Air Quality Assessment
1605 South 7th Street Project
City of San José, California

Prepared by:

Kimley-Horn
Expect More. Experience Better.

Kimley-Horn and Associates, Inc.
10 S. Almaden Boulevard, Suite 1250
San José, California 95113
Contact: Ms. Sophia La Herran

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LIST OF ABBREVIATED TERMS

AQMP	air quality management plan
AB	Assembly Bill
ADT	average daily traffic
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAAQS	California Ambient Air Quality Standards
CCAA	California Clean Air Act
CalEEMod	California Emissions Estimator Model
CEQA	California Environmental Quality Act
CO	carbon monoxide
cy	cubic yards
DPM	diesel particulate matter
FCAA	Federal Clean Air Act
H_2S	hydrogen sulfide
Pb	Lead
LST	local significance threshold
$\mu g/m^3$	micrograms per cubic meter
mg/m^3	milligrams per cubic meter
NAAQS	National Ambient Air Quality Standards
NO_2	nitrogen dioxide
NO_X	nitrogen oxide
O_3	Ozone
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
ppm	parts per million
ROG	reactive organic gases
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SRA	source receptor area
SF	square foot
SO_{4-2}	Sulfates
SO_2	sulfur dioxide
TAC	toxic air contaminant
C_2H_3Cl	vinyl chloride
U.S. EPA	United States Environmental Protection Agency
VOC	volatile organic compound

1 INTRODUCTION

This report describes the air quality conditions in the Project area. The current condition and air quality was used as the baseline against which to compare potential impacts of the Project. The purpose of this Air Quality Assessment is to evaluate potential short- and long-term air quality impacts resulting from implementation of the proposed 1605 South 7th Street Project (proposed Project) in the City of San José.

1.1 PROJECT LOCATION

The Project is located at 1605 South 7th Street in San José (Assessor Parcel Number: 477-08-037), on the southern corner of the intersection of South 7th Street and East Alma Avenue. Figure 1: Regional Vicinity and Figure 2: Site Vicinity, depict the Project site in a regional and local context. The Project site is located in an urban area with a mix of surrounding uses including commercial, office, and industrial uses. The Project site is designated HI – Heavy Industrial in the City's General Plan, which allows for warehousing and distribution uses, and zoned as HI – Heavy Industrial, which allows for a warehouse/distribution facility.

The Project site is an industrial/business park complex currently developed with a two-story, 279,030-square foot main industrial building and ancillary office structures. The existing two-story building is located on the western half of the parcel, with additional office uses on the southern and western portions of the site. Loading docks are located along the southern part of the main industrial building. Surface parking is available on the northern half of the site and truck parking is available in the northeast corner of the Project site. The Project site has existing landscaping along the northern and eastern site boundaries; however, the majority of the site is paved/and or improved with industrial buildings supporting several existing businesses. The Project site also has existing surface lighting.

1.2 PROJECT DESCRIPTION

The proposed 1605 South 7th Street Project (proposed Project) would demolish and clear the existing on-site industrial structures and construct an approximately 106,771 square foot new one-story concrete tilt-up warehouse/industrial use building. An approximately 36,613 square foot prefabricated canopy structure would be installed over the loading zone along the east elevation. Approximately 8,694 square feet of the total 106,771 square foot building would be incidental office use. The office space of the building would be equipped with bathrooms and a changing room, including at least one (1) shower. The Project consists of a 24-hour operation of outdoor uses (loading/unloading) and is designed and proposed to support the "last mile" distribution of packages, including nine (9) loading docks. The Project would provide approximately 178 employee parking stalls, 10 accessible stalls, 413 van parking stalls, 18 electric vehicle parking stalls, 72 electric vehicle capable stalls, 18 bicycle parking stalls, and 5 motorcycle parking stalls. Proposed site work also includes exterior van loading and loading canopy, site lighting, and utility infrastructure as required to support Project operations. Figure 3: Site Plan shows the proposed layout of the Project site and Figure 4: Project Truck Routes shows truck routes.

There would be four access driveways to the Project site. One access driveway would be located at the northwestern corner of the Project site, from East Alma Avenue. The other three driveways would be located along the eastern site boundary, from South 7th Street.

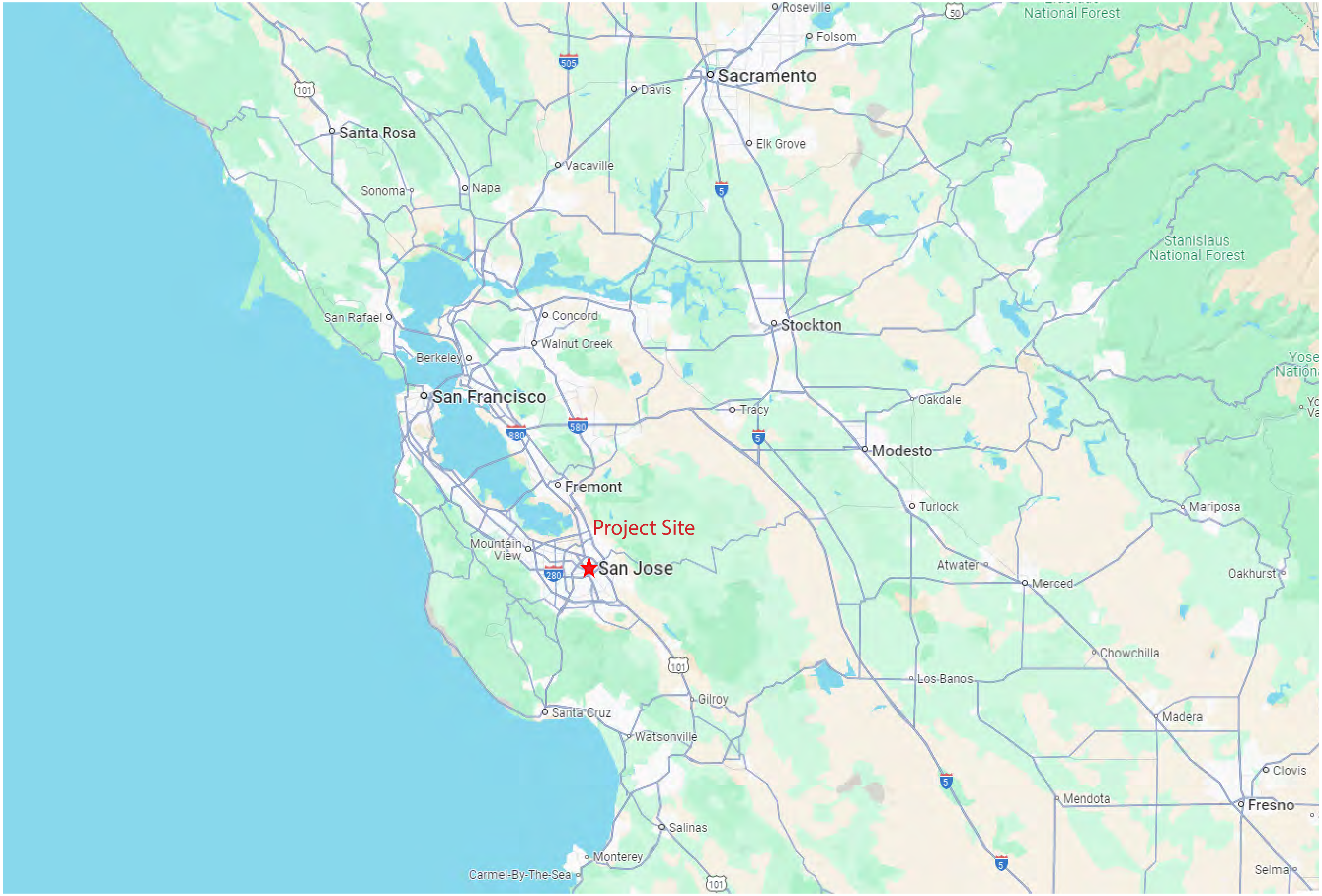
Construction of the Project is expected to commence in July 2026 and last for approximately 17 months. There would be approximately 39,219 tons of demolition and 3,000 cubic yards of soil export.

Project Operations

The Project is designed and proposed as a “last mile” e-commerce distribution center (delivery facility). It is anticipated that the Project would be operated by a single tenant for their business operations. Delivery centers support the last mile of the tenant’s order fulfillment process and help to expedite local deliveries for customers. Packages would be transported to the Project site via line haul trailer trucks from separate tenant fulfillment and sortation centers and would then be sorted, picked, and loaded into delivery vans on the Project site.

The Project is anticipated operate 24/7 to support delivery of packages to customer locations between 10:00 AM and 9:30 PM. At this facility, a total of 52 daily truck trips are expected to deliver packages to the Project site each day, between 12:00 AM and 7:00 AM. The customer packages are unloaded from haul trucks, sorted, picked to the delivery routes, placed onto movable racks and staged for dispatch. While the exact geographic range that the project would service is not rigidly defined, the tenant would operate the delivery facility in order to provide expedited delivery to the local market.

Approximately 600 workers would be hired at the delivery facility, however the total daily workers onsite would not exceed 400 workers. The majority of the Project employees would arrive and depart between 1:20 AM and 1:50 PM. Other Project employees 9:00 AM to 10:30 PM. Delivery vans are anticipated to arrive at the delivery facility between 9:30 AM and 11:30 AM. During this time, delivery vans will load and depart from the Project every 30 minutes to facilitate a regulated traffic flow into the surrounding area. The departure window is designed to avoid peak period of local traffic. Approximately 8 to 12 hours after dispatch, delivery routes are completed and the vans return to the station between 8:30 PM and 10:30 PM. The drivers park the delivery van onsite and leave using a personal vehicle or public transportation. Project operation would also involve independent contractors to deliver packages from this location. It is anticipated that traditional passenger vehicles, associated with the independent contractors, would enter the delivery facility, staggered between 4:30 PM and 5:30 PM.



Source: Google Maps, 2024

Figure 1: Regional Vicinity

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Source: Google Earth, 2024

Figure 2: Project Site Vicinity

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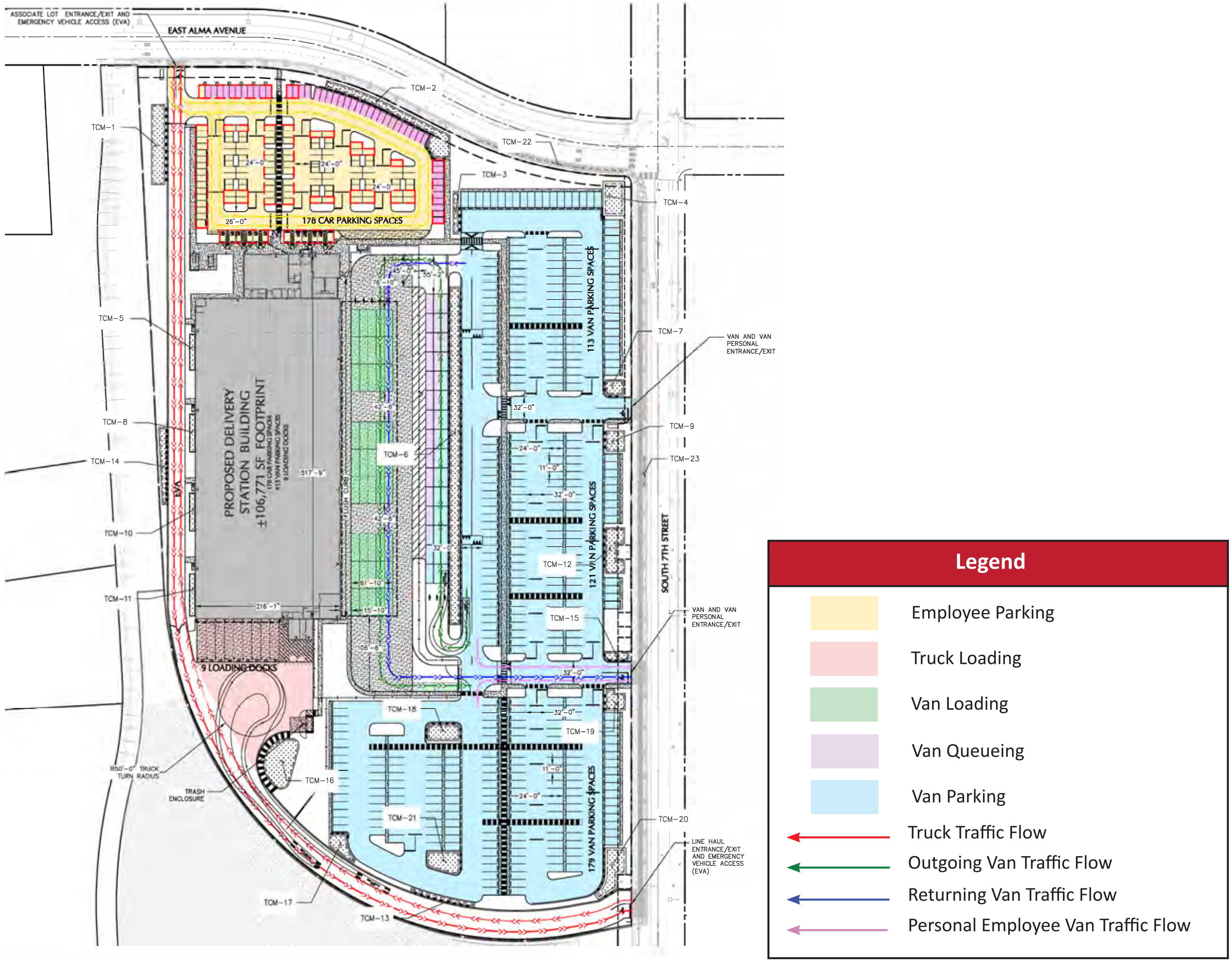

Source: Langan, 2025

Figure 3: Project Site Plan

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Source: City of San José, MG2, 2025

Figure 4: Project Truck Routes

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Not to scale

2 ENVIRONMENTAL SETTING

2.1 CLIMATE AND METEOROLOGY

The California Air Resources Board (CARB) divides the State into 15 air basins that share similar meteorological and topographical features. The project is located within the San Francisco Bay Area Air Basin (Basin). This Basin comprises all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, the southern portion of Sonoma County, and the southwestern portion of Solano County. Air quality in this area is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions. These factors along with applicable regulations are discussed below. The Bay Area Air District is responsible for local control and monitoring of criteria air pollutants throughout the Basin.

There are several climatic factors that influence air quality. Wind patterns can transport or disperse air pollutants emitted by stationary or mobile sources. An inversion is a condition where warmer air traps cooler air underneath it, which can confine air pollutants near the ground by limiting upward mixing (dilution).

Radiation inversions, which are typical in the wintertime, form as heat quickly radiates from the Earth's surface at night, causing the surface air to rapidly cool. Radiation inversions are strongest on clear, low-wind, cold winter nights, allowing the build-up of pollutants such as carbon monoxide and particulate matter. When wind speeds are low, there is little mechanical turbulence to mix the air, resulting in a layer of warm air over a layer of cooler air next to the ground. During radiation inversions downwind transport is slow, the mixing depths are shallow, and turbulence is minimal, all factors which contribute to ozone formation.

The frequency of hot, sunny days during the summer months in the Basin is another important factor that affects air pollution. In the presence of ultraviolet sunlight and higher temperatures, reactive organic gases and oxides of nitrogen react to form secondary photochemical pollutants, including ozone.

The climate is dominated by the location and strength of a semi-permanent, subtropical high-pressure cell. In the summer, this cell is centered over the northeastern Pacific Ocean, resulting in stable meteorological conditions and a steady northwesterly wind flow. This northwesterly wind flow induces upwelling of cold deep ocean water which creates a band of cold water off the coast. This frequently results in condensation and the presence of fog and low stratus clouds along the coast. In the winter, the high-pressure cell weakens and shifts southward, resulting in increased offshore wind flow, weakening upwelling, and the occurrence of storms.

The Basin is characterized by moderately wet winters (November through March) and dry summers. The rainfall in the mountains reaches 40 inches while the valley sees less than 16 inches. Generally, coastal temperatures can be 35 degrees Fahrenheit cooler than temperatures 15 to 20 miles inland. At night, this contrast usually decreases to less than 10 degrees Fahrenheit. In the winter, the relationship of minimum and maximum temperatures is reversed.

The Project site is located in the City of San José and Santa Clara County; on the southern perimeter of the San Francisco Bay. The City of San José has a generally mild climate, with average temperatures in the low 80's Fahrenheit in the summer and high 50's Fahrenheit in the winter. The annual rainfall is approximately 15 inches in the City, primarily between November and April. The Project area's proximity to both the Pacific Ocean and the San Francisco Bay has a moderating influence on the climate. This portion of the Santa Clara Valley is bounded to the north by the San Francisco Bay and the Santa Cruz Mountains to the southwest and the Diablo Range to the east. The surrounding terrain greatly influences winds in the valley, resulting in a prevailing wind that follows along the valley's northwest-southwest axis. The regulatory section below discusses the various buffer zones around sources of air pollution sufficient to avoid adverse health and nuisance impacts on nearby receptors.

2.2 AIR POLLUTANTS OF PRIMARY CONCERN

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state laws. These regulated air pollutants are known as "criteria air pollutants" and are categorized into primary and secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NO_X), sulfur dioxide (SO_2), coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead are primary air pollutants. Of these, CO, NO_X, SO_2, PM_{10}, and $PM_{2.5}$ are criteria pollutants. ROG and NO_X are criteria pollutant precursors and go on to form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. For example, the criteria pollutant ozone (O_3) is formed by a chemical reaction between ROG and NO_X in the presence of sunlight. O_3 and nitrogen dioxide (NO_2) are the principal secondary pollutants. Sources and health effects commonly associated with criteria pollutants are summarized in <u>Table 1: Air Contaminants and Associated Public Health Concerns</u>.

Ozone, or smog, is not emitted directly into the environment, but is formed in the atmosphere by complex chemical reactions between ROG and NO_X in the presence of sunlight. Ozone formation is greatest on warm, windless, sunny days. The main sources of NO_X and ROG, often referred to as ozone precursors, are combustion processes (including motor vehicle engines) the evaporation of solvents, paints, and fuels, and biogenic sources. Automobiles are the single largest source of ozone precursors in the Basin. Tailpipe emissions of ROG are highest during cold starts, hard acceleration, stop-and-go conditions, and slow speeds. They decline as speeds increase up to about 50 miles per hour (mph), then increase again at high speeds and high engine loads. ROG emissions associated with evaporation of unburned fuel depend on vehicle and ambient temperature cycles. Nitrogen oxide emissions exhibit a different curve; emissions decrease as the vehicle approaches 30 mph and then begin to increase with increasing speeds.

Ozone levels usually build up during the day and peak in the afternoon hours. Short-term exposure can irritate the eyes and cause constriction of the airways. Besides causing shortness of breath, it can aggravate existing respiratory diseases such as asthma, bronchitis and emphysema. Chronic exposure to high ozone levels can permanently damage lung tissue. Ozone can also damage plants and trees, and materials such as rubber and fabrics.

Table 1: Air Contaminants and Associated Public Health Concerns

Pollutant	Major Man-Made Sources	Human Health Effects
Particulate Matter (PM_{10} and $PM_{2.5}$)	Emissions from combustion of gasoline, oil, diesel fuel, or wood, produce much of the $PM_{2.5}$ pollution, as well as PM_{10}. PM_{10} also includes dust from construction sites, landfills and agriculture, wildfires and brush/waste burning, and industrial sources and processes such as motor vehicle exhaust.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; worsening of cardiovascular disease; asthma; chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility.
Ozone (O_3)	Formed by a chemical reaction between reactive organic gases/volatile organic compounds (ROG or VOC)[1] and nitrogen oxides (NO_X) in the presence of sunlight. Motor vehicle exhaust industrial emissions, combustion, consumer products, evaporation of paints and factories.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Worsening of lung disease leading to premature death, and damage to lung tissue. Damages plants; reduces crop yield.
Sulfur Dioxide (SO_2)	A colorless gas formed when fuel containing sulfur is burned and when gasoline is extracted from oil. Examples are petroleum refineries, motor vehicles, metal processing facilities, locomotives, and ships.	Aggravates lung and heart problems, exacerbates asthma, and is a respiratory irritant which can lead to wheezing, shortness of breath and chest tightness. Also increases incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Carbon Monoxide (CO)	An odorless, colorless gas formed from the incomplete combustion of carbon containing fuels such as natural gas, gasoline, or wood. Emitted by motor vehicles, power plants, wildfires, and incinerators.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO_2)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Can intensify responses to allergens in allergic asthmatics. Exposure can lead to premature death, cardiopulmonary effects, decreased lung function growth in children, and respiratory symptoms. Precursor to ozone. Causes brown discoloration of the atmosphere.
Lead (Pb)	Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Due to the phase out of leaded gasoline, the major sources of emissions today are ore	Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead

Pollutant	Major Man-Made Sources	Human Health Effects
	and metal processing, lead smelters, piston-engine aircraft operating on leaded aviation gasoline, waste incinerators, utilities, and lead-acid battery manufacturers.	exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ.
[1] Volatile Organic Compounds (VOCs or Reactive Organic Gases [ROG]) are hydrocarbons/organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including ROGs and VOCs. Both ROGs and VOCs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. The major sources of hydrocarbons are combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources are petroleum fuels, solvents, dry cleaning solutions, and paint (via evaporation).		
Sources: U.S. Environmental Protection Agency, *Criteria Air Pollutants*, https://www.epa.gov/criteria-air-pollutants, accessed September 29, 2024. California Air Resources Board, *Common Air Pollutants*, https://ww2.arb.ca.gov/resources/common-air-pollutants, accessed September 29, 2024.		

Toxic Air Contaminants

Toxic air contaminants (TACs) are airborne substances that can cause short-term (acute) or long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes more than 200 compounds, including particulate emissions from diesel-fueled engines.

CARB identified diesel particulate matter (DPM) as a toxic air contaminant. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine. Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

2.3 AMBIENT AIR QUALITY

CARB monitors ambient air quality at approximately 250 air monitoring stations across the state. Air quality monitoring stations usually measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. Existing levels of ambient air quality, historical trends, and projections near the Project site are documented by measurements made by the Bay Area Air Quality Management District (BAAAQMD)'s air pollution regulatory agency that maintains air quality monitoring stations, which process ambient air quality measurements.

Ozone (O_3) and particulate matter (PM_{10} and $PM_{2.5}$) are pollutants of concern in the Bay Area Air District. The closest air monitoring station to the Project site that monitors ambient concentrations of these pollutants is the San Jose-Jackson Street Monitoring Station located approximately 2.5 miles north of the Project site. Local air quality data from 2021 to 2023 is provided in Table 2: Ambient Air Quality Data lists the monitored maximum concentrations and number of exceedances of federal or state air quality standards for each year.

Table 2: Ambient Air Quality Data

Pollutant	San Jose- Jackson Street[1]		
	2021	2022	2023
Ozone (O_3)			
1-hour Maximum Concentration (ppm)	0.098	0.090	0.087
8-hour Maximum Concentration (ppm)	0.085	0.074	0.068
Number of Days Standard Exceeded			
CAAQS 1-hour (>0.09 ppm)	3	0	0
NAAQS 8-hour (>0.070 ppm)	4	1	0
Carbon Monoxide (CO)			
1-hour Maximum Concentration (ppm)	1.703	1.755	1.957
Number of Days Standard Exceeded			
NAAQS 1-hour (>35 ppm)	0	0	0
CAAQS 1 hour (>20 ppm)	0	0	0
Nitrogen Dioxide (NO_2)			
1-hour Maximum Concentration (ppm)	0.0478	0.0468	0.0587
Number of Days Standard Exceeded			
NAAQS 1-hour (>0.100 ppm)	0	0	0
CAAQS 1-hour (>0.18 ppm)	0	0	0
Particulate Matter Less Than 2.5 Microns ($PM_{2.5}$)			
National 24-hour Maximum Concentration	38.1	36.2	49.0
State 24-hour Maximum Concentration	38.1	36.2	49.0
Number of Days Standard Exceeded			
NAAQS 24-hour (>150 μg/m^3)	1	2	1
CAAQS 24-hour (>50 μg/m^3)	12	12	10
Particulate Matter Less Than 10 Microns (PM_{10})			
National 24-hour Maximum Concentration	42.8	41.1	76.5
State 24-hour Maximum Concentration	45.1	44.5	79.8
Number of Days Standard Exceeded			
NAAQS 24-hour (>150 μg/m^3)	0	0	0
CAAQS 24-hour (>50 μg/m^3)	0	0	2

NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; ppm = parts per million; μg/m^3 = micrograms per cubic meter; NM = not measured

[1] Measurements taken at the San Jose-Jackson Street Monitoring Station located at 156B Jackson Street, San Jose, California 95112 (CARB# 43383), expect for 2023 PM10 concentrations, which were taken at the San Juan Bautista-Nyland Monitoring Station located at 100 Nyland Drive, San Juan Bautista, California 95045 (CARB #35821)

Source: All pollutant measurements are from the CARB Aerometric Data Analysis and Management system database (arb.ca.gov/adam) except for CO, which were retrieved from the CARB Air Quality and Meteorological Information System (https://www.arb.ca.gov/aqmis2/aqdselect.php, https://www.arb.ca.gov/qaweb/siteinfo.php).

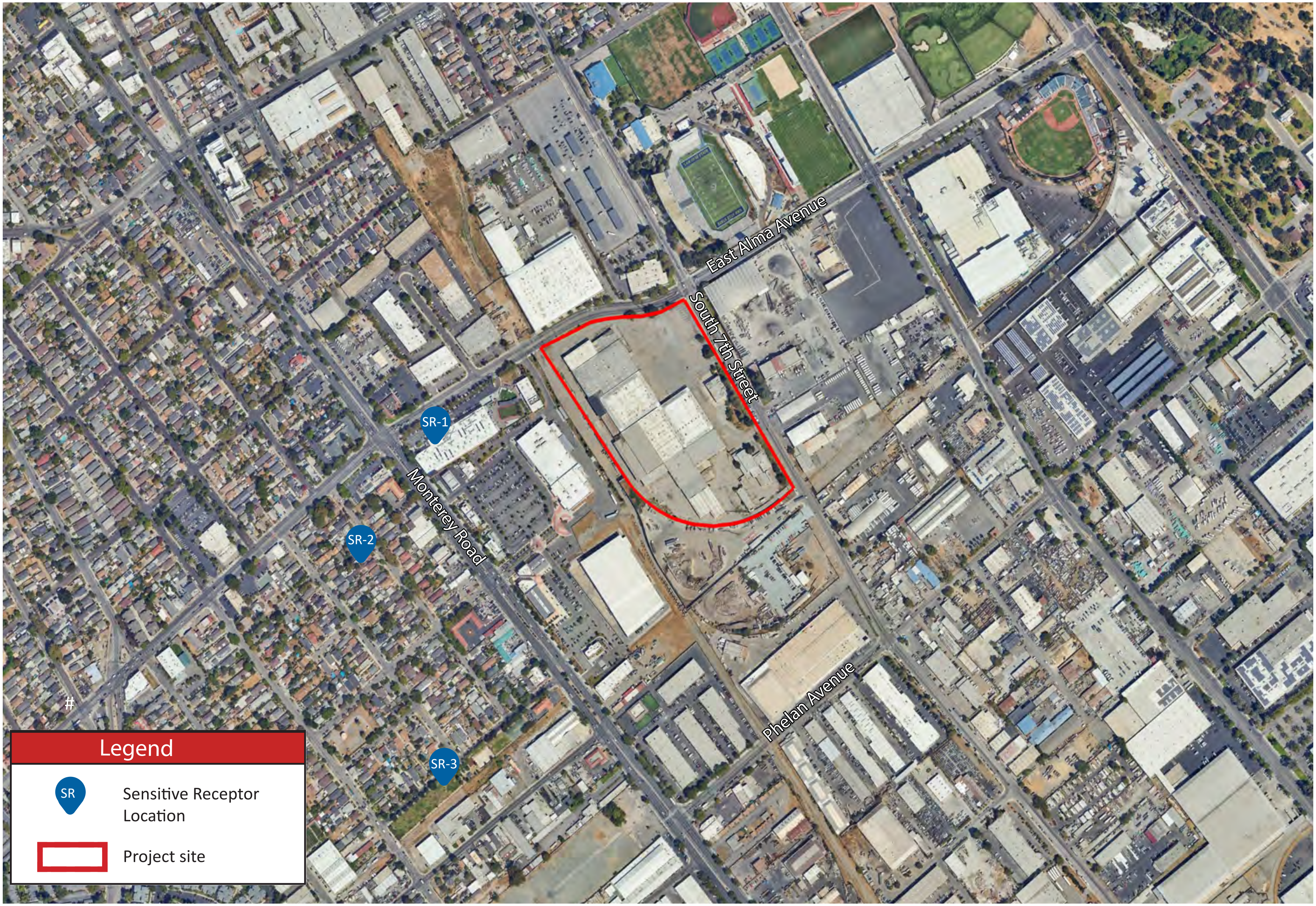
2.4 SENSITIVE RECEPTORS

Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive receptors in proximity to localized sources of toxics are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

The Project site is located in an urban area with a mix of surrounding uses including commercial, office, and industrial uses. The Project site is bound by warehouse storage, office and parking lots, across East Alma Avenue to the north; a construction company, industrial buildings, and surface parking, across South 7th Street to the east; a recycling center to the south; and commercial uses, including Sun Garden Shopping Center, to the west. CEFCU Stadium and a variety of San José State University sports fields are located to the north. Additionally, DCP El Camino Middle School and DCP El Primero High School is located to the west of the Project site. The eastern boundary of the site is 7th Street. Table 3: Sensitive Receptors, lists the distances and locations of nearby sensitive receptors. The numbering corresponds to the locations in Figure 5: Sensitive Receptor Locations.

Table 3: Sensitive Receptors

Receptor Description	Distance and Direction from the Project Site
1. DCP Charter School	100 feet west
2. CEFCU Stadium	230 feet north
3. Single-family residential community	800 feet west
4. Bellevue Park	1,200 feet west
Source: Google Earth, 2024.	



Source: Google Earth, 2024

Figure 5: Sensitive Receptor Locations

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3 REGULATORY SETTING

3.1 FEDERAL

Federal Clean Air Act

Air quality is federally protected by the Federal Clean Air Act (FCAA) and its amendments. Under the FCAA, the U.S. Environmental Protection Agency (U.S. EPA) developed the primary and secondary National Ambient Air Quality Standards (NAAQS) for the criteria air pollutants including ozone, NO_2, CO, SO_2, PM_{10}, $PM_{2.5}$, and lead. Depending on whether the standards are met or exceeded, the local air basin is classified as in "attainment" or "nonattainment." Some areas are unclassified, which means no monitoring data are available. Unclassified areas are considered to be in attainment. Proposed projects in or near nonattainment areas could be subject to more stringent air-permitting requirements. The FCAA requires that each state prepare a State Implementation Plan (SIP) to demonstrate how it will attain the NAAQS within the federally imposed deadlines.

The U.S. EPA has designated enforcement of air pollution control regulations to the individual states. Applicable federal standards are summarized in Table 4: State of California.

Corporate Average Fuel Economy Standards

In October 2012, the U.S.EPA and the National Highway Traffic Safety Administration (NHSTA), on behalf of the Department of Transportation, issued final rules to further reduce greenhouse gas (GHG) emissions and improve corporate average fuel economy (CAFE) standards for light-duty vehicles for model years 2017 and beyond (77 Federal Register [FR] 62624). NHTSA's CAFE standards have been enacted under the Energy Policy and Conservation Act since 1978. This national program requires automobile manufacturers to build a single light-duty national fleet that meets all requirements under both federal programs and the standards of California and other states. This program would increase fuel economy to the equivalent of 54.5 miles per gallon (mpg) limiting vehicle emissions to 163 grams of carbon dioxide (CO_2) per mile for the fleet of cars and light-duty trucks by model year 2025. In August 2022, NHTSA announced that it intends to prepare an environmental impact statement to analyze the potential environmental impacts of new CAFE standards for model years 2027 and beyond for passenger cars and light trucks, and new fuel efficiency standards for model years 2029 and beyond for heavy-duty pickup trucks and vans. In July 2023, the NHTSA officially proposed the new CAFÉ standards and invited public comments.

Federal Emissions Standards for On-Road Trucks

To reduce emissions from on-road, heavy-duty diesel trucks, the U.S. EPA established a series of increasingly strict emission standards for new engines, starting in 1988. The U.S. EPA promulgated the final and cleanest standards with the 2007 Heavy-Duty Highway Rule.[1] The PM emission standard of 0.01 gram per horsepower-hour (g/hp-hr) is required for new vehicles beginning with model year 2007. Also, the nitrogen oxide (NO_X) and nonmethane hydrocarbon (NMHC) standards of 0.20 g/hp-

1 United States Environmental Protection Agency (U.S. EPA), *Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements*, Final Rule. 40 Code of Federal Regulations, Parts 69, 80, and 86. January 18, 2001.

hr and 0.14 g/hp-hr, respectively, were phased in together between 2007 and 2010 on a percent of sales basis: 50 percent from 2007 to 2009 and 100 percent in 2010. In December 2022, the U.S. EPA final rule set new, more stringent standards to reduce NO_X pollution from heavy-duty vehicles and engines starting in model year 2027. The rule will reduce NO_X emissions from heavy-duty trucks by almost 50 percent by 2045, producing significant health-related benefits.[2]

Emission Standards for Off-Road Diesel Engines

To reduce emissions from off-road diesel equipment, the U.S. EPA established a series of cleaner emission standards for new off-road diesel engines. Tier 1 standards were phased in from 1996 to 2000 (year of manufacture), depending on the engine horsepower category. Tier 2 standards were phased in from 2001 to 2006. Tier 3 standards were phased in from 2006 to 2008. Tier 1 through Tier 3 standards are to be increasingly more stringent, respectively, and vary by pollutant and engine size. Tier 4 standards, which generally require add-on emission control equipment to attain them, were phased in from 2008 to 2015. The Tier 4 standards require that emissions of PM and NO_X be further reduced by about 90% from Tier 3 standards. CARB currently developing potential amendments to the off-road diesel engine standards, in a Tier 5 rulemaking. The Tier 5 rulemaking aims to reduce oxides of nitrogen (NO_X) and particulate matter (PM) emissions from new, off-road compression-ignition (CI) engines, by an additional 50% to 90%, compared to what is allowed by today's Tier 4 final emission standards.

California Air Resources Board

CARB administers California's air quality policy. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards, included with the NAAQS in Table 4, are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates. In general, the Bay Area experiences low concentrations of most pollutants when compared to federal standards, except for O_3 and PM, for which standards are exceeded periodically. With respect to federal standards, the Bay Area's attainment status for 8-hour ozone is classified as "marginal nonattainment" and "nonattainment" for $PM_{2.5.}$ The region is also considered to be in nonattainment with the CAAQS for PM_{10} and $PM_{2.5}$. Area sources generate the majority of these airborne particulate emissions. The Basin is considered in attainment or unclassified with respect to the CO, NO_2 and SO_2 NAAQS and CAAQS.

The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for the preparation of the SIP for meeting federal clean air standards for the State of California. Like the U.S. EPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous

[2] United States Environmental Protection Agency (U.S. EPA), *Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements*, Final Rule. 40 Code of Federal Regulations, s 2, 59, 60, 80, 85, 86, 600, 1027, 1030, 1031, 1033, 1036, 1037, 1039, 1042, 1043, 1045, 1048, 1051, 1054, 1060, 1065, 1066, 1068, and 1090. January 24, 2023.

three calendar years. Exceedances that are affected by highly irregular or infrequent events such as wildfires, volcanoes, etc. are not considered violations of a State standard, and are not used as a basis for designating areas as nonattainment. The applicable State standards are summarized in Table 4.

Table 4: State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	State Standards[1]		Federal Standards[2]	
		Concentration	Attainment Status	Concentration[3]	Attainment Status
Ozone (O_3)	8 Hour	0.070 ppm (137 µg/m^3)	N[9]	0.070 ppm	N[4]
	1 Hour	0.09 ppm (180 µg/m^3)	N	NA	N/A[5]
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m^3)	A	9 ppm (10 mg/m^3)	A[6]
	1 Hour	20 ppm (23 mg/m^3)	A	35 ppm (40 mg/m^3)	A
Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm (339 µg/m^3)	A	0.100 ppm[11]	U
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	-	0.053 ppm (100 µg/m^3)	A
Sulfur Dioxide[12] (SO_2)	24 Hour	0.04 ppm (105 µg/m^3)	A	0.14 ppm (365 µg/m^3)	A
	1 Hour	0.25 ppm (655 µg/m^3)	A	0.075 ppm (196 µg/m^3)	A
	Annual Arithmetic Mean	NA	-	0.03 ppm (80 µg/m^3)	A
Particulate Matter (PM_{10})	24-Hour	50 µg/m^3	N	150 µg/m^3	-U
	Annual Arithmetic Mean	20 µg/m^3	N[7]	NA	-
Fine Particulate Matter ($PM_{2.5}$) [15]	24-Hour	NA	-	35 µg/m^3	U/A
	Annual Arithmetic Mean	12 µg/m^3	N[7]	9.0 µg/m^3	N
Sulfates (SO_{4-2})	24 Hour	25 µg/m^3	A	NA	-
Lead (Pb)[13, 14]	30-Day Average	1.5 µg/m^3	-	NA	A
	Calendar Quarter	NA	-	1.5 µg/m^3	A
	Rolling 3-Month Average	NA	-	0.15 µg/m^3	-
Hydrogen Sulfide (H_2S)	1 Hour	0.03 ppm (42 µg/m^3)	U	NA	-
Vinyl Chloride (C_2H_3Cl)	24 Hour	0.01 ppm (26 µg/m^3)	-	NA	-
Visibility Reducing Particles[8]	8 Hour (10:00 to 18:00 PST)	-	U	-	-

A = attainment; N = nonattainment; U = unclassified; N/A = not applicable or no applicable standard; ppm = parts per million; µg/m^3 = micrograms per cubic meter; mg/m^3 = milligrams per cubic meter; – = not indicated or no information available.

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM_{10}, and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM_{10} annual standard), then some measurements may be excluded. In particular, measurements are excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe CO standard is 6.0 ppm, a level one-half the national standard and two-thirds the state standard.
2. National standards shown are the "primary standards" designed to protect public health. National standards other than for ozone, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the 4th highest daily concentrations is 0.070 ppm (70 ppb) or less. The 24-hour PM_{10} standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 µg/m$_3$. The 24-hour $PM_{2.5}$ standard is attained when the 3-year average of 98th percentiles is less than 35 µg/m^3.
   Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM_{10} is met if the 3-year average falls below the standard at every site. The annual $PM_{2.5}$ standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard.
3. National air quality standards are set by the U.S. EPA at levels determined to be protective of public health with an adequate margin of safety.
4. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the fourth-highest maximum daily 8-hour ozone concentration per year, averaged over three years, is equal to or less than 0.070 ppm. The U.S. EPA will make recommendations on attainment designations by October 1, 2016, and issue final designations October

1, 2017. Nonattainment areas will have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the ozone level in the area. 5. The national 1-hour ozone standard was revoked by U.S. EPA on June 15, 2005. 6. In April 1998, the Bay Area was redesignated to attainment for the national 8-hour carbon monoxide standard. 7. In June 2002, CARB established new annual standards for $PM_{2.5}$ and PM_{10}. 8. Statewide VRP Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range. 9. The 8-hour CA ozone standard was approved by the Air Resources Board on April 28, 2005 and became effective on May 17, 2006. 10. On January 9, 2013, the U.S. EPA issued a final rule to determine that the Bay Area attains the 24-hour $PM_{2.5}$ national standard. This U.S. EPA rule suspends key SIP requirements as long as monitoring data continues to show that the Bay Area attains the standard. Despite this EPA action, the Bay Area will continue to be designated as "nonattainment" for the national 24-hour $PM_{2.5}$ standard until such time as the Air District submits a "redesignation request" and a "maintenance plan" to U.S. EPA, and U.S. EPA approves the proposed redesignation. 11. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100ppm (effective January 22, 2010). The U.S. EPA expects to make a designation for the Bay Area by the end of 2017. 12. On June 2, 2010, the U.S. EPA established a new 1-hour SO_2 standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The existing 0.030 ppm annual and 0.14 ppm 24-hour SO_2 NAAQS however must continue to be used until one year following U.S. EPA initial designations of the new 1-hour SO_2 NAAQS. 13. CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure below which there are no adverse health effects determined. 14. National lead standard, rolling 3-month average: final rule signed October 15, 2008. Final designations effective December 31, 2011. 15. In December 2012, the U.S. EPA strengthened the annual $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS) from 15.0 to 12.0 micrograms per cubic meter ($\mu g/m^3$). In December 2014, the U.S. EPA issued final area designations for the 2012 primary annual $PM_{2.5}$ NAAQS. Areas designated "unclassifiable/attainment" must continue to take steps to prevent their air quality from deteriorating to unhealthy levels. The effective date of this standard is April 15, 2015.
Source: Bay Area Air Quality Management District, *Air Quality Standards and Attainment Status*, 2017 http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status.

Diesel Risk Reduction Plan

The identification of DPM as a TAC in 1998 led CARB to adopt the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (DRRP) in October 2000. The DRRP's goals include an 85 percent reduction in DPM by 2020 from the 2000 baseline[3]. CARB estimates that emissions of DPM in 2035 will be less than half those in 2010, further reducing statewide cancer risk and non-cancer health effects.[4] The DRRP includes regulations to establish cleaner new diesel engines, cleaner in-use diesel engines (retrofits), and cleaner diesel fuel.

Truck and Bus Regulation Reducing Emissions from Existing Diesel Vehicles

On December 12, 2008, CARB approved the Truck and Bus Regulation to significantly reduce PM and NO_X emissions from existing diesel vehicles operating in California. The regulation requires PM retrofits on all diesel trucks and buses that operate in California (i.e., existing vehicles are required to be upgraded to reduce emissions). Heavier trucks must be retrofitted with PM filters beginning January 1, 2012, and older trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses would need to have 2010 model year engines or equivalent.

The regulation applies to most diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. Small fleets with three or fewer diesel trucks can delay compliance for heavier trucks and there are several

3 California Air Resources Board, Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles, October 2000.

4 California Air Resources Board, *Overview: Diesel Exhaust & Health*, available at: https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health, accessed August 2023.

extensions for low-mileage construction trucks, early PM filter retrofits, adding cleaner vehicles, and other situations. Privately and publicly owned school buses have different requirements.

Heavy-Duty Vehicle Idling Emission Reduction Program

The purpose of the CARB ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling is to reduce public exposure to DPM and criteria pollutants by limiting the idling of diesel-fueled commercial vehicles including transportation refrigeration units (TRUs). The driver of any vehicle subject to this ATCM is prohibited from idling the vehicle's primary diesel engine for greater than five minutes at any location and is prohibited from idling a diesel-fueled auxiliary power system (APS) for more than five minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if it has a sleeper berth and the truck is located within 100 feet of a restricted area (homes and schools). On February 24, 2022, CARB approved amendments to the TRU ATCM (2022 Amendments) to achieve additional emission and health risk reductions from diesel-powered TRUs and increase the use of zero-emission technology in the off-road sector. The 2022 Amendments will help meet the State's multiple risk reduction, air quality, and climate goals, as well as the directive of Executive Order N-29-20, which set a goal for 100 percent zero-emission off-road vehicles and equipment in the State by 2035.

CARB Final Regulation Order, Requirements to Reduce Idling Emissions from New and In-Use Trucks, beginning in 2008, requires that new 2008 and subsequent model-year heavy-duty diesel engines be equipped with an engine shutdown system that automatically shuts down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged.

Section 2485 and Section 2449 of Title 13 of the California Code of Regulations limits diesel-fueled motor vehicle idling to no more than five minutes. Section 2485 limits idling for diesel-fueled commercial motor vehicles with gross vehicle weight ratings of greater than 10,000 pounds that are or must be licensed to operate on publicly maintained highways and streets within California. Section 2449 limits idling for off-road diesel-fueled fleets.

CARB Advanced Clean Truck Regulation

CARB adopted the Advanced Clean Truck Regulation in June 2020 requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. This rule directly addresses disproportionate risks and health and pollution burdens and puts California on the path for an all zero-emission short-haul drayage fleet in ports and railyards by 2035, and zero-emission "last-mile" delivery trucks and vans by 2040. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8. The regulation has two components including a manufacturer sales requirement, and a reporting requirement:

<u>Zero-Emission Truck Sales:</u> Manufacturers who certify Class 2b through 8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales.

Company and Fleet Reporting: Large employers including retailers, manufacturers, brokers and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Advanced Clean Cars I and II

Advanced Clean Cars combines several regulations into one package including the Low-Emission Vehicle (LEV) criteria and greenhouse gas regulations and the zero-emission vehicle (ZEV) regulation. Advanced Clean Cars I was adopted in 2012 and Advanced Clean Cars II was adopted in 2022. These regulations rapidly scale down emissions of light-duty passenger cars, pickup trucks and SUVs and require an increased number of zero-emission vehicles to meet air quality and climate change emissions goals. By 2035 all new passenger cars, trucks and SUVs sold in California will be zero emissions. The Advanced Clean Cars II regulations take the state's already growing zero-emission vehicle market and robust motor vehicle emission control rules and augments them to meet more aggressive tailpipe emissions standards and ramp up to 100% zero-emission vehicles.

CARB Advanced Clean Fleets Regulation

CARB approved Advanced Clean Fleets Regulation (ACF) on April 28, 2023, requires fleet owners to begin transitioning toward ZEVs starting in 2024. Due to the impact that truck traffic has on residents living near heavily trafficked corridors, drayage trucks will need to be zero-emissions by 2035. All other fleet owners have the option to transition a percentage of their vehicles to meet expected zero-emission milestones, which gives owners the flexibility to continue operating combustion-powered vehicles as needed during the move toward cleaner technology.

CalEnviroScreen

California Office of Environmental Health Hazard Assessment (OEHHA) has developed CalEnviroScreen 4.0, which is a mapping tool that helps identify California communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution's effects. CalEnviroScreen uses environmental, health, and socioeconomic information to produce scores for every census tract in the State. The scores are mapped so that different communities can be compared. An area with a high score is one that experiences a much higher pollution burden than areas with low scores.

According to CalEnviroScreen, the Project site is located within Census Tract 6085503122, which is within the 69th percentile.[5] It should be noted that the CalEnviroScreen scores are not an expression of health risk, and do not provide quantitative information on increases in cumulative impacts for specific sites or projects. Further, as a comparative screening tool, the results do not provide a basis

[5] California Office of Environmental Health Hazard Assessment, *CalEnviroScreen 4.0*, https://experience.arcgis.com/experience/11d2f52282a54ceebcac7428e6184203/page/CalEnviroScreen-4_0/, accessed October 2024.

for determining when differences between scores are significant in relation to public health or the environment.

Senate Bill 535

Senate Bill (SB) 535 directs 25 percent of the proceeds from the Greenhouse Gas Reduction Fund (i.e., funds from the AB 32 cap-and-trade program) to go to projects that provide a benefit to disadvantaged communities (DACs) (as identified by the OEHHA mapping). These funds must be used for programs that further reduce greenhouse gas emissions. Funding programs that reduce greenhouse gas emissions would also potentially reduce exposure to other emissions including TACs. Based on OEHHA mapping, the closest SB 535 designated disadvantaged community is located approximately six miles northeast of the Project site (Census Tract 6085503122).[6] SB 535 does not include project specific requirements or prohibit developments in proximity to the designated communities.

Senate Bill 32

Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017, CARB adopted a second update to the Scoping Plan (CARB, 2017b). The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping Plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and support the Clean Power Plan and other Federal actions. In 2022, CARB published the 2022 Scoping Plan, which is discussed above.

Executive Order N-79-20

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

6 California Office of Environmental Health Hazard Assessment, *SB 535 Disadvantaged Communities (2022 Update)*, https://oehha.ca.gov/calenviroscreen/sb535, accessed October 2024.

2045. Executive Order N-79-20 builds upon the CARB Advanced Clean Trucks regulation, which was adopted by CARB in July 2020.

3.2 REGIONAL

Bay Area Air Quality Management District

The Bay Area Air District is the regional agency with jurisdiction over the nine-county region located in the Basin. The Association of Bay Area Governments (ABAG), Metropolitan Transportation Commission (MTC), county transportation agencies, cities and counties, and various nongovernmental organizations also join in the efforts to improve air quality through a variety of programs. These programs include the adoption of regulations and policies, as well as implementation of extensive education and public outreach programs.

Clean Air Plan

Air quality plans developed to meet federal requirements are referred to as State Implementation Plans. The federal and state Clean Air Acts require plans to be developed for areas designated as nonattainment (with the exception of areas designated as nonattainment for the state PM_{10} standard). The Bay Area Air District is responsible for developing a Clean Air Plan, which guides the region's air quality planning efforts to attain the CAAQS. The Bay Area Air District adopted the 2017 Clean Air Plan: Spare the Air, Cool the Climate on April 19, 2019, by the Bay Area Air District.

The Bay Area Air District periodically develops air quality plans that outline the regional strategy to improve air quality and protect the climate. The most recent plan, 2017 Bay Area Clean Air Plan, includes a wide range of control measures designed to reduce emissions of air pollutants and GHGs, including the following examples that may be relevant to this project: reduce emissions of toxic air contaminants by adopting more stringent limits and methods for evaluating toxic risks; implement pricing measures to reduce travel demand; accelerate the widespread adoption of electric vehicles; promote the use of clean fuels; promote energy efficiency in both new and existing buildings; and promote the switch from natural gas to electricity for space and water heating in Bay Area buildings.

The 2017 Clean Air Plan provides a regional strategy to protect public health and protect the climate. To protect public health, the plan describes how the Bay Area Air District will continue progress toward attaining all state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 Clean Air Plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious greenhouse gas (GHG) reduction targets for 2030 and 2050 and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets. The 2017 Clean Air Plan contains district-wide control measures to reduce ozone precursor emissions (i.e., ROG and NO_X), particulate matter, TACs, and greenhouse gas emissions. The Bay Area 2017 Clean Air Plan updates the Bay Area 2010 Clean Air Plan in accordance with the requirements of the California Clean Air Act to implement "all feasible measures" to reduce ozone; provides a control strategy to reduce ozone, PM, TACs, and greenhouse gases in a single, integrated plan; reviews progress in improving air quality in recent years; and establishes emission control measures to be adopted or implemented in both the short term and through 2050.

The 2017 Clean Air Plan includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants; to reduce emissions of methane and other “super-GHGs” that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

The following Bay Area Air District rules would limit emissions of air pollutants from construction and operation of the Project:

- Regulation 8, Rule 3 – Architectural Coatings. This rule governs the manufacture, distribution, and sale of architectural coatings and limits the reactive organic gases content in paints and paint solvents. Although this rule does not directly apply to the project, it does dictate the ROG content of paint available for use during the construction.

- Regulation 8, Rule 15 – Emulsified and Liquid Asphalts. This rule dictates the reactive organic gases content of asphalt available for use during construction through regulating the sale and use of asphalt and limits the ROG content in asphalt. Although this rule does not directly apply to the project, it does dictate the ROG content of asphalt for use during the construction.

- Regulation 9, Rule 8 – Organic Compounds. This rule limits the emissions of nitrogen oxides and carbon monoxide from stationary internal combustion engines with an output rated by the manufacturer at more than 50 brake horsepower.

- Regulation 11, Rule 1 – Asbestos Demolition, Renovation, and Manufacturing. The purpose of this Rule is to control emissions of asbestos to the atmosphere during demolition, renovation, milling, and manufacturing, and establish appropriate waste disposal procedures. Although this rule may not apply to the Project, since the facility was constructed in the 1960s, asbestos may be present.

- Regulation 11, Rule 18 – Reduction of risk from air toxic emissions at existing facilities. The purpose of this rule is to ensure that facilities that emit toxic air contaminants do not pose an unacceptable health risk to nearby residents, workers, or students.

The Bay Area Air District prepared an Ozone Attainment Demonstration Plan to satisfy the federal 1-hour ozone planning requirement because of the Air Basin’s nonattainment for federal and State ozone standards. The U.S. EPA revoked the 1-hour ozone standard and adopted an 8-hour ozone standard. The Bay Area Air District will address the new federal 8-hour ozone planning requirements once they are established.

Community Air Risk Evaluation Program

The Bay Area Air District began its Community Air Risk Evaluation (CARE) program in 2004 to evaluate and reduce health risks associated with exposures to outdoor TACs in the Bay Area. The program examines TAC emissions from point sources, area sources, and on-road and off-road mobile sources with an emphasis on diesel exhaust, which is a major contributor to airborne health risk in

California. The CARE program is an on-going program that encourages community involvement and input. The technical analysis portion of the CARE program is implemented in three phases that includes an assessment of the sources of TAC emissions, modeling and measurement programs to estimate concentrations of TAC, and an assessment of exposures and health risks. Throughout the program, information derived from the technical analyses is used to focus emission reduction measures in areas with high TAC exposures and high density of sensitive populations.

Risk reduction activities associated with the CARE program are focused on the most at-risk communities in the Bay Area. The Bay Area Air District has identified six communities as impacted as part of the CARE program: Concord, Richmond/San Pablo, Western Alameda County, San José, Redwood City/East Palo Alto, and Eastern San Francisco. Overburdened communities are areas located (i) within a census tract identified by the California Communities Environmental Health Screening Tool (CalEnviroScreen), Version 4.0 implemented by OEHHA, as having an overall score at or above the 70th percentile, or (ii) within 1,000 feet of any such census tract. The project site is not located in the San José CARE area or within an overburdened area as identified by CalEnviroScreen as the Project site is scored at the 69th percentile and is not within 1,000 feet of a census tract at or above the 70th percentile.

CEQA Air Quality Guidelines

The Bay Area Air District prepared its California Environmental Quality Act (CEQA) Air Quality Guidelines to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process consistent with CEQA requirements including thresholds of significance, mitigation measures, and background air quality information. They also include assessment methodologies for TACs, odors, and GHG emissions. The Bay Area Air District most recently updated its guidelines in April 2023, after revising its climate impact threshold on April 20, 2022.

3.3 LOCAL

City of San José Municipal Code

The City's Municipal Code includes the following regulations that addresses air quality standards for future development:

- Transportation Demand Management (Chapter 11.105)
- Green Building Regulations for Private Development (Chapter 17.84)

City of San José General Plan

The San José General Plan includes the following policies intended to control or reduce air pollution impacts:

Policy MS-10.1: Assess projected air emissions from new development in conformance with the Bay Area Air District CEQA Guidelines and relative to state and federal standards. Identify and implement feasible air emissions reduction measures.

Policy MS - 10.2: Consider the cumulative air quality impacts from proposed developments for proposed land use designation changes and new development, consistent with the region's Clean Air Plan and State law.

Policy MS-10.4: Encourage effective regulation of mobile and stationary sources of air pollution, both inside and outside of San José. In particular, support Federal and State regulations to improve automobile emission controls.

Policy MS – 10.6: Encourage mixed land use development near transit lines and provide retail and other types of service-oriented uses within walking distance to minimize automobile dependent development.

Policy MS – 10.7: Encourage regional and statewide air pollutant emission reduction through energy conservation to improve air quality.

Policy MS-11.2: For projects that emit toxic air contaminants, require project proponents to prepare health risk assessments in accordance with Bay Area Air District-recommended procedures as part of environmental review and employ effective mitigation to reduce possible health risks to a less than significant level. Alternatively, require new projects (such as, but not limited to, industrial, manufacturing, and processing facilities) that are sources of TACs to be located an adequate distance from residential areas and other sensitive receptors.

Policy MS-11.6: Develop and adopt a comprehensive Community Risk Reduction Plan that includes: baseline inventory of toxic air contaminants (TACs) and particulate matter smaller than 2.5 microns (PM2.5), emissions from all sources, emissions reduction targets, and enforceable emission reduction strategies and performance measures. The Community Risk Reduction Plan will include enforcement and monitoring tools to ensure regular review of progress toward the emission reduction targets, progress reporting to the public and responsible agencies, and periodic updates of the plan, as appropriate.

Policy MS-11.7: Consult with the Bay Area Air District to identify stationary and mobile TAC sources and determine the need for and requirements of a health risk assessment for proposed developments.

Policy MS-11.8: For new projects that generate truck traffic, require signage which reminds drivers that the State truck idling law limits truck idling to five minutes.

Policy MS-12.2: Require new residential development projects and projects categorized as sensitive receptors to be located an adequate distance from facilities that are existing and potential sources of odor. An adequate separation distance will be determined based upon the type, size and operations of the facility

Policy MS-13.1: Include dust, particulate matter, and construction equipment exhaust control measures as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits. At minimum, conditions shall conform to construction mitigation measures recommended in the current Bay Area Air District CEQA Guidelines for the relevant project size and type.

Policy MS-13.2: Construction and/or demolition projects that have the potential to disturb asbestos (from soil or building material) shall comply with all the requirements of the California Air Resources Board's air toxic control measures (ATCMs) for Construction, Grading, Quarrying, and Surface Mining Operations.

4 SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 AIR QUALITY THRESHOLDS

State CEQA Guidelines Appendix G

Based upon the criteria derived from State CEQA Guidelines Appendix G, a project normally would have a significant effect on the environment if it would:

AQ-1 Conflict with or obstruct implementation of the applicable air quality plan?

AQ-2 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

AQ-3 Expose sensitive receptors to substantial pollutant concentrations?

AQ-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Air Quality Thresholds

Under the California Environmental Quality Act (CEQA), the Bay Area Air District is an expert commenting agency on air quality within its jurisdiction or impacting its jurisdiction. Under the Federal Clean Air Act (FCAA), the Bay Area Air District has adopted Federal attainment plans for O_3 and $PM_{2.5}$. The Bay Area Air District reviews projects to ensure that they would not: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any Federal attainment plan.

The Bay Area Air District Options and Justification Report (dated October 2009) establishes thresholds based on substantial evidence, and the thresholds are consistent with the thresholds outlined within the 2010/2011 Bay Area Air District CEQA Air Quality Guidelines (and current 2017 CEQA Air Quality Guidelines). The thresholds have been developed by the Bay Area Air District in order to attain State and Federal ambient air quality standards. Therefore, projects below these thresholds would not violate an air quality standard and would not contribute substantially to an existing or projected air quality violation.

The Bay Area Air District's CEQA Air Quality Guidelines provides significance thresholds for both construction and operation of projects. Ultimately the lead agency determines the thresholds of significance for impacts. The City of San José has determined that the Bay Area Air District significance thresholds for air quality would be appropriate for the Project. If a project proposes development in excess of the established thresholds, as outlined in Table 5: Bay Area Air Quality Management District Emissions Thresholds, a significant air quality impact may occur and additional analysis is warranted to fully assess the significance of impacts.

Table 5: Bay Area Air Quality Management District Emissions Thresholds

Criteria Air Pollutants and Precursors (Regional)	Construction-Related	Operational-Related	
	Average Daily Emissions (pounds/day)	Average Daily Emission (pounds/day)	Annual Average Emission (tons/year)
Reactive Organic Gases (ROG)	54	54	10
Nitrogen Oxides (NO_X)	54	54	10
Coarse Particulates (PM_{10})	82 (exhaust)	82	15
Fine Particulates ($PM_{2.5}$)	54 (exhaust)	54	10
PM_{10} / $PM_{2.5}$ (fugitive dust)	Best Management Practices*	None	
Local CO	None	9.0 ppm (8-hour average) 20.0 ppm (1-hour average)	

* PM_{10} / $PM_{2.5}$ (fugitive dust) is also recognized to impact local communities. The Air District strongly recommends implementing all feasible fugitive dust management practices especially when construction projects are located near sensitive communities, including schools, residential areas, or other sensitive land uses. These measures are detailed in Chapter 5, Section 5.2.2 (Construction-Related Criteria Air Pollutant Emissions.
Source: Bay Area Air Quality Management District, 2022 CEQA Air Quality Guidelines, 2022.

4.2 METHODOLOGY

This air quality impact analysis considers construction and operational impacts associated with the Project. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Air quality impacts were assessed according to methodologies recommended by CARB and the Bay Area Air District.

Construction equipment, trucks, worker vehicles, and ground-disturbing activities associated with Project construction would generate emissions of criteria air pollutants and precursors. The anticipated truck routes during construction are shown in **Error! Reference source not found.** above. Air quality impacts were assessed according to CARB and Bay Area Air District recommended methodologies. Daily regional construction emissions are estimated by assuming construction occurs at the earliest feasible date (i.e., a conservative estimate of construction activities) and applying off-road, fugitive dust, and on-road emissions factors in CalEEMod.

Project operations would result in emissions of area sources (consumer products), stationary sources (emergency generators), off-road sources (yard trucks) and mobile sources (motor vehicles from Project generated vehicle trips). Project-generated increases in operational emissions would be predominantly associated with motor vehicle use. The Project vehicle trip generation was obtained from the *1605 South 7th Street Transportation Analysis* prepared by NV5 (September 2024). Based on the *Transportation Analysis* the following assumptions provided in Table 6: Trip Generation, Fleet Mix, and Trip Length Assumptions were modeled in CalEEMod.

Table 6: Trip Generation, Fleet Mix, and Trip Length Assumptions

Vehicle Categories[1]	Trip Generation (daily trips)	Fleet Mix	Trip Length (miles one-way)
Associates - Passenger Vehicles	328	CalEEMod Defaults	12.83[1]
DSP Drivers - Passenger Vehicles	530	CalEEMod Defaults	12.83[1]
Flex Drivers - Passenger Vehicles	150	CalEEMod Defaults	17.7[2]
DSP Vans – Sprinter Vans	528	Light Heavy-Duty Trucks (LHD2)	17.7[2]
Line-Haul Trucks - 4+ axle trucks	52	Heavy-Heavy Duty Trucks	43
Total	**1,588**		

1. Vehicle categories and descriptions are detailed in Appendix B of the Transportation Analysis (NV5, September 2024)
2. Employee, flex, and van trip length provided by VMT Analysis Report and supporting traffic data (NV5, September 2024).

Additionally, the increase of traffic over existing conditions as a result of the Project was obtained from the Project's *Transportation Analysis*. Other operational emissions from area, energy, and stationary sources were quantified in CalEEMod based on land use activity data.

As discussed above, the Bay Area Air District provides significance thresholds for emissions associated with proposed Project construction and operations. The proposed Project's construction and operational emissions are compared to the daily criteria pollutant emissions significance thresholds in order to determine the significance of the Project's impact on regional air quality.

As discussed above, the Bay Area Air District provides significance thresholds for emissions associated with proposed Project construction and operations. The proposed Project's construction and operational emissions are compared to the daily criteria pollutant emissions significance thresholds in order to determine the significance of the Project's impact on regional air quality. Impacts of the proposed Project on sensitive receptors are determined by analyzing Project impacts on toxic air contaminants, construction diesel particulate matter, of which those two impacts are determined within the Health Risk Assessment (HRA), and CO hotspots on nearby receptors. The proposed Project's impacts in other emissions (such as those leading to odors) that adversely affecting a substantial number of people are determined by the Bay Area Air District considerations of land uses.

5 POTENTIAL IMPACTS AND MITIGATION

5.1 AIR QUALITY ANALYSIS

Threshold AQ-1: Would the Project conflict with or obstruct implementation of the applicable air quality plan?

The Bay Area Air District's most recently adopted plan, the Clean Air Plan (2017), outlines how the San Francisco area will attain air quality standards, reduce population exposure and protect public health, and reduce GHG emissions. The Bay Area Air District has not established a quantitative threshold of significance for project-level consistency with an air quality plan. However, per Bay Area Air District guidelines, if a project is consistent with Criterion 1 through Criterion 3 (see analysis below), the project would not conflict with or obstruct the implementation of the applicable air plan.

Criterion 1: Does the Project support the primary goals of the Air Quality Plan?

The Clean Air Plan has two paramount goals: (1) protect air quality and health at the regional and local scale by (a) attaining all state and national air quality standards and (b) eliminating disparities among Bay Area communities in cancer health risk from toxic air contaminants, and (2) protect the climate by keeping the Bay Area region on track to achieve the statewide greenhouse gas emission reduction targets in Senate Bill 32 and 2050 goal in Executive Order S-3-05.

The Project supports these two primary goals. Regarding Goal 1(a), as described Threshold AQ-2, construction and operational air quality emissions, with mitigation, generated by the proposed Project would not exceed the Bay Area Air District's emissions thresholds for criteria air pollutants. Since the proposed Project would not exceed these thresholds, the proposed Project would not be considered by the Bay Area Air District to be a substantial emitter of criteria air pollutants and would not contribute to any non-attainment areas in the Basin and would be consistent with the goal to attain all state and national air quality standards.

Regarding Goal 1(b), as described Threshold AQ-2 and Threshold AQ-3, construction and operational cancer health risk from toxic air contaminants would be below Bay Area Air District's project-level and cumulative thresholds. Therefore, the Project would not conflict with the Clean Air Plan's goal to eliminate disparities in Bay Area communities in cancer health risk from toxic air contaminants.

Regarding Goal 2, as discussed in the *1605 South 7th Street Project Greenhouse Gas Emissions Assessment* (Kimley-Horn, 2025), the Project would be consistent with the City's Greenhouse Gas Reduction Strategy (GHGRS), which aligns with the targets in SB 32 and is designed to put the City on the path to meet the long-term target of carbon neutrality by 2045. Therefore, the Project would not conflict with the second goal of protecting the climate by being consistent with the SB 32 targets and executive orders related to future greenhouse gas emissions.

Criterion 2: Does the Project include applicable control measures from the Air Quality Plan?

The Project is consistent with the 2017 Clean Air Plan policies that are applicable to the Project site. As shown below, projects are considered consistent with the 2017 Clean Air Plan if they incorporate all applicable and feasible control measures from the 2017 Clean Air Plan and would not disrupt or hinder implementation of any 2017 Clean Air Plan control measures. As discussed in Table 7: Project Consistency with Applicable Clean Air Plan Control Measures, the Project would comply with City, State, and regional requirements.

Table 7: Project Consistency with Applicable Clean Air Plan Control Measures

Control Measure	Project Consistency
Stationary Source Control Measures	
SS21: New Source Review of Toxic Air Contaminants. SS21 addresses air toxics emissions through Bay Area Air District Rule 2-5, New Source Review of Toxic Air Contaminants.	**Consistent**. The Project would not include uses that would generate new sources of TAC that would impact nearby sensitive receptors.
SS25: Coatings, Solvents, Lubricants, Sealants and Adhesives. SS25 will reduce emissions of ROG from architectural coatings and other materials by proposing more stringent ROG limits as appropriate.	**Consistent**. The Project would comply with Regulation 8, Rule 3: Architectural Coatings, which would dictate the ROG content of paint available for use during construction (also required per City of San José Environmental Standard Conditions).
SS26: Surface Prep and Cleaning Solvent. SS26 aims to lower the ROG limits for surface preparation, cleanup, and equipment cleaning in Bay Area Air District rules 8-24, 8-29, 8-30, 8-35, and 8-38.	
SS29: Asphaltic Concrete. SS29 evaluates the cost effectiveness, and feasibility of limiting solvent content of emulsified asphalt and the availability of substitutes for diesel to clean asphalt related equipment.	**Consistent**. Paving activities associated with the project would be required to utilize asphalt that does not exceed Bay Area Air District emission standards in Regulation 8, Rule 15.
SS31: General Particulate Matter Emissions Limitation. SS31 aims to reduce or revise Bay Area Air District's allowable weight rate limitations for particulate matter.	**Consistent**. This control measure is implemented by the Bay Area Air District through Regulation 6, Rule 1. This Rule Limits the quantity of particulate matter in the atmosphere by controlling emission rates, concentration, visible emissions and opacity. The Project would be required to comply with applicable Bay Area Air District rules.
SS32: Emergency Back-up Generators. S32 will reduce emissions of DPM, TACs, and criteria pollutants from emergency backup generators by enforcing Rule 11- 18, resulting in reduced health risks to impacted individuals. This measure will also have climate protection benefits through reduced GHG emissions.	**Consistent**. While emergency generators are not currently proposed for the Project, one back up emergency generator was conservatively assumed this in analysis. If emergency generators were to be installed, they would be required to meet the Bay Area Air District's emissions standards for back-up generators..
SS36: Particulate Matter from Trackout. SS36 developed Regulation 6, Particulate Matter; Rule 6: Trackout (Rule 6-6) to address mud and dirt that can be "tracked out" from construction sites, bulk material storage, and disturbed surfaces onto public paved roads where vehicle	**Consistent**. Mud and dirt that may be tracked out onto the nearby public roads during construction activities would be removed promptly by the contractor based on Bay Area Air District's requirements.

Control Measure	Project Consistency
traffic will pulverize the mud and dirt into fine particles and entrain them into the air.	
SS37: Particulate Matter from Asphalt Operations. SS37 aims to develop a rule to require abatement/control of blue smoke emissions related to asphalt delivery to roadway paving projects.	**Consistent**. Paving and roofing activities associated with the Project would be required to utilize best management practices to minimize the particulate matter created from the transport and application of road and roofing asphalt.
SS38: Fugitive Dust. SS38 reduces particulate matter (PM10 & PM2.5) fugitive dust emissions from traffic and other operations on construction sites, large, disturbed surfaces, and other sources of fugitive PM emissions.	**Consistent**. Material stockpiling and track out during grading activities as well as smoke and fumes from paving and roofing asphalt operations would be required to utilize best management practices, such as watering exposed surfaces twice a day, covering haul trucks, keeping vehicle speeds on unpaved roads under 15 mph, to minimize the creation of fugitive dust. See City of San José Environmental Standard Conditions for a more detailed list.
SS40: Odors. SS40 proposes amendments to Regulation 7 to strengthen odor standards and enhance enforceability.	**Consistent**. The Project is an industrial development and is not anticipated to generate odors. The project would comply with Bay Area Air District Regulation 7 to strengthen odor standards and enhance enforceability.
Transportation Control Measures	
TR2: Trip Reduction Programs. TR2 includes a mandatory and voluntary trip reduction program. The regional Commuter Benefits Program, resulting from SB 1339, and similar local programs in jurisdictions with ordinances that require employers to offer pretax transit benefits to their employees are mandatory programs. Voluntary programs include outreach to employers to encourage them to implement strategies that encourage their employees to use alternatives to driving alone.	**Consistent**. The project would include a number of travel demand measures (TDM) measures such as mix of land uses and improving pedestrian and bicycle networks. These TDM Programs would help reduce vehicle miles traveled (VMT) and mobile greenhouse gas emissions.
TR8: Ridesharing and Last-Mile Connections. TR8 promotes ridesharing services and incentives through the implementation of the 511 Regional Rideshare Program, as well as local rideshare programs implemented by Congestion Management Agencies. These activities will include marketing rideshare services, operating a rideshare information call center and website, and providing vanpool support services. In addition, this measure includes provisions for encouraging car sharing programs.	
TR9: Bicycle and Pedestrian Access Facilities. The bicycle component of TR9	**Consistent**. Along South 7th Street, there are 5 to 7 feet wide Class II bike lanes in both directions with additional solid green striping. Along Phelan Ave, there

Control Measure	Project Consistency
strives to expand bicycle facilities serving employment sites, educational and cultural facilities, residential areas, shopping districts, and other activity centers. Typical improvements include bike lanes, routes, paths, and bicycle parking facilities. The bicycle component also includes a bike share pilot project that was developed to assess the feasibility of bicycle sharing as a first- and last-mile transit option. The pedestrian component of this measure is intended to improve pedestrian facilities and encourage walking by funding projects that improve pedestrian access to transit, employment sites, and major activity centers. Improvements may include sidewalks/paths, benches, reduced street width and intersection turning radii, crosswalks with activated signals, curb extensions/bulbs, buffers between sidewalks and traffic lanes, and street trees.	are both Class II and Class III bike lanes in both the NB and SB directions. Pedestrian crosswalks are present at every intersection with ADA compliant ramps. Construction of the project will maintain the existing Class II and Class III bike lanes and pedestrian facilities along Phelan Avenue. According to the San Jose Better Bike Plan 2025, protected bike lanes (class IV) are planned along Monterey Road, South 7th Street and East Alma Avenue. The Project would reconstruct the existing Class II bike lane along the South 7th Street Project site frontage to a Class IV protected bike lane from the intersection of South 7th Street and East Alma Avenue to the southern terminus of the Project site. In addition to the Class IV protected bike lane, the Project would install a sidewalk with concrete paving in between the Class IV bike lane and the Project site boundary along South 7th Street frontage. The Project would include 18 bicycle parking spaces as well as bicycle and pedestrian access on the driveway.
TR10: Land Use Strategies. This measure supports land use patterns that reduce VMT and associated emissions and exposure to TACs, especially within infill locations and impacted communities.	**Consistent**. This measure is a Bay Area Air District funding tool to maintain and disseminate information on current climate action plans and other local best practices and collaborate with regional partners to identify innovative funding mechanisms to help local governments address air quality and climate change in their general plans. In addition, the proposed Project site is located within 2,000 feet of transit stops at Montague Expressway / Trimble Road intersection and Brokaw Road / Junction Avenue intersection. Therefore, these employment opportunities would be easily accessible via transit, furthering the City's General Plan goals to support a healthy community, reduce traffic congestion and decrease greenhouse gas emissions and energy consumption. The Project would not conflict with implementation of this measure.
TR19: Medium and Heavy-Duty Trucks. TR19 supports the provision and encouragement of organizations to provide incentives for the purchase of new trucks with engines that exceed ARB's NO_X emission standards for heavy-duty engines, new hybrid trucks, and new zero-emission trucks.	**Consistent.** The Project includes a warehousing use that would generate truck trips. However, per the *Transportation Analysis* prepared for the Project there would be approximately 52 daily heavy-duty truck trips. The Project would not conflict with the implementation of this measure.
TR22: Construction, Freight and Farming Equipment. TR22 directs Bay Area Air District to work to reduce emissions from off-road equipment used in the construction, freight	**Consistent**. The Project would comply through implementation of mitigation measure AQ-1, which requires construction equipment to meet the CARB Tier 4 emissions standards.

Control Measure	Project Consistency
handling and farming industries by pursuing the following strategies: (1) offering financial incentives between 2017 and 2030 to retrofit engines with diesel particulate filters or upgrade to equipment with electric or Tier 4 off-road engines; (2) work with the air board, the California Energy Commission and others to develop more fuel-efficient off-road engines and drive trains; and (3) work with local communities to encourage use of renewable electricity and fuels.	
Energy and Climate Control Measures	
EN1: Decarbonize Electricity Generation. EN1 focuses on lowering carbon emissions by switching the fuel sources used in electricity generation. The measure would promote and expedite a transition away from fossil fuels used in electricity generation (i.e., natural gas) to a greater reliance on renewable energy sources (e.g., wind, solar). In addition, this measure would promote an increase in cogeneration, which results in useful heat in addition to electricity generation from a single fuel source.	**Consistent**. The Project would be constructed in accordance with the latest California Building Code and green building regulations/CalGreen. The proposed development would be constructed in compliance with the City's Council Policy 6-32 and the City's Green Building Ordinance.
EN2: Decrease Electricity Demand. EN2 would decrease electricity demand through the adoption of additional energy efficiency policies and programs.	
Buildings Control Measures	
BL1: Green Buildings. BL1 seeks to increase energy efficiency and the use of on-site renewable energy for all types of existing and future buildings. The measure includes policy assistance, incentives, diffusion of public information, and targeted engagement and facilitation of partnerships in order to increase energy efficiency and on-site renewable energy in the buildings sector.	**Consistent**. The Project would be constructed in accordance with the latest California Building Code and green building regulations/CalGreen. The proposed development would be constructed in compliance with the City's Council Policy 6-32 and the City's Green Building Ordinance.
BL2: Decarbonize Buildings. BL2 seeks to reduce GHG emissions, criteria pollutants and TACs by limiting the installation of space- and water-heating systems and appliances powered by fossil fuels. This measure is to be implemented by developing model policies for local governments that support low- and zero-carbon technologies as well as potentially developing a rule limiting the sale of natural-gas furnaces and water heaters.	

Control Measure	Project Consistency
BL4: Urban Heat Island Mitigation. BL4 seeks to reduce GHG emissions, criteria pollutants, and TACs by developing and encouraging the adoption of a model ordinance for "cool parking" that promotes the use of cool surface lots undergoing resurfacing.	**Consistent**. The project would demolish the existing warehouse building and associated asphalt surfaces. The project would include more landscaping and reduce the amount of impervious surface area on the project site.
Natural and Working Lands Control Measures	
NW2: Urban Tree Planting. NW2 seeks to reduce criteria pollutants and GHG emissions by developing or identifying an existing model municipal tree planting ordinance.	**Consistent**. The Project site is in an existing warehouse building. The Project includes landscaping with native vegetation and trees.
Waste Management Control Measures	
WA3: Green Waste Diversion. WA3 seeks to reduce the total amount of green waste being disposed in landfills by supporting the diversion of green waste to other uses.	**Consistent**. The waste service provider for the Project would be required to meet the AB 341 and SB 939, 1374, and 1383 requirements that require waste service providers to divert and recycle waste. Per Cal Green requirements the Project would recycle construction waste.
WA4: Recycling and Waste Reduction. WA4 seeks to reduce GHG emissions by diverting recyclables and other materials from landfills.	
Water Control Measures	
WR2: Support Water Conservation. WR2 seeks to promote water conservation, including reduced water consumption and increased on-site water recycling, in residential, commercial and industrial buildings for the purpose of reducing GHG emissions.	**Consistent**. The Project would implement water conservation measures and low flow fixtures as required by Title 24, CalGreen, and the City of San Jose's Municipal Code Section 15-11 Water Efficient Landscaping Ordinance, which includes various specifications for plant types, water features, and irrigation design etc.
Source: Bay Area Air District, Clean Air Plan, 2017 and Kimley-Horn & Associates, 2025.	

As discussed above, the Project would include appliable control measures from the Clean Air Plan.

<u>Criterion 3: Does the Project hinder or disrupt the implementation of any Air Quality Control Measures?</u>

The Clean Air Plan assumptions for projected air emissions and pollutants in the City of San José are based on the Envision San José 2040 General Plan Land Use Designation Map which designates the Project site use as "Heavy Industrial (HI)". The Project site is zoned "Heavy Industrial (HI)". The HI Zoning District allows for warehouse, light to medium manufacturing, and wholesale establishments. The Project would be consistent with the development assumptions for the land use. Therefore, the Project is consistent with the General Plan assumptions. The proposed Project consists of 106,771 square feet of industrial /office space consistent with the Envision San José 2040 General Plan Supplemental Program EIR land use designation and would not increase the regional population growth or cause changes in vehicle traffic that would obstruct implementation of the Clean Air Plan in the San Francisco Bay Area Basin.

Specifically, the Project is anticipated to generate 600 jobs within the City. ABAG predicts that job opportunities in the City of San José will grow from 369,500 in 2019 to 708,980 by 2040. Therefore, the 600 new jobs generated by the Project would be within the ABAG growth projections for the City. As identified in the General Plan Environmental Impact Report (EIR), the City currently has an existing ratio of 0.8 jobs per resident. The General Plan Final EIR identified that at full buildout of the General Plan, the existing ratio of jobs per employed resident would be increased to a job per employed resident ratio of 1.3. Because the Project is consistent with planned land uses for the Project site, the Project would not exceed the level of population or housing in regional planning efforts. Population growth from the Project would be consistent with ABAG's projections for the City and with the City's General Plan and accounted for in Bay Area Air District's assumptions in its Clean Air Plan. Thus, the jobs associated with the Project would not conflict with the Clean Air Plan.

Therefore, the Project would not hinder or disrupt the implementation of any 2017 Clean Air Plan Control Measures and impacts would be less than significant.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

Threshold AQ-2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Construction Emissions

Project construction activities would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the Project area include ozone-precursor pollutants (i.e., ROG and NO_X) and PM_{10} and $PM_{2.5}$. Construction-generated emissions are short term and temporary, lasting only while construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the Bay Area Air District's thresholds of significance.

Construction results in the temporary generation of emissions during demolition, site preparation, site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities, as well as weather conditions and the appropriate application of water.

The Project's construction-related emissions were calculated using the Bay Area Air District-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Project construction was modeled to begin July 2026 with a construction duration of approximately 17 months and would include 368,835 sf (39,219 tons) of demolition, including the existing building and pavement. Additionally, there would be approximately 3,000 cubic yards (cy) of soil export during construction. The construction schedules are shown in Table 9: Construction-Related Emissions. The exact construction timeline is unknown; however, to be conservative, earlier dates for the commencement of construction were utilized in the modeling. This approach is conservative given that emissions factors decrease in future years due to regulatory and technological improvements and fleet turnover. See Appendix A for additional information regarding the construction assumptions used in this analysis.

Table 8: Project Construction Schedule

Phase type	Start	End	Days
Demolition	7/1/2026	10/1/2026	67
Site Preparation	10/2/2026	1/1/2027	66
Grading	10/2/2026	4/1/2027	130
Building Construction	11/2/2026	10/1/2027	240
Paving	7/1/2027	12/1/2027	110
Architectural Coating	6/1/2027	12/1/2027	132
Source: Refer to Appendix A: Modeling Data.			

The Project's predicted maximum daily construction-related emissions are summarized in Table 9: Construction-Related Emissions.

Table 9: Construction-Related Emissions

Construction Year	Pollutant (maximum pounds per day)[1]					
	ROG	NO_X	Exhaust		Fugitive Dust	
			PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$
Unmitigated Scenario						
2026	7.55	67.59	2.75	2.53	15.85	2.74
2027	14.92	64.21	2.56	2.36	4.61	1.67
Bay Area Air District Significance Threshold [2, 3]	*54*	*54*	*82*	*54*	*BMPs*	*BMPs*
Exceed Bay Area Air District Threshold?	**No**	**Yes**	**No**	**No**	**N/A**	**N/A**
Mitigated Scenario						
2026	1.83	17.86	0.34	0.33	15.85	2.74
2027	13.55	11.95	0.33	0.33	4.61	1.67
Bay Area Air District Significance Threshold [2, 3]	*54*	*54*	*82*	*54*	*BMPs*	*BMPs*
Exceed Bay Area Air District Threshold?	**No**	**No**	**No**	**No**	**N/A**	**N/A**

ROG = Reactive Organic Gases; NO_X = Nitrogen Oxides; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

1. Emissions were calculated using CalEEMod. Mitigated emissions include compliance with the Bay Area Air District's Basic Construction Mitigation Measures Recommended for All Projects and the City of San José Environmental Standard Conditions. These measures include the following: water exposed surfaces two times daily; cover haul trucks; clean track outs with wet powered vacuum street sweepers; limit speeds on unpaved roads to 15 miles per hour; complete paving as soon as possible after grading; limit idle times to 5 minutes; properly maintain mobile and other construction equipment; and post a publicly visible sign with contact information to register dust complaints and take corrective action within 48 hours. Additionally, the mitigated scenario would implement Mitigation Measure AQ-1, which would require all off-road diesel powered construction equipment meet CARB Tier 4 Final emissions standards.
2. Bay Area Air Quality Management District, California Environmental Quality Act Air Quality Guidelines, updated May 2017.
3. BMPs = Best Management Practices. The Bay Area Air District recommends the implementation of all Basic Construction Mitigation Measures, whether or not construction-related emissions exceed applicable significance thresholds. Implementation of Basic Construction Mitigation measures are considered to mitigate fugitive dust emissions to be less than significant.

Source: Refer to the CalEEMod outputs provided in Appendix A, *Air Quality Modeling Data*.

Fugitive Dust Emissions. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill operations, demolition, and truck travel on unpaved roadways. Dust emissions also vary substantially from day to day, depending on the level of activity, the specific operations, and weather conditions. Fugitive dust emissions may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the Project vicinity. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. The Bay Area Air District does not have quantitative thresholds for fugitive dust. The Bay Area Air District instead recommends the implementation of all Basic Construction Control Measures, whether or not construction-related emissions exceed applicable significance thresholds and the Project would implement the Bay Area Air District Basic Construction Control Measures as a Standard Permit Condition to control dust at the Project site during all phases of construction. These Standard Permit Conditions would be incorporated in the permit. Implementation of the Bay Area Air District's Basic Construction Control Measures ensure that fugitive dust emissions would be less than significant.

Standard Permit Condition

These measures would be placed on the project plan documents prior to the issuance of any grading permits for the proposed project.

i. Water all exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) two times per day.
ii. Cover all haul trucks transporting soil, sand, or other loose material off-site.
iii. Remove all visible mud or dirt trackout onto adjacent public roads at least once per day using wet power vacuum street sweepers. The use of dry power sweeping is prohibited.
iv. Limit all vehicle speeds on unpaved roads to 15 mph.
v. Pave all new roadways, driveways, and sidewalks as soon as possible.
vi. Lay building pads as soon as possible after grading unless seeding or soil binders are used.
vii. Suspend all excavation, grading, and/or demolition activities when average wind speeds exceed 20 mph.
viii. Wash off all trucks and equipment, including their tires, prior to leaving the site.
ix. Treat unpaved roads providing access to sites located 100 feet or further from a paved road with a 6- to 12-inch layer of compacted wood chips, mulch, or gravel.
x. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 2 minutes (A 5-minute limit is required by state Airborne Toxics Control Measures [Title 13, Sections 2449(d)(3) and 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at all access points to the site.
xi. Maintain and properly tune all construction equipment in accordance with the manufacturer's specifications. Check all equipment by a certified mechanic and record a determination of running in proper condition prior to operation.
xii. Post a publicly visible sign with the name and phone number of an on-site construction coordinator to contact regarding dust complaints. The on-site construction coordinator

shall respond and take corrective action within 48 hours. The sign shall also provide the City's Code Enforcement Complaints email and number and the Bay Area Air Quality Management District's General Air Pollution Complaints number to ensure compliance with applicable regulations.

Construction Equipment and Worker Vehicle Exhaust. Exhaust emission factors for typical diesel-powered heavy equipment are based on the CalEEMod program defaults. Variables factored into estimating the total construction emissions include: level of activity, length of construction period, number of pieces/types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported onsite or offsite. Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the Project site, emissions produced on site as the equipment is used, and emissions from trucks transporting materials and workers to and from the site. Emitted pollutants would include ROG, NO_X, PM_{10}, and $PM_{2.5}$. The Bay Area Air District recommends the implementation of all Basic Construction Control Measures, whether or not construction-related emissions exceed applicable significance thresholds. The See the above listed Standard Permit Conditions.

As detailed in Table 9, unmitigated Project construction emissions would exceed the Bay Area Air District thresholds and construction emissions would result in a potentially significant impact for NO_X. However, the proposed Project would be required to use construction equipment that would meet CARB Tier 4 Final emissions standards in order to reduce NO_X construction emissions. Implementation of Mitigation Measure AQ-1, would further reduce construction emissions, as detailed in Table 9. With implementation of Mitigation Measure AQ-1, construction air quality impacts would be less than significant.

ROG Emissions. In addition to gaseous and particulate emissions, the application of asphalt and surface coatings creates ROG emissions, which are O_3 precursors. In accordance with the methodology prescribed by the Bay Area Air District, the ROG emissions associated with paving have been quantified with CalEEMod.

The highest concentration of ROG emissions would be generated from architectural coating beginning in Summer 2027 and lasting approximately five months. This phase includes the interior and exterior painting as well as striping of all paved parking areas and driveways. Paints would be required to comply with Bay Area Air District Regulation 8, Rule 3: Architectural Coating. Regulation 8, Rule 3 provides specifications on painting practices and regulates the ROG content of paint. Compliance with this mandatory regulation will further ensure that Project impacts with respect to ROG emissions remain less-than-significant.

Summary. As shown in Table 9, all criteria pollutant emissions would remain below their respective thresholds with implementation of Mitigation Measure AQ-1. The Bay Area Air District considers fugitive dust emissions to be potentially significant without implementation of the Construction Control Measures which help control fugitive dust. NO_X emissions are primarily generated by engine combustion in construction equipment, haul trucks, and employee commuting, requiring the use of newer construction equipment with better emissions controls would reduce construction-related NO_X emissions. With implementation of the Standard Permit Condition and Mitigation Measure AQ-

1 listed above, the proposed Project's construction would not worsen ambient air quality, create additional violations of federal and state standards, or delay the Basin's goal for meeting attainment standards. Impacts would be less than significant.

Impact AQ-1: Project construction would temporarily exceed Bay Area Air District threshold limits for nitrogen oxide (NO_X) prior to the implementation of mitigation.

Mitigation Measure

MM AQ-1 Prior to issuance of any demolition, grading permits, and/or building permits (whichever occurs earliest), the project applicant shall prepare and submit a construction operations plan that includes specifications of the equipment to be used during construction to the Director of Planning, Building and Code Enforcement or the Director's Designee. The plan shall be accompanied by a letter signed by an air quality specialist, verifying that the equipment included in the plan meets the standards set forth below.

- All diesel-powered off-road equipment, larger than 25 horsepower, operating on the site for more than two days continuously shall meet Tier 4 Final U.S. Environmental Protection Agency (U.S. EPA) particulate matter emissions standards.
- If Tier 4 Final equipment are not available, other measures may include the use of added exhaust devices, alternatively fueled equipment, or a combination of measures, provided that these measures demonstrate reduction in community risk impacts to a less than significant level, are verified by an air quality specialist, and approved by the City.
- The construction operations plan prepared by the construction contractor shall outline how the contractor will achieve the measures outlined in this mitigation measure. The plan shall include, but not be limited to the following:
    - List of activities and estimated timing.
    - Equipment that would be used for each activity.
    - Manufacturer's specifications for each equipment that provides the emissions level; or the manufacturer's specifications for devices that would be added to each piece of equipment to ensure the emissions level meet the thresholds in the mitigation measure.
    - How the construction contractor would ensure that the measures listed are monitored.
    - How the construction contractor would remedy any exceedance of the thresholds.
    - How often and the method the construction contractor would use to report compliance with this mitigation measure.

Operational Emissions

Operational emissions for industrial developments are typically generated from mobile sources (burning of fossil fuels in cars); energy sources (cooling and heating); area sources (landscape equipment and household products); stationary sources (i.e., emergency generators) and off-road equipment (i.e., forklifts). Table 10: Maximum Daily Project Operational Emissions shows that the Project's maximum emissions would not exceed Bay Area Air District operational thresholds.

Table 10: Maximum Daily Project Operational Emissions

Emissions Source	Pollutant (maximum pounds per day)[1]					
	ROG	NO_X	Exhaust		Fugitive Dust	
			PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$
Area	4.59	0.05	0.01	0.01	0.00	0.00
Energy[2]	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	4.65	13.83	0.20	0.19	17.30	4.41
Off-Road – Forklift[3.4]	1.03	8.43	0.32	0.29	0.00	0.00
Emergency Generator[3]	1.69	4.71	0.25	0.25	0.00	0.00
Total Project Emissions	**11.96**	**27.02**	**0.78**	**0.74**	**17.30**	**4.41**
Bay Area Air District Significance Threshold[5]	*54*	*54*	*82*	*54*	*N/A*	*N/A*
Bay Area Air District Threshold Exceeded?	**No**	**No**	**No**	**No**	**N/A**	**N/A**

ROG = Reactive Organic Gases; NO_X = Nitrogen Oxides; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

1. The highest values between summer and winter results were used as a worst-case scenario.
2. The Project would not include natural gas for operations.
3. One emergency back-up generator was conservatively assumed in this analysis. Emissions were calculated with CARB OFFROAD 1.0.2.
4. Emissions were calculated for 2 forklifts operating for 12 hours per day
5. Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, 2017.

Source: Refer to the CalEEMod outputs provided in Appendix A, *Air Quality and GHG Data*.

Area Source Emissions. Area source emissions would be generated due to the use consumer products, architectural coating, and landscaping.

Mobile Sources. Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_X, PM_{10}, and $PM_{2.5}$ are all pollutants of regional concern (NO_X and ROG react with sunlight to form O_3 [photochemical smog], and wind currents readily transport PM_{10} and $PM_{2.5}$). However, CO tends to be a localized pollutant, dispersing rapidly at the source.

Project-generated vehicle emissions have been estimated using CalEEMod. Trip generation rates associated with the Project were based on the Project's *Transportation Analysis* prepared by NV5 (2024). Based on the *Transportation Analysis*, the Project would result in a total of 1,588 daily vehicle trips. This includes 528 delivery van trips, 150 flex driver trips, 858 employee passenger trips, and 52 heavy-duty truck trips. Refer to Table 6 for more information.

Off-Road Equipment Emissions. Operational off-road emissions would be generated by off-road cargo handling equipment used during operational activities. Based on information provided by the Applicant the Project would include two forklifts.

Emergency Generator. While emergency generators are not currently proposed for the Project, one back up emergency generator was conservatively assumed this in analysis. Backup generators would only be used in the event of a power failure and would not be part of the Project's normal daily operations. Nonetheless, emissions associated with this equipment were included to be conservative. Emissions from an emergency backup generator for the warehouse building was calculated separately from CalEEMod; refer to **Appendix A**. However, CalEEMod default emissions rates were used. The Applicant would be required to obtain Permits to Operate prior to the installation and operation of the emergency generators. Testing and maintenance includes 50 hours per year per generator. If emergency generators are required, the end user would be required to obtain a permit from the Bay Area Air District and include the Best Available Control Technology (BACT) prior to installation.

Total Operational Emissions. Federal and state ambient air quality standards for criteria air pollutants have been set to protect public health, with an adequate margin of safety, and the climate. The Bay Area Air District thresholds for criteria air pollutants represent the level of emissions a project can have while allowing the air basin to attain federal and state ambient air quality standards. As indicated in Table 10, the Project would not have a significant impact on criterial air pollutants during operation. Therefore, the Project would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and no criteria pollutant health impacts would occur. Project operational emissions would be less than significant.

Cumulative Short-Term Emissions

The Basin is designated nonattainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards and nonattainment for O_3 and $PM_{2.5}$ for Federal standards. As discussed above, the Project's construction-related emissions by themselves would have the potential to exceed the Bay Area Air District significance thresholds for a criteria pollutant, NO_x, without mitigation measure AQ-1. The Bay Area Air District developed the construction thresholds of significance based on the level above which a project's individual emissions would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. Therefore, a project that exceeds the Bay Area Air District thresholds would also be a cumulatively considerable contribution to a significant cumulative impact.[7]

In general, the construction emissions of any given project would not be cumulatively considerable if they do not exceed the Bay Area Air District project level thresholds. Since the Bay Area Air District thresholds indicate whether an individual project's emissions have the potential to affect cumulative regional air quality, it can be expected that an individual project that exceeds these thresholds would result in a cumulative short term impact. Project level cumulative construction emissions would not exceed threshold because the Project would utilize Tier 4 Final construction equipment (MM AQ-1).

[7] In developing thresholds of significance for air pollutants, Bay Area Air District considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (Bay Area Air District CEQA Guidelines page 2-1).

Furthermore, the Bay Area Air District recommends Basic Construction Mitigation Measures for all projects whether construction-related emissions exceed the thresholds of significance. Other projects would comply with the recommended measures through individual CEQA review and through compliance with Bay Area Air District Regulations. Compliance with Bay Area Air District construction-related mitigation requirements are considered to reduce cumulative impacts at a Basin-wide level. As a result, construction emissions associated with the Project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts from construction.

Cumulative Long-Term Impacts

The Bay Area Air District has not established separate significance thresholds for cumulative operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. The Bay Area Air District developed the operational thresholds of significance based on the level above which a project's individual emissions would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. Therefore, a project that exceeds the Bay Area Air District operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact for operations.

As shown in Table 10, the Project's operational emissions would not exceed Bay Area Air District thresholds. As a result, operational emissions associated with the Project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts from operations.

Mitigation Measures: Mitigation Measure AQ-1.

Level of Significance: Less than significant impact with compliance with Mitigation Measure AQ-1, standard conditions, and City policies.

Threshold AQ-3: Would the Project expose sensitive receptors to substantial pollutant concentrations?

Sensitive land uses are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The closest sensitive receptor is the DCP Charter School approximately 100 feet west of the Project site. The State CEQA Guidelines indicate that a potentially significant impact could occur if a project would expose sensitive receptors to substantial pollutant concentrations. CO concentrations would be well below the State and federal standards.

Carbon Monoxide Hotspots

Intersection Hotspots. The primary mobile-source criteria pollutant of local concern is CO. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Transport of this criteria pollutant is extremely limited; CO disperses rapidly with distance from the source under normal meteorological conditions. Under certain meteorological conditions, however, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. CO concentration modeling is therefore typically conducted for intersections that are projected to operate at unacceptable levels of service during peak commute hours.

The Basin is designated as in attainment for CO. Emissions and ambient concentrations of CO have decreased dramatically in the Basin with the introduction of the catalytic converter in 1975. As noted above, CARB monitors ambient air quality at approximately 250 air monitoring stations across the state. In Santa Clara County, there are four CARB monitoring stations. No exceedances of the CAAQS or NAAQS for CO have been recorded at any monitoring stations located in Santa Clara County since 1991. As a result, the Bay Area Air District screening criteria notes that CO impacts may be determined to be less than significant if a project would not increase traffic volumes at local intersections to more than 44,000 vehicles per hour, or 24,000 vehicles per hour for locations in heavily urban areas, where "urban canyons" formed by buildings tend to reduce air circulation. Traffic would increase along surrounding roadways during long-term operational activities.

According to the *Transportation Analysis* prepared for the Project (NV5, 2024), the Project would generate 1,588 daily vehicle trips traveling along Monterey Road, South 7th Street, East Alma Avenue, Phelan Avenue, and Curtner Avenue to reach the nearest freeways (see **Error! Reference source not found.**. According to the *Traffic Analysis*, the South 7th Street and East Alma Avenue study intersection would have the highest peak hour volume with 1,864 vehicles in the worst case peak hour scenario. Project peak hour volumes at this intersection would be 60 vehicles during the worst case peak hour. Therefore, the total intersection volume would be 1,924 vehicles. As such, the Project would not increase traffic volumes at local intersections by more than 44,000 vehicles per hour, or 24,000 vehicles per hour for locations in heavily urban areas. Therefore, the Project would not have the potential to create a CO hotspot and impacts would be less than significant.

Carcinogenic Risk

Construction equipment and associated heavy-duty truck traffic generate diesel exhaust, which is a known TACs. Diesel exhaust from construction equipment operating at the site poses a health risk to nearby sensitive receptors. The closest sensitive receptor to the Project site is the DCP Charter School to the west of the Project site. The Bay Area Air District provides guidance for evaluating impacts from TACs in its CEQA Air Quality Guidelines document. As noted therein, an incremental cancer risk of greater than 10 cases per million at the Maximally Exposed Individual (MEI) will result in a significant impact. The Bay Area Air District considers exposure to annual $PM_{2.5}$ concentrations that exceed 0.3 μg/m^3 from a single source to be significant. The Bay Area Air District significance threshold for non-cancer hazards is 1.0.

Stationary sources within a 1,000-foot radius of the Project site were identified using Bay Area Air District's Stationary Source Screening Analysis Tools and consultation with Bay Area Air District. The Bay Area Air District confirmed five sources exist within 1,000-feet of the Project site and are further evaluated in the *Health Risk Assessment* (HRA) prepared by Kimley-Horn 2025. It is noted that the analysis below summarizes the findings of the HRA prepared by Kimley-Horn, refer to the HRA for detailed modeling and analysis assumptions.

Construction-Related Diesel Particulate Matter

Project construction would generate DPM emissions from the use of off-road diesel equipment required for grading and excavation, paving, and other construction activities. For construction activity, DPM is the primary TAC of concern. Diesel exhaust from construction equipment operating at the site poses a potential health risk to nearby sensitive receptors. The closest sensitive receptor is the DCP Charter School approximately 100 feet west of the Project site.

The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they would not stay on the site for long durations.

Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. The use of diesel-powered construction equipment would be episodic and would occur in various phases throughout the Project site. Additionally, construction activities would limit idling to no more than five minutes (per City and State standards, see Standard Permit Condition in impact section above), which would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Furthermore, even during the most intense year of construction, emissions of DPM would be generated from different locations on the Project site rather than in a single location because different types of construction activities (e.g., site preparation and building construction) would not occur at the same place at the same time.

$PM_{2.5}$ construction emissions rates in grams per second were calculated from the total annual mitigated on-site exhaust emissions reported in CalEEMod total during construction. Although construction would span over several years, the modeling conservatively uses the year with the highest emission for each phase. Annual emissions were converted to grams per second and these emissions rates were input into AERMOD.

As noted above, maximum (worst case) $PM_{2.5}$ exhaust construction emissions over the entire construction period were used in AERMOD to approximate construction DPM emissions. Risk levels were calculated with the CARB Hotspots Analysis and Reporting Program (HARP) Risk Assessment Standalone Tool (RAST) based on the California Office of Environmental Health Hazard Assessment (OEHHA) guidance document, Air Toxics Hot Spots Program Risk Assessment Guidelines (February 2015). Results of this assessment are summarized in Table 11: Particulate Matter Concentration and Carcinogenic Risk. The reported annual pollutant concentrations in Table 11 are at the closest maximally exposed individual (MEI) single family residential receptors located 800 feet west of the Project site, DCP Charter School receptor located 100 feet west of the Project site, and worker receptors located 95 feet west of the Project site.

Table 11 shows the health risk for the following scenarios: construction, operation, and combined construction and operation of the Project. Project construction would occur for a period of approximately 17 months. However, the health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 3-year exposure scenario, beginning with the third trimester, as recommended by the Bay Area Air District, and thus is conservative.[8] Further, based on OEHHA *Risk Assessment Guidelines*, the exposure duration for a resident is 30 years, beginning with the third trimester. Operations would commence following the construction period. The analysis calculates risk based on exposure to construction concentrations during the first 3 years of the exposure duration and operational concentrations for the remainder of the exposure duration.

As shown in Table 11, the unmitigated construction risk at DCP Charter School and single family residential receptors would be 0.68 and 0.32 in one million, respectively. The unmitigated construction risk at the off-site worker receptors would be 0.33 in one million. Additionally, the unmitigated operational cancer risk at DCP Charter School and single family residential receptors would be 1.68 and 2.62 in one million, respectively. The operational risk at the off-site worker receptor would be 6.05 in one million.

The unmitigated combined construction and subsequent operational cancer risk at the off-site worker receptor would be 6.38 in one million. Further, the unmitigated combined construction and subsequent operational cancer risk at the DCP Charter School and single family residential receptors would be 2.33 and 2.87 in one million, respectively. Therefore, the maximum unmitigated construction, operational, and construction and subsequent operational cancer risk would not exceed the Bay Area Air District threshold of 10 in one million. Regardless, the Project would be required to implement Mitigation Measure AQ-1 to reduce NO_X emissions associated with construction of the Project. Mitigation Measure AQ-1 requires the use of construction equipment that would meet CARB Tier 4 Final emissions standards in order to reduce diesel exhaust construction emissions. Implementation of Mitigation Measure AQ-1 would further reduce cancer risk from Project construction; refer to Table 11.

Table 11: Particulate Matter Concentration and Carcinogenic Risk

Exposure Scenario[1]	$PM_{2.5}$ Annual Concentration (μg/m^3)	$PM_{2.5}$ Threshold (μg/m^3)	Cancer Risk (Risk per Million)[1]	Significance Threshold (Risk per Million)	Exceeds Risk Significance Threshold?
Unmitigated					
Construction					
Single Family Residential Receptor (800 feet west)	0.042	0.30	0.687	10	No
DCP Charter School Receptor (100 feet west)	0.071	0.30	0.323	10	No
Off-Site Worker Receptor (95 feet west)	0.054	0.30	0.329	10	No
Operations					
Single Family Residential Receptor (800 feet west)	0.008	0.30	2.620	10	No
DCP Charter School Receptor (100 feet west)	0.025	0.30	1.678	10	No

8 The Bay Area Air District recommends that the cancer risk be evaluated assuming that the average daily dose for short-term exposure lasts a minimum of three years for projects lasting three years or less (Bay Area Air District, *Bay Area Air District Air Toxics NSR Program Health Risk Assessment Guidelines*, December 2016).

Exposure Scenario[1]	$PM_{2.5}$ Annual Concentration ($\mu g/m^3$)	$PM_{2.5}$ Threshold ($\mu g/m^3$)	Cancer Risk (Risk per Million)[1]	Significance Threshold (Risk per Million)	Exceeds Risk Significance Threshold?
Off-Site Worker Receptor (95 feet west)	0.029	0.30	6.052	10	No
Construction and Subsequent Operations					
Single Family Residential Receptor (800 feet west)	0.050	0.30	2.874	10	No
DCP Charter School Receptor (100 feet west)	0.095	0.30	2.331	10	No
Off-Site Worker Receptor (95 feet west)	0.082	0.30	6.381	10	No
Mitigated[3]					
Construction					
Single Family Residential Receptor (800 feet west)	0.038	0.30	0.242	10	No
DCP Charter School Receptor (100 feet west)	0.046	0.30	0.058	10	No
Off-Site Worker Receptor (95 feet west)	0.022	0.30	0.051	10	No
Construction and Subsequent Operations					
Single Family Residential Receptor (800 feet west)	0.047	0.30	2.575	10	No
DCP Charter School Receptor (100 feet west)	0.071	0.30	2.331	10	No
Off-Site Worker Receptor (95 feet west)	0.051	0.30	6.102	10	No

1. The reported annual pollutant concentration is at the closest maximally exposed individual (MEI) to the Project site.
2. The mitigated exposure scenario accounts for implementation of MM AQ-1 which requires all heavy-duty off-road construction equipment to meet CARB Tier 4 Final. This would reduce construction risk levels below Bay Area Air District thresholds. No mitigation is required for operations.

Source: Refer to HRA Report Appendix A: Modeling Data.

Additionally, the maximum unmitigated $PM_{2.5}$ concentrations generated during Project construction and operations and combined construction and operations would not exceed the Bay Area Air District threshold of 0.3 $\mu g/m^3$ at any of the receptors.

Non-Carcinogenic Hazard

The significance thresholds for TAC exposure also require an evaluation of non-cancer risk stated in terms of a hazard index. Non-cancer chronic impacts are calculated by dividing the annual average concentration by the REL for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. RELs are designed to protect sensitive individuals within the population. According to OEHHA, the REL for DPM is 5 and the target organ is the respiratory system.[9]

10 California Office of Environmental Health Hazard Assessment, *OEHHA Acute, 8-hour and Chronic Reference Exposure Level (REL) Summary*, available at https://oehha.ca.gov/air/general-info/oehha-acute-8-hour-and-chronic-reference-exposure-level-rel-summary.

Table 12: Chronic and Acute Hazard show that the highest calculated non-carcinogenic risk at the Project site would be less than hazard index of 1.0 at off-site receptors. Therefore, impacts from construction and operational non-carcinogenic hazards would be less than significant.

The highest maximum chronic hazard index associated with DPM emissions from unmitigated Project construction would be 0.0004 at the single-family residential receptor and 0.002 at the DCP Charter School receptor. The highest maximum chronic hazard index associated with DPM emissions from unmitigated Project construction would be 0.003 at the off-site worker receptors. Additionally, the highest maximum chronic hazard index associated with DPM emissions from unmitigated Project operations would be 0.001 at the single family residential receptor, 0.004 at the DCP Charter School receptor, and 0.005 at the off-site worker receptor. Therefore, unmitigated construction and operational non-carcinogenic hazards would not exceed the acceptable limits of 1.0 and impacts would be less than significant. Additionally, Mitigation Measure AQ-1 would further reduce chronic non-carcinogenic impacts by requiring all construction equipment to meet CARB Tier 4 Final emissions standards.

Table 12: Chronic and Acute Hazard

Exposure Scenario[1]	Chronic Hazard[2]
Unmitigated Construction	
Single Family Residential Receptor (800 feet west)	0.0004
DCP Charter School Receptor (100 feet west)	0.0021
Off-Site Worker Receptor (95 feet west)	0.0028
Unmitigated Operation	
Single Family Residential Receptor (800 feet west)	0.0009
DCP Charter School Receptor (100 feet west)	0.0039
Off-Site Worker Receptor (95 feet west)	0.0051
Bay Area Air District Threshold	*1.0*
Threshold Exceeded?	No

1. The reported pollutant concentration is at the closest receptor (maximally exposed individual receptor).
2. DPM is the primary TAC occurring during construction. There is no acute REL for DPM and acute health risk cannot be calculated.

Source: Refer to HRA Report Appendix A: Modeling Data.

Cumulative Health Risk Analysis

In addition to mobile sources, stationary sources within a 1,000-foot radius of the Project site were reviewed using Bay Area Air District's Stationary Source Screening Analysis Tools. There were five stationary sources located within a 1,000-foor radius of the Project site, as indicated in Table 13: Cumulative Operational Health Risk.

Table 13 shows that cumulative impacts related to cancer risk and hazard would be less than cumulatively considerable and within acceptable limits. Additionally, cumulative $PM_{2.5}$ concentrations at the residential MEI would not exceed Bay Area Air District's cumulative threshold of 0.8 μg/m^3, the primary contributor to those concentrations is the existing stationary sources near the Project area. The existing stationary have a high $PM_{2.5}$ concentration (0.59 μg/m^3). The highway sources represent approximately 83 percent of the total concentrations and are unrelated to the Project. The Project represents less than one percent of total cumulative $PM_{2.5}$ in the Project area.

The Project and the cumulative project total $PM_{2.5}$ concentrations and cancer risk would not exceed the Bay Area Air District cumulative thresholds. Therefore, the combined effects from both the proposed Project and related projects would not be cumulatively significant. The Project is also below the Bay Area Air District's incremental health risk thresholds. Therefore, the incremental effect of the individual Project is also less than cumulatively considerable.[10] As the related cumulative TAC sources in the Project area do not exceed the Bay Area Air District cumulative thresholds for cancer risk and the Project does not exceed the Bay Area Air District incremental thresholds, impacts would not be cumulatively considerable. Therefore, the project's cumulative impacts would be less than cumulatively considerable.

Table 13: Cumulative Operational Health Risk

Emissions Sources	$PM_{2.5}$ (μg/m³)	Cancer Risk (Risk per million)	Hazard
Project Emissions	0.03	6.37	0.014
Major Street Sources[1]	0.05	1.48	0.20
Highway Sources[1]	0.03	14.46	1.32
Railway Sources[1]	0.01	3.06	0.04
Stationary Sources			
Lardie & Company	0.00	0.00	0.00
Glencore Recycling	0.59	0.30	0.00
Y2K Auto Body Repair	0.00	0.00	0.00
Skunkworks Performance & Restoration	0.00	0.08	0.00
Sun Garden Chevron	0.00	38.23	0.17
Cumulative Health Risk Values	**0.71**	**63.98**	**1.74**
Bay Area Air District Cumulative Threshold	*0.8*	*100*	*10*
Threshold Exceeded?	**No**	**No**	**No**
1. Bay Area Air District GIS data.			
Source: Bay Area Air District's Stationary Source Data and GIS Mapping Tools, 2024.			

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

10 CEQA case law has held that any additional emissions in an impacted area does not necessarily create a significant cumulative impact, finding that "the 'one [additional] molecule rule' is not the law" (Communities for a Better Environment v. California Resources Agency (2002) 103 Cal. App. 4th 98, 120).

Threshold AQ-4: Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Construction

According to the Bay Area Air District, land uses associated with odor complaints typically include wastewater treatment plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries, and chemical plants. The Project does not include any uses identified by the Bay Area Air District as being associated with odors.

Construction activities associated with the Project may generate detectable odors from heavy duty equipment (i.e., diesel exhaust), as well as from architectural coatings and asphalt off-gassing. Odors generated from the referenced sources are common in the man-made environment and are not known to be substantially offensive to adjacent receptors. Any construction-related odors would be short-term in nature and cease upon Project completion. As a result, impacts to existing adjacent land uses from construction-related odors would be short-term in duration and therefore would be less than significant.

Operational

The Bay Area Air District has established odor screening thresholds for land uses that have the potential to generate substantial odor complaints, including wastewater treatment plants, landfills or transfer stations, composting facilities, confined animal facilities, food manufacturing, and chemical plants. The Bay Area Air District's thresholds for odors are qualitative based on Bay Area Air District's Regulation 7, Odorous Substances. This rule places general limitations on odorous substances and specific emission limitations on certain odorous compounds.

The Project includes an 106,771 square foot warehouse and office building with canopy which is not anticipated to generate odors. None of the above listed odor generating uses are located near the Project site. Impacts would be less than significant.

Mitigation Measures: Compliance with General Plan Policies and applicable state and local law would reduce impacts associated with odors to a less than significant level. No additional site-specific mitigation measures are required.

Level of Significance: Less than significant impact.

5.2 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

Cumulative Setting

The cumulative setting for air quality includes the City and the Air Basin. The Air Basin is designated as a nonattainment area for state standards of ozone, PM_{10}, and $PM_{2.5}$ and federal standards of ozone and $PM_{2.5}$, attainment and serious maintenance for federal PM_{10} standards, and is designated as unclassified or attainment for all other pollutants. Cumulative growth in population and vehicle use could inhibit efforts to improve regional air quality and attain the ambient air quality standards.

Cumulative Impacts and Mitigation Measures

The Bay Area Air District CEQA Air Quality Guidelines do not include separate significance thresholds for cumulative operational or construction emissions that result in criteria air pollutants. However, with respect to regional air pollution, the development of the Project would result in population growth that is consistent with ABAG projections and the City General Plan. Therefore, the Project would be consistent with the 2017 Clean Air Plan that uses ABAG population forecasts.

As described in threshold Bay Area Air District construction BMPs above, the Project would also be consistent with the appropriate 2017 Clean Air Plan control measures, which are provided to reduce air quality emissions for the entire Bay Area region. Additionally, the discussion in threshold AQ-2 addresses cumulative impacts and demonstrates that the Project would not exceed the applicable Bay Area Air District thresholds for construction or operations with implementation of Mitigation Measure AQ-1. The Bay Area Air District CEQA Air Quality Guidelines note that the nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size by itself to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. As mentioned on pages 2-10, 2-12, and 2-14 of the Bay Area Air District CEQA Guidelines (2022), if the project emissions of criteria air pollutants or its precursors are below the Bay Area Air District Thresholds of Significance, the project would result in a less than significant cumulative impact.

Consistency with the 2017 Clean Air Plan control measures would ensure that the Project would not make a cumulatively considerable contribution to air quality impacts in the Basin. In addition, in the discussion above in Impact Statement AQ-3 and Impact Statement AQ-4 the Project would not exceed the applicable Bay Area Air District thresholds for exposure of sensitive receptors to substantial pollutant concentrations after mitigation nor for other emissions (such as those leading to odors) adversely affecting a substantial number of people. Therefore, impacts would be less than significant and less than cumulatively considerable.

Mitigation Measures: Mitigation Measure AQ-1.

Level of Significance: Less than significant impact with mitigation.

6 REFERENCES

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8. California Air Resources Board, *Aerometric Data Analysis and Measurement System,* 2024.
9. California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, 2005.
10. California Air Resources Board, *Current Air Quality Standards*, 2024.
11. California Air Resources Board, *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, 2000.
12. City of San José, *General Plan,* 2024.
13. City of San José, *Municipal Code*, 2024.
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15. NV5, *1605 S. 7th Street Development Transportation Analysis*, 2024.
16. Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Risk Assessment Guidelines*, 2015.
17. United States Environmental Protection Agency, *National Ambient Air Quality Standards Table*, 2024.
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19. United States Environmental Protection Agency, *Policy Assessment for the Review of the Lead National Ambient Air Quality Standards*, 2014.

Appendix A

Air Quality Modeling Data

1605 7th Street Project
CalEEMod Assumptions

Land Use

Land Use	Size	Metric
Unrefrigerated Warehouse-No Rail	134.69	KSF
General Office Building	8.694	KSF
Parking Lot	546.99	KSF
City Park	0.023	Acres
KSF = thousand square feet		

Construction

Schedule

Phase Name	Start Date	End Date	Workdays
Demolition	7/1/2026	10/1/2026	67
Site Preparation	10/2/2026	1/1/2027	66
Grading	10/2/2026	4/1/2027	130
Building Construction	11/2/2026	10/1/2027	240
Paving	7/1/2027	12/1/2027	110
Architectural Coating	6/1/2027	12/1/2027	132

Equipment

Construction Phase	Equipment	Number per Day	Hours Per Day
Demolition	Excavators	3	8
	Rubber Tired Dozers	2	8
	Concrete/Industrial Saws	1	8
Site Preparation	Rubber Tired Dozers	3	8
	Tractors/Loaders/Backhoes	4	8
Grading	Graders	1	8
	Excavators	2	8
	Scrapers	2	8
	Rubber Tired Dozers	1	8
	Tractors/Loaders/Backhoes	2	8
Building Construction	Cranes	1	7
	Forklifts	3	8
	Welders	1	8
	Generator Set	1	8
	Tractors/Loaders/Backhoes	3	7
Paving	Paving Equipment	2	8
	Pavers	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	6

Grading/Earthwork

Phase	Import (CY)	Export (CY)	Haul Distance (mi)
Grading	-	3,600	20
CY = cubic yards; mi = miles			

Demolition

Phase	Amount (square feet)
Demolition	368,835

Operations

Vehicle Data

Land Use	Size	Metric	Trip Rate	Daily Trip Generation
Warehouse (Associates + DSP Driver)	134.69	KSF	6.37	858
Office (DSP Vans)	8.694	KSF	60.732	528
Parking (Flex)	546.99	KSF	0.274	150
City Park (Trucks)	0.02	Acres	2260.87	52
Total Daily Trips	-	-	-	**1,588**
KSF = thousand square feet; DU = dwelling unit				

Trip Length

Land Use	Trip Length (miles)		
	Non-Res H-W / Res H-W	Non-Res W-O / Res H-S	Non-Res O-O / Res H-O
Warehouse (Associates + DSP Driver)	12.8	-	-
Office (DSP Vans)	17.7	-	-
Parking (Flex)	17.7	-	-
City Park (Trucks)	-	-	43.0

Trip Purpose and Percent

Land Use	Trip Percent (%)			Trip Purpose (%)		
	Primary	Diverted	Pass-By	Non-Res H-W / Res H-W	Non-Res W-O / Res H-S	Non-Res O-O / Res H-O
Warehouse (Associates + DSP Driver)	100	-	-	100	-	-
Office (DSP Vans)	100	-	-	100	-	-
Parking (Flex)	100	-	-	100	-	-
City Park (Trucks)	100	-	-	-	-	100

Fleet Mix

Land Use	HHD %	LDA %	LDT1 %	LDT2 %	LHD1 %	LHD2 %	MCY %	MDV %	MH %	MHD %	OBUS %	SBUS %	UBUS %
Warehouse (Associates + DSP Driver)	CalEEMod Default												
Office (DSP Vans)	-	-	-	-	-	100	-	-	-	-	-	-	-
Parking (Flex)	CalEEMod Default												
City Park (Trucks)	100	-	-	-	-	-	-	-	-	-	-	-	-

Stationary Sources

Equipment Type	Fuel Type	# per Day	Hours/ Day	Hours/ Year	HP	Load Factor
Emergency Generators	Diesel	1	-	50	750	0.74
Forklifts	Diesel	2	12	-	Aggregate	-
HP = horsepower						

Quantified Measures

#	Measure	Notes
Construction		
C-5	Use Advanced Engine Tiers	Tier 4 equipment use for all equipment

7th Street Construction v2 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	7th Street Construction v2
Construction Start Date	7/1/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	1.60
Location	37.31688933074615, -121.86932951651731
County	Santa Clara
City	San Jose
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1804
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
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	135	1000sqft	3.09	134,690	134,690	—	—	—
Parking Lot	547	1000sqft	12.6	0.00	0.00	—	—	—

General Office Building	8.69	1000sqft	0.20	8,694	0.00	—	—	—
City Park	0.02	Acre	0.02	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.4	14.9	36.1	43.5	0.10	1.39	15.9	16.8	1.28	2.74	3.65	—	13,825	13,825	0.95	1.68	21.9	14,373
Mit.	13.6	13.6	17.2	53.5	0.10	0.21	15.9	16.0	0.21	2.74	2.93	—	13,825	13,825	0.95	1.68	21.9	14,373
% Reduced	11%	9%	52%	-23%	—	85%	—	5%	84%	—	20%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.3	14.9	67.6	73.0	0.14	2.75	15.9	16.8	2.53	2.74	4.21	—	15,874	15,874	0.96	1.68	0.57	15,972
Mit.	13.6	13.5	17.9	82.0	0.14	0.34	15.9	16.0	0.33	2.74	2.93	—	15,874	15,874	0.96	1.68	0.57	15,972
% Reduced	11%	9%	74%	-12%	—	88%	—	5%	87%	—	30%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.37	6.08	17.6	16.8	0.04	0.65	3.69	4.34	0.60	0.79	1.39	—	5,153	5,153	0.28	0.35	2.02	5,267

Mit.	5.13	5.08	5.14	19.4	0.04	0.09	3.69	3.78	0.09	0.79	0.88	—	5,153	5,153	0.28	0.35	2.02	5,267
% Reduced	20%	16%	71%	-15%	—	86%	—	13%	85%	—	36%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.16	1.11	3.21	3.07	0.01	0.12	0.67	0.79	0.11	0.14	0.25	—	853	853	0.05	0.06	0.33	872
Mit.	0.94	0.93	0.94	3.54	0.01	0.02	0.67	0.69	0.02	0.14	0.16	—	853	853	0.05	0.06	0.33	872
% Reduced	20%	16%	71%	-15%	—	86%	—	13%	85%	—	36%	—	—	—	—	—	—	—

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.82	2.56	33.3	25.8	0.10	0.97	15.9	16.8	0.90	2.74	3.65	—	13,825	13,825	0.95	1.68	21.9	14,373
2027	15.4	14.9	36.1	43.5	0.09	1.39	4.47	5.86	1.28	1.64	2.92	—	10,458	10,458	0.43	0.22	3.93	10,539
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	9.03	7.55	67.6	73.0	0.14	2.75	15.9	16.8	2.53	2.74	4.21	—	15,874	15,874	0.96	1.68	0.57	15,972
2027	15.3	14.9	64.2	71.9	0.14	2.56	4.61	7.17	2.36	1.67	4.03	—	15,842	15,842	0.65	0.27	0.11	15,939
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.21	1.74	17.6	16.8	0.04	0.65	3.69	4.34	0.60	0.79	1.39	—	5,153	5,153	0.28	0.35	2.02	5,267
2027	6.37	6.08	12.6	16.8	0.03	0.47	1.10	1.57	0.43	0.37	0.80	—	3,679	3,679	0.15	0.09	0.87	3,711
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.40	0.32	3.21	3.06	0.01	0.12	0.67	0.79	0.11	0.14	0.25	—	853	853	0.05	0.06	0.33	872
2027	1.16	1.11	2.30	3.07	0.01	0.09	0.20	0.29	0.08	0.07	0.15	—	609	609	0.02	0.02	0.14	614

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.46	0.63	17.2	25.0	0.10	0.19	15.9	16.0	0.19	2.74	2.93	—	13,825	13,825	0.95	1.68	21.9	14,373
2027	13.6	13.6	8.39	53.5	0.09	0.21	4.47	4.67	0.21	1.64	1.85	—	10,458	10,458	0.43	0.22	3.93	10,539
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.96	1.83	17.9	82.0	0.14	0.34	15.9	16.0	0.33	2.74	2.93	—	15,874	15,874	0.96	1.68	0.57	15,972
2027	13.6	13.5	11.9	81.8	0.14	0.33	4.61	4.94	0.33	1.67	2.00	—	15,842	15,842	0.65	0.27	0.11	15,939
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.58	0.41	5.14	18.1	0.04	0.09	3.69	3.78	0.09	0.79	0.88	—	5,153	5,153	0.28	0.35	2.02	5,267
2027	5.13	5.08	3.68	19.4	0.03	0.08	1.10	1.18	0.08	0.37	0.44	—	3,679	3,679	0.15	0.09	0.87	3,711
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.07	0.94	3.31	0.01	0.02	0.67	0.69	0.02	0.14	0.16	—	853	853	0.05	0.06	0.33	872
2027	0.94	0.93	0.67	3.54	0.01	0.01	0.20	0.22	0.01	0.07	0.08	—	609	609	0.02	0.02	0.14	614

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

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

Location	TOG	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	2.72	2.29	20.7	19.0	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	13.0	13.0	—	1.97	1.97	—	—	—	—	—	—	—
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.72	2.29	20.7	19.0	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	13.0	13.0	—	1.97	1.97	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.79	3.49	0.01	0.15	—	0.15	0.14	—	0.14	—	629	629	0.03	0.01	—	631
Demolition	—	—	—	—	—	—	2.39	2.39	—	0.36	0.36	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.69	0.64	< 0.005	0.03	—	0.03	0.03	—	0.03	—	104	104	< 0.005	< 0.005	—	104
Demolition	—	—	—	—	—	—	0.44	0.44	—	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	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.57	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	126	126	< 0.005	< 0.005	0.46	128
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	0.00
Hauling	1.05	0.22	12.6	6.22	0.07	0.13	2.71	2.84	0.13	0.74	0.87	—	10,272	10,272	0.81	1.65	21.4	10,806
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	117	117	< 0.005	0.01	0.01	118
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	0.00
Hauling	1.03	0.21	13.3	6.27	0.07	0.13	2.71	2.84	0.13	0.74	0.87	—	10,276	10,276	0.81	1.65	0.56	10,790
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.7	21.7	< 0.005	< 0.005	0.04	22.0
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	0.00
Hauling	0.19	0.04	2.40	1.15	0.01	0.02	0.50	0.52	0.02	0.14	0.16	—	1,886	1,886	0.15	0.30	1.69	1,982
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.59	3.59	< 0.005	< 0.005	0.01	3.64
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	0.00
Hauling	0.03	0.01	0.44	0.21	< 0.005	< 0.005	0.09	0.10	< 0.005	0.02	0.03	—	312	312	0.02	0.05	0.28	328

3.2. Demolition (2026) - Mitigated

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

Location	TOG	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	0.36	0.36	4.51	18.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	13.0	13.0	—	1.97	1.97	—	—	—	—	—	—	—
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	4.51	18.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	13.0	13.0	—	1.97	1.97	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.83	3.34	0.01	0.01	—	0.01	0.01	—	0.01	—	629	629	0.03	0.01	—	631
Demolition	—	—	—	—	—	—	2.39	2.39	—	0.36	0.36	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.15	0.61	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	104	104	< 0.005	< 0.005	—	104
Demolition	—	—	—	—	—	—	0.44	0.44	—	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	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.57	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	126	126	< 0.005	< 0.005	0.46	128
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	0.00
Hauling	1.05	0.22	12.6	6.22	0.07	0.13	2.71	2.84	0.13	0.74	0.87	—	10,272	10,272	0.81	1.65	21.4	10,806
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	117	117	< 0.005	0.01	0.01	118
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	0.00
Hauling	1.03	0.21	13.3	6.27	0.07	0.13	2.71	2.84	0.13	0.74	0.87	—	10,276	10,276	0.81	1.65	0.56	10,790
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.7	21.7	< 0.005	< 0.005	0.04	22.0
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	0.00
Hauling	0.19	0.04	2.40	1.15	0.01	0.02	0.50	0.52	0.02	0.14	0.16	—	1,886	1,886	0.15	0.30	1.69	1,982
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.59	3.59	< 0.005	< 0.005	0.01	3.64
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	0.00
Hauling	0.03	0.01	0.44	0.21	< 0.005	< 0.005	0.09	0.10	< 0.005	0.02	0.03	—	312	312	0.02	0.05	0.28	328

3.3. Site Preparation (2026) - Unmitigated

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

Location	TOG	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	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.56	5.19	5.13	0.01	0.22	—	0.22	0.20	—	0.20	—	943	943	0.04	0.01	—	947
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.95	0.94	< 0.005	0.04	—	0.04	0.04	—	0.04	—	156	156	0.01	< 0.005	—	157
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.57	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	136	136	< 0.005	0.01	0.01	138
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	24.5	24.5	< 0.005	< 0.005	0.04	24.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.06	4.06	< 0.005	< 0.005	0.01	4.12
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	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	0.00

3.4. Site Preparation (2026) - Mitigated

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

Location	TOG	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	0.59	0.57	3.48	28.2	0.05	0.13	—	0.13	0.13	—	0.13	—	5,298	5,298	0.21	0.04	—	5,316
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.10	0.62	5.02	0.01	0.02	—	0.02	0.02	—	0.02	—	943	943	0.04	0.01	—	947
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.11	0.92	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	156	156	0.01	< 0.005	—	157
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.57	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	136	136	< 0.005	0.01	0.01	138
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	24.5	24.5	< 0.005	< 0.005	0.04	24.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.06	4.06	< 0.005	< 0.005	0.01	4.12
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	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	0.00

3.5. Site Preparation (2027) - Unmitigated

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

Location	TOG	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	3.63	3.05	28.0	28.3	0.05	1.17	—	1.17	1.08	—	1.08	—	5,298	5,298	0.21	0.04	—	5,316
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.4	10.4	< 0.005	< 0.005	—	10.4
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.72	1.72	< 0.005	< 0.005	—	1.72
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.53	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	134	134	< 0.005	0.01	0.01	136
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.27
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
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	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	0.00

3.6. Site Preparation (2027) - Mitigated

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

Location	TOG	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	0.59	0.57	3.44	28.2	0.05	0.12	—	0.12	0.12	—	0.12	—	5,298	5,298	0.21	0.04	—	5,316
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.4	10.4	< 0.005	< 0.005	—	10.4
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.72	1.72	< 0.005	< 0.005	—	1.72
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.53	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	134	134	< 0.005	0.01	0.01	136
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.27
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
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	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	0.00

3.7. Grading (2026) - Unmitigated

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

Location	TOG	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	3.62	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	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	4.85	4.91	0.01	0.20	—	0.20	0.18	—	0.18	—	1,175	1,175	0.05	0.01	—	1,179
Dust From Material Movement	—	—	—	—	—	—	0.64	0.64	—	0.25	0.25	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.88	0.90	< 0.005	0.04	—	0.04	0.03	—	0.03	—	195	195	0.01	< 0.005	—	195
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	156	156	< 0.005	0.01	0.02	158
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	0.00
Hauling	0.02	< 0.005	0.26	0.12	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	203	203	0.02	0.03	0.01	213
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	0.05	28.5
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	0.00
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	36.1	36.1	< 0.005	0.01	0.03	37.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.64	4.64	< 0.005	< 0.005	0.01	4.71
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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.97	5.97	< 0.005	< 0.005	0.01	6.27

3.8. Grading (2026) - Mitigated

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

Location	TOG	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	0.64	0.64	4.43	35.3	0.06	0.12	—	0.12	0.12	—	0.12	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	0.79	6.29	0.01	0.02	—	0.02	0.02	—	0.02	—	1,175	1,175	0.05	0.01	—	1,179
Dust From Material Movement	—	—	—	—	—	—	0.64	0.64	—	0.25	0.25	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	1.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	195	195	0.01	< 0.005	—	195
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	156	156	< 0.005	0.01	0.02	158
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	0.00
Hauling	0.02	< 0.005	0.26	0.12	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	203	203	0.02	0.03	0.01	213
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	0.05	28.5
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	0.00
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	36.1	36.1	< 0.005	0.01	0.03	37.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.64	4.64	< 0.005	< 0.005	0.01	4.71
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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.97	5.97	< 0.005	< 0.005	0.01	6.27

3.9. Grading (2027) - Unmitigated

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

Location	TOG	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	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—

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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	0.52	4.56	4.86	0.01	0.19	—	0.19	0.17	—	0.17	—	1,175	1,175	0.05	0.01	—	1,179
Dust From Material Movement	—	—	—	—	—	—	0.64	0.64	—	0.25	0.25	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.10	0.83	0.89	< 0.005	0.03	—	0.03	0.03	—	0.03	—	195	195	0.01	< 0.005	—	195
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
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	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.71	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	165	165	< 0.005	0.01	0.55	168
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	0.00
Hauling	0.02	< 0.005	0.24	0.12	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	198	198	0.02	0.03	0.39	208
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.61	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	153	153	< 0.005	0.01	0.01	155
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	0.00
Hauling	0.02	< 0.005	0.25	0.12	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	198	198	0.02	0.03	0.01	208
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.5	27.5	< 0.005	< 0.005	0.04	27.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.2	35.2	< 0.005	0.01	0.03	37.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.56	4.56	< 0.005	< 0.005	0.01	4.63
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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.83	5.83	< 0.005	< 0.005	< 0.005	6.13

3.10. Grading (2027) - Mitigated

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

Location	TOG	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	0.64	0.64	4.43	35.3	0.06	0.12	—	0.12	0.12	—	0.12	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.64	4.43	35.3	0.06	0.12	—	0.12	0.12	—	0.12	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	0.79	6.29	0.01	0.02	—	0.02	0.02	—	0.02	—	1,175	1,175	0.05	0.01	—	1,179
Dust From Material Movement	—	—	—	—	—	—	0.64	0.64	—	0.25	0.25	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	1.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	195	195	0.01	< 0.005	—	195

Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.71	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	165	165	< 0.005	0.01	0.55	168
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	0.00
Hauling	0.02	< 0.005	0.24	0.12	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	198	198	0.02	0.03	0.39	208
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.61	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	153	153	< 0.005	0.01	0.01	155
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	0.00
Hauling	0.02	< 0.005	0.25	0.12	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	198	198	0.02	0.03	0.01	208
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.5	27.5	< 0.005	< 0.005	0.04	27.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.2	35.2	< 0.005	0.01	0.03	37.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.56	4.56	< 0.005	< 0.005	0.01	4.63
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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.83	5.83	< 0.005	< 0.005	< 0.005	6.13

3.11. 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	TOG	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	1.28	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.16	1.52	< 0.005	0.04	—	0.04	0.04	—	0.04	—	281	281	0.01	< 0.005	—	282
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	46.6	46.6	< 0.005	< 0.005	—	46.8
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.19	0.17	0.16	1.93	0.00	0.00	0.49	0.49	0.00	0.12	0.12	—	462	462	0.01	0.02	0.05	469
Vendor	0.06	0.02	0.82	0.38	< 0.005	0.01	0.17	0.17	0.01	0.05	0.05	—	623	623	0.03	0.09	0.04	652
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.22	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	54.9	54.9	< 0.005	< 0.005	0.09	55.7
Vendor	0.01	< 0.005	0.09	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	73.2	73.2	< 0.005	0.01	0.08	76.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.09	9.09	< 0.005	< 0.005	0.02	9.22
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.1	12.1	< 0.005	< 0.005	0.01	12.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2026) - Mitigated

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

Location	TOG	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	0.35	0.33	2.82	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.04	0.04	0.33	1.74	< 0.005	0.01	—	0.01	0.01	—	0.01	—	281	281	0.01	< 0.005	—	282
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.6	46.6	< 0.005	< 0.005	—	46.8
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.17	0.16	1.93	0.00	0.00	0.49	0.49	0.00	0.12	0.12	—	462	462	0.01	0.02	0.05	469
Vendor	0.06	0.02	0.82	0.38	< 0.005	0.01	0.17	0.17	0.01	0.05	0.05	—	623	623	0.03	0.09	0.04	652
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.22	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	54.9	54.9	< 0.005	< 0.005	0.09	55.7
Vendor	0.01	< 0.005	0.09	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	73.2	73.2	< 0.005	0.01	0.08	76.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.09	9.09	< 0.005	< 0.005	0.02	9.22
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.1	12.1	< 0.005	< 0.005	0.01	12.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. 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	TOG	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	1.23	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.55	5.04	6.94	0.01	0.18	—	0.18	0.17	—	0.17	—	1,285	1,285	0.05	0.01	—	1,290
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.92	1.27	< 0.005	0.03	—	0.03	0.03	—	0.03	—	213	213	0.01	< 0.005	—	214
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	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.12	2.12	0.00	0.00	0.49	0.49	0.00	0.12	0.12	—	490	490	0.01	0.02	1.64	497
Vendor	0.05	0.02	0.74	0.36	< 0.005	0.01	0.17	0.17	0.01	0.05	0.05	—	610	610	0.03	0.09	1.34	640
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.15	1.80	0.00	0.00	0.49	0.49	0.00	0.12	0.12	—	454	454	0.01	0.02	0.04	460
Vendor	0.05	0.02	0.78	0.37	< 0.005	0.01	0.17	0.17	0.01	0.05	0.05	—	611	611	0.03	0.09	0.03	639
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	0.96	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	246	246	< 0.005	0.01	0.38	250
Vendor	0.03	0.01	0.41	0.20	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	327	327	0.02	0.05	0.31	343
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.17	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	40.7	40.7	< 0.005	< 0.005	0.06	41.3
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	54.2	54.2	< 0.005	0.01	0.05	56.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2027) - Mitigated

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

Location	TOG	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	0.35	0.33	2.82	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.82	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.18	1.51	7.95	0.01	0.04	—	0.04	0.04	—	0.04	—	1,285	1,285	0.05	0.01	—	1,290
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.28	1.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	213	213	0.01	< 0.005	—	214
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.12	2.12	0.00	0.00	0.49	0.49	0.00	0.12	0.12	—	490	490	0.01	0.02	1.64	497
Vendor	0.05	0.02	0.74	0.36	< 0.005	0.01	0.17	0.17	0.01	0.05	0.05	—	610	610	0.03	0.09	1.34	640
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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.15	1.80	0.00	0.00	0.49	0.49	0.00	0.12	0.12	—	454	454	0.01	0.02	0.04	460
Vendor	0.05	0.02	0.78	0.37	< 0.005	0.01	0.17	0.17	0.01	0.05	0.05	—	611	611	0.03	0.09	0.03	639
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	0.96	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	246	246	< 0.005	0.01	0.38	250
Vendor	0.03	0.01	0.41	0.20	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	327	327	0.02	0.05	0.31	343
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.17	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	40.7	40.7	< 0.005	< 0.005	0.06	41.3
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	54.2	54.2	< 0.005	0.01	0.05	56.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Paving (2027) - Unmitigated

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

Location	TOG	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	0.88	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	0.30	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	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	0.30	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	2.09	3.00	< 0.005	0.09	—	0.09	0.08	—	0.08	—	455	455	0.02	< 0.005	—	457
Paving	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	75.4	75.4	< 0.005	< 0.005	—	75.7
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.42	126
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	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.46	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.01	116
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	34.9	34.9	< 0.005	< 0.005	0.05	35.5
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.79	5.79	< 0.005	< 0.005	0.01	5.87
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	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	0.00

3.16. Paving (2027) - Mitigated

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

Location	TOG	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	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.30	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.30	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.58	3.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	455	455	0.02	< 0.005	—	457
Paving	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.58	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	75.4	75.4	< 0.005	< 0.005	—	75.7
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.42	126
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	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.46	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.01	116
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	34.9	34.9	< 0.005	< 0.005	0.05	35.5
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.79	5.79	< 0.005	< 0.005	0.01	5.87
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	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	0.00

3.17. 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	TOG	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	0.14	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	12.5	12.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	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	12.5	12.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.30	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	48.3	48.3	< 0.005	< 0.005	—	48.4
Architectural Coatings	4.51	4.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.99	7.99	< 0.005	< 0.005	—	8.02
Architectural Coatings	0.82	0.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.42	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.0	98.0	< 0.005	< 0.005	0.33	99.5
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	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.36	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	90.8	90.8	< 0.005	< 0.005	0.01	92.0
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	33.2	33.2	< 0.005	< 0.005	0.05	33.7
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.49	5.49	< 0.005	< 0.005	0.01	5.57
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	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	0.00

3.18. Architectural Coating (2027) - Mitigated

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

Location	TOG	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	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	12.5	12.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	12.5	12.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.23	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	48.3	48.3	< 0.005	< 0.005	—	48.4
Architectural Coatings	4.51	4.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.99	7.99	< 0.005	< 0.005	—	8.02

Architect Coatings	0.82	0.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.42	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.0	98.0	< 0.005	< 0.005	0.33	99.5
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	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.36	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	90.8	90.8	< 0.005	< 0.005	0.01	92.0
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	33.2	33.2	< 0.005	< 0.005	0.05	33.7
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.49	5.49	< 0.005	< 0.005	0.01	5.57
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	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	0.00

4. Operations Emissions Details

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	TOG	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	TOG	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	TOG	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	TOG	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	TOG	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Species	TOG	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	7/1/2026	10/1/2026	5.00	67.0	—
Site Preparation	Site Preparation	10/2/2026	1/1/2027	5.00	66.0	—
Grading	Grading	10/2/2026	4/1/2027	5.00	130	—
Building Construction	Building Construction	11/2/2026	10/1/2027	5.00	240	—
Paving	Paving	7/1/2027	12/1/2027	5.00	110	—
Architectural Coating	Architectural Coating	6/1/2027	12/1/2027	5.00	132	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40

Site Preparation	Tractors/Loaders/Back	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Tier 4 Final	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41

Grading	Excavators	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	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	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	146	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT

Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	2.88	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	59.4	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	23.5	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	11.9	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	146	20.0	HHDT

Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	2.88	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	59.4	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	23.5	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	11.9	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

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	215,076	71,692	32,819

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	39,219	—
Grading	0.00	3,000	390	0.00	—
Paving	0.00	0.00	0.00	0.00	12.6

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
Parking Lot	12.6	100%

General Office Building	0.00	0%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.6	annual days of extreme heat
Extreme Precipitation	2.35	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

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

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	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	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
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	22.2
AQ-PM	33.2
AQ-DPM	80.3
Drinking Water	22.7
Lead Risk Housing	29.1
Pesticides	0.00
Toxic Releases	30.3
Traffic	53.5
Effect Indicators	—
CleanUp Sites	80.4
Groundwater	94.9
Haz Waste Facilities/Generators	87.7
Impaired Water Bodies	33.2
Solid Waste	98.8
Sensitive Population	—
Asthma	44.1
Cardio-vascular	16.7
Low Birth Weights	65.4
Socioeconomic Factor Indicators	—

Education	81.7
Housing	91.5
Linguistic	95.3
Poverty	87.5
Unemployment	15.8

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	15.74489927
Employed	13.05017323
Median HI	1.398691133
Education	—
Bachelor's or higher	24.56050302
High school enrollment	100
Preschool enrollment	70.15270114
Transportation	—
Auto Access	6.967791608
Active commuting	39.71512896
Social	—
2-parent households	37.88014885
Voting	44.15501091
Neighborhood	—
Alcohol availability	31.57962274
Park access	25.52290517
Retail density	84.3320929
Supermarket access	48.45374054

Tree canopy	57.65430515
Housing	—
Homeownership	22.34056204
Housing habitability	6.082381625
Low-inc homeowner severe housing cost burden	5.504940331
Low-inc renter severe housing cost burden	12.66521237
Uncrowded housing	14.25638393
Health Outcomes	—
Insured adults	22.21224176
Arthritis	40.2
Asthma ER Admissions	72.1
High Blood Pressure	27.5
Cancer (excluding skin)	74.5
Asthma	37.3
Coronary Heart Disease	37.1
Chronic Obstructive Pulmonary Disease	22.0
Diagnosed Diabetes	14.5
Life Expectancy at Birth	74.1
Cognitively Disabled	9.6
Physically Disabled	5.2
Heart Attack ER Admissions	85.9
Mental Health Not Good	29.3
Chronic Kidney Disease	35.4
Obesity	49.0
Pedestrian Injuries	94.3
Physical Health Not Good	24.5
Stroke	26.0
Health Risk Behaviors	—

Binge Drinking	97.0
Current Smoker	24.1
No Leisure Time for Physical Activity	14.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	65.5
Elderly	61.3
English Speaking	2.6
Foreign-born	87.0
Outdoor Workers	79.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	13.1
Traffic Density	43.1
Traffic Access	87.4
Other Indices	—
Hardship	84.4
Other Decision Support	—
2016 Voting	41.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	69.0
Healthy Places Index Score for Project Location (b)	13.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	based on assumptions spreadsheet.
Construction: Dust From Material Movement	based on assumptions spreadsheet
Land Use	—

7th Street Operations v3 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	7th Street Operations v3
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	1.60
Location	37.31699040914974, -121.86923951672324
County	Santa Clara
City	San Jose
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1804
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
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	135	1000sqft	3.09	134,690	13,258	—	—	This includes utility and canopy
Parking Lot	547	1000sqft	12.6	0.00	0.00	—	—	—

General Office Building	8.69	1000sqft	0.20	8,694	0.00	—	—	—
City Park	0.02	Acre	0.02	0.00	0.00	0.00	—	City Park used as proxy for truck driver trips

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.3	9.24	12.6	66.7	0.23	0.21	17.3	17.5	0.20	4.41	4.61	135	25,269	25,404	14.9	1.84	64.4	26,390
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.08	8.06	13.8	53.1	0.22	0.20	17.3	17.5	0.19	4.41	4.60	135	24,209	24,344	14.9	1.90	1.69	25,285
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.56	8.51	13.4	55.7	0.22	0.21	17.3	17.5	0.19	4.41	4.60	135	24,364	24,500	14.9	1.88	27.8	25,460
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.75	1.55	2.44	10.2	0.04	0.04	3.15	3.19	0.04	0.80	0.84	22.4	4,034	4,056	2.47	0.31	4.60	4,215

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.66	4.65	12.6	60.5	0.23	0.20	17.3	17.5	0.19	4.41	4.60	—	23,850	23,850	0.98	1.66	64.3	24,435
Area	4.67	4.59	0.05	6.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.6	25.6	< 0.005	< 0.005	—	25.7
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,274	1,274	0.21	0.02	—	1,287
Water	—	—	—	—	—	—	—	—	—	—	—	62.6	119	181	6.44	0.15	—	389
Waste	—	—	—	—	—	—	—	—	—	—	—	72.6	0.00	72.6	7.26	0.00	—	254
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	10.3	9.24	12.6	66.7	0.23	0.21	17.3	17.5	0.20	4.41	4.61	135	25,269	25,404	14.9	1.84	64.4	26,390
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.52	4.50	13.8	53.1	0.22	0.20	17.3	17.5	0.19	4.41	4.60	—	22,816	22,816	1.03	1.72	1.67	23,356
Area	3.56	3.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,274	1,274	0.21	0.02	—	1,287
Water	—	—	—	—	—	—	—	—	—	—	—	62.6	119	181	6.44	0.15	—	389
Waste	—	—	—	—	—	—	—	—	—	—	—	72.6	0.00	72.6	7.26	0.00	—	254
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	9.08	8.06	13.8	53.1	0.22	0.20	17.3	17.5	0.19	4.41	4.60	135	24,209	24,344	14.9	1.90	1.69	25,285
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.45	4.44	13.4	52.6	0.22	0.20	17.3	17.5	0.19	4.41	4.60	—	22,958	22,958	1.01	1.70	27.8	23,517
Area	4.11	4.07	0.03	3.08	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.6	12.6	< 0.005	< 0.005	—	12.7
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,274	1,274	0.21	0.02	—	1,287
Water	—	—	—	—	—	—	—	—	—	—	—	62.6	119	181	6.44	0.15	—	389
Waste	—	—	—	—	—	—	—	—	—	—	—	72.6	0.00	72.6	7.26	0.00	—	254
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	9.56	8.51	13.4	55.7	0.22	0.21	17.3	17.5	0.19	4.41	4.60	135	24,364	24,500	14.9	1.88	27.8	25,460

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.00	0.81	2.44	9.61	0.04	0.04	3.15	3.19	0.03	0.80	0.84	—	3,801	3,801	0.17	0.28	4.60	3,894
Area	0.75	0.74	< 0.005	0.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.09	2.09	< 0.005	< 0.005	—	2.10
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	211	211	0.03	< 0.005	—	213
Water	—	—	—	—	—	—	—	—	—	—	—	10.4	19.7	30.0	1.07	0.03	—	64.3
Waste	—	—	—	—	—	—	—	—	—	—	—	12.0	0.00	12.0	1.20	0.00	—	42.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	1.75	1.55	2.44	10.2	0.04	0.04	3.15	3.19	0.04	0.80	0.84	22.4	4,034	4,056	2.47	0.31	4.60	4,215

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	TOG	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	3.19	2.90	2.55	30.4	0.08	0.05	7.76	7.81	0.04	1.97	2.01	—	8,171	8,171	0.27	0.29	26.6	8,290
Parking Lot	0.50	0.47	0.34	3.90	0.01	0.01	0.94	0.94	0.01	0.24	0.24	—	992	992	0.04	0.04	3.21	1,008
General Office Building	1.29	1.18	1.19	22.1	0.07	0.03	6.54	6.56	0.02	1.65	1.68	—	7,114	7,114	0.12	0.13	19.4	7,175
City Park	0.69	0.11	8.48	4.03	0.07	0.12	2.06	2.18	0.12	0.55	0.67	—	7,573	7,573	0.56	1.21	15.0	7,962

Total	5.66	4.65	12.6	60.5	0.23	0.20	17.3	17.5	0.19	4.41	4.60	—	23,850	23,850	0.98	1.66	64.3	24,435
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	3.08	2.78	2.99	27.3	0.08	0.05	7.76	7.81	0.04	1.97	2.01	—	7,677	7,677	0.29	0.32	0.69	7,779
Parking Lot	0.48	0.44	0.39	3.63	0.01	0.01	0.94	0.94	0.01	0.24	0.24	—	933	933	0.04	0.04	0.08	946
General Office Building	1.28	1.16	1.52	18.2	0.07	0.03	6.54	6.56	0.02	1.65	1.68	—	6,632	6,632	0.13	0.15	0.50	6,681
City Park	0.68	0.11	8.94	4.05	0.07	0.12	2.06	2.18	0.12	0.55	0.67	—	7,574	7,574	0.56	1.21	0.39	7,949
Total	5.52	4.50	13.8	53.1	0.22	0.20	17.3	17.5	0.19	4.41	4.60	—	22,816	22,816	1.03	1.72	1.67	23,356
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.55	0.50	0.51	4.90	0.01	0.01	1.42	1.42	0.01	0.36	0.37	—	1,282	1,282	0.05	0.05	1.90	1,300
Parking Lot	0.09	0.08	0.07	0.64	< 0.005	< 0.005	0.17	0.17	< 0.005	0.04	0.04	—	156	156	0.01	0.01	0.23	158
General Office Building	0.23	0.21	0.25	3.32	0.01	< 0.005	1.19	1.20	< 0.005	0.30	0.31	—	1,109	1,109	0.02	0.02	1.39	1,118
City Park	0.12	0.02	1.60	0.74	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,254	1,254	0.09	0.20	1.08	1,317
Total	1.00	0.81	2.44	9.61	0.04	0.04	3.15	3.19	0.03	0.80	0.84	—	3,801	3,801	0.17	0.28	4.60	3,894

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	TOG	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	—	—	—	—	—	—	—	—	—	—	—	—	870	870	0.14	0.02	—	879
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	268	268	0.04	0.01	—	270
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	137	137	0.02	< 0.005	—	138
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,274	1,274	0.21	0.02	—	1,287
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	870	870	0.14	0.02	—	879
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	268	268	0.04	0.01	—	270
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	137	137	0.02	< 0.005	—	138
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,274	1,274	0.21	0.02	—	1,287
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrig Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	144	144	0.02	< 0.005	—	145
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	44.3	44.3	0.01	< 0.005	—	44.8
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	22.6	22.6	< 0.005	< 0.005	—	22.9
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	211	211	0.03	< 0.005	—	213

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	TOG	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	0.00	0.00	0.00	0.00	0.00	0.00	—	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	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	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	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrig Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	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	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	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	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	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	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

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

Consum Products	3.11	3.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.45	0.45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.11	1.02	0.05	6.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.6	25.6	< 0.005	< 0.005	—	25.7
Total	4.67	4.59	0.05	6.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.6	25.6	< 0.005	< 0.005	—	25.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.11	3.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.45	0.45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3.56	3.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.57	0.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.10	0.09	< 0.005	0.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.09	2.09	< 0.005	< 0.005	—	2.10
Total	0.75	0.74	< 0.005	0.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.09	2.09	< 0.005	< 0.005	—	2.10

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	TOG	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	—	—	—	—	—	—	—	—	—	—	—	59.7	113	173	6.14	0.15	—	370
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2.96	5.59	8.55	0.30	0.01	—	18.3
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	62.6	119	181	6.44	0.15	—	389
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	59.7	113	173	6.14	0.15	—	370
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2.96	5.59	8.55	0.30	0.01	—	18.3

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	62.6	119	181	6.44	0.15	—	389
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	9.88	18.7	28.6	1.02	0.02	—	61.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.49	0.93	1.42	0.05	< 0.005	—	3.04
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	10.4	19.7	30.0	1.07	0.03	—	64.3

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	TOG	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	—	—	—	—	—	—	—	—	—	—	—	68.2	0.00	68.2	6.82	0.00	—	239
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.36	0.00	4.36	0.44	0.00	—	15.2
City Park	—	—	—	—	—	—	—	—	—	—	—	< 0.005	0.00	< 0.005	< 0.005	0.00	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	72.6	0.00	72.6	7.26	0.00	—	254
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	68.2	0.00	68.2	6.82	0.00	—	239
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.36	0.00	4.36	0.44	0.00	—	15.2
City Park	—	—	—	—	—	—	—	—	—	—	—	< 0.005	0.00	< 0.005	< 0.005	0.00	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	72.6	0.00	72.6	7.26	0.00	—	254
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	11.3	0.00	11.3	1.13	0.00	—	39.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.72	0.00	0.72	0.07	0.00	—	2.52
City Park	—	—	—	—	—	—	—	—	—	—	—	< 0.005	0.00	< 0.005	< 0.005	0.00	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	12.0	0.00	12.0	1.20	0.00	—	42.0

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

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	TOG	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. 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	TOG	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. 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	TOG	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	TOG	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	TOG	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	TOG	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

5.9. 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	858	858	858	313,161	11,008	11,008	11,008	4,017,855
Parking Lot	150	150	150	54,704	1,326	1,326	1,326	484,135
General Office Building	528	528	528	192,721	9,346	9,346	9,346	3,411,170
City Park	52.0	52.0	52.0	18,980	2,236	2,236	2,236	816,140

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	215,076	71,692	32,819

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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	1,556,714	204	0.0330	0.0040	0.00
Parking Lot	479,163	204	0.0330	0.0040	0.00
General Office Building	244,557	204	0.0330	0.0040	0.00
City Park	0.00	204	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	31,147,063	141,734
Parking Lot	0.00	0.00
General Office Building	1,545,217	0.00
City Park	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	127	—
Parking Lot	0.00	—
General Office Building	8.09	—
City Park	< 0.005	—

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
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
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.6	annual days of extreme heat
Extreme Precipitation	2.35	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	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	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
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	22.2
AQ-PM	33.2
AQ-DPM	80.3
Drinking Water	22.7
Lead Risk Housing	29.1
Pesticides	0.00
Toxic Releases	30.3
Traffic	53.5
Effect Indicators	—
CleanUp Sites	80.4
Groundwater	94.9
Haz Waste Facilities/Generators	87.7
Impaired Water Bodies	33.2
Solid Waste	98.8

Sensitive Population	—
Asthma	44.1
Cardio-vascular	16.7
Low Birth Weights	65.4
Socioeconomic Factor Indicators	—
Education	81.7
Housing	91.5
Linguistic	95.3
Poverty	87.5
Unemployment	15.8

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	15.74489927
Employed	13.05017323
Median HI	1.398691133
Education	—
Bachelor's or higher	24.56050302
High school enrollment	100
Preschool enrollment	70.15270114
Transportation	—
Auto Access	6.967791608
Active commuting	39.71512896
Social	—
2-parent households	37.88014885
Voting	44.15501091

Neighborhood	—
Alcohol availability	31.57962274
Park access	25.52290517
Retail density	84.3320929
Supermarket access	48.45374054
Tree canopy	57.65430515
Housing	—
Homeownership	22.34056204
Housing habitability	6.082381625
Low-inc homeowner severe housing cost burden	5.504940331
Low-inc renter severe housing cost burden	12.66521237
Uncrowded housing	14.25638393
Health Outcomes	—
Insured adults	22.21224176
Arthritis	40.2
Asthma ER Admissions	72.1
High Blood Pressure	27.5
Cancer (excluding skin)	74.5
Asthma	37.3
Coronary Heart Disease	37.1
Chronic Obstructive Pulmonary Disease	22.0
Diagnosed Diabetes	14.5
Life Expectancy at Birth	74.1
Cognitively Disabled	9.6
Physically Disabled	5.2
Heart Attack ER Admissions	85.9
Mental Health Not Good	29.3
Chronic Kidney Disease	35.4

Obesity	49.0
Pedestrian Injuries	94.3
Physical Health Not Good	24.5
Stroke	26.0
Health Risk Behaviors	—
Binge Drinking	97.0
Current Smoker	24.1
No Leisure Time for Physical Activity	14.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	65.5
Elderly	61.3
English Speaking	2.6
Foreign-born	87.0
Outdoor Workers	79.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	13.1
Traffic Density	43.1
Traffic Access	87.4
Other Indices	—
Hardship	84.4
Other Decision Support	—
2016 Voting	41.6

7.3. Overall Health & Equity Scores

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

Healthy Places Index Score for Project Location (b)	13.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Trip gen per traffic analysis: Warehouse (Associates + DSP Driver), Office (Vans), Parking (Flex), City Park (Trucks) It should be noted that the origin of the FLEX driver is not known - The primary difference between the van trips and the private carrier vehicles is that they do not return to the last-mile distribution center, The delivery zones are the same as for the delivery vans so the methodology for determining VMT is the same, except that because the private carrier vehicles do not return to the center, the VMT is not doubled. Therefore the 8.85 miles reflected above equates to 17.7 miles one way.
Operations: Fleet Mix	Anticipated fleet mix Warehouse (Associates + DSP Driver) default fleet mix Office (Vans) LHDT2 Parking (Flex) default fleet mix City Park (Trucks) HHD
Operations: Energy Use	No Natural gas

Model Output: OFFROAD2021 (v1.0.7) Emissions Inventory
Region Type: Sub-Area
Region: Santa Clara (SF)
Calendar Year: 2027
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Y	Vehicle Category	Model Year	Horsepower Bin	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2.5_tpd	SOx_tpd	NH3_tpd	Fuel Consumptic	Total_Activ	Total_Population	Horsepower_Hours_hhpy
Santa Clara (SF)	2027	Industrial - Forklifts	Aggregate	Aggregate	Diesel	0.01286619	0.01556809	0.018527314	0.219302735	0.127712626	38.85613	0.00483739	0.00445	0.000368077	0	1262636.702	1200327	2535.583506	23627187.3

g/hph											
	HC	ROG	TOG	CO	Nox	CO2	PM10	PM2_5	Sox	NH3	Fuel_gphr
2024	0.180315826	0.21818215	0.25965479	3.073462585	1.789854457	544.55709	0.067794583	0.062371	0.005158484	0	17695477.7

Project Forklifts	2	
HP	89	
Hours per Day	12	
Days per Year	365	
1 pound =	453.5924	grams

Emissions Source	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	metric tons/yr	PM10==2.5 tons/yr
Phase 1 Forklift Emission	1.03	8.43	14.47	0.02	0.32	0.29	0	0	0.054

Based on emission rates obtained from CARB OFFROAD Version 1.0.3.
Number of forklifts per SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results, June 2014.

Emergency Backup Generator Emissions

	Fuel Type	Quantity	HP	LF	Hours/Year per Unit	Hours per Day	HP-hr per day	Total hp-hr per year
Standard Generator	Diesel	1	750	0.74	50	1	750	37,500

Emissions Rates (g/hp-hr)

	HC	ROG	TOG	CO	NO_X	CO_2	PM_{10}	$PM_{2.5}$	PM	SO_X	CH_4
Standard Warehouse	0.14	1.020583	1.124909	2.6	2.85	521.6311	0.15	0.15	0.15	0.00494	0.073

From CalEEMod Guide Appenix D, Table 12.1 and updated with Tier 4 Standards (CARB 2017 Off-Road Diesel Emission Factor Update for NOx and PM)

Emissions (pounds/day)

	HC	ROG	TOG	CO	NO_X	CO_2	PM_{10}	$PM_{2.5}$	PM	SO_X	CH_4
Standard Warehouse	0.23	1.69	1.86	4.30	4.71	862.50	0.25	0.25	0.25	0.01	0.00
Total	0.23	1.69	1.86	4.30	4.71	862.50	0.25	0.25	0.25	0.01	0.00

Emissions (tons/year)

	HC	ROG	TOG	CO	NO_X	CO_2	PM_{10}	$PM_{2.5}$	PM	SO_X	CH_4
Standard Warehouse	0.01	0.04	0.05	0.11	0.12	21.56	0.01	0.01	0.01	0.00	0.00
Total	0.01	0.04	0.05	0.11	0.12	21.56	0.01	0.01	0.01	0.00	0.00