EL PASEO AND 1777 SARATOGA AVENUE MIXED-USE PROJECT AIR QUALITY ASSESSMENT

San José, California

March 31, 2021
Revised July 20, 2021

Prepared for:

Amy Wang
Project Manager
David J. Powers & Associates, Inc.
1871 The Alameda, Suite 200
San José, CA 95126

Prepared by:

Casey Divine &
James A. Reyff

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality
429 E. Cotati Avenue
Cotati, CA 94931
(707) 794-0400

I&R Project: #19-030

INTRODUCTION

The purpose of this report is to address air quality and community health risk impacts associated with the proposed mixed-use developments at the intersection of Saratoga Avenue and Lawrence Expressway/Quito Road in San José, California. The air quality impacts from this project would be associated with demolition of the existing land uses, construction of the new buildings and infrastructure, and operation of the project. Air pollutants associated with construction and operation of the project were predicted using appropriate models. In addition, the potential project health risk impacts (includes construction and operation) and the impact of existing toxic air contaminant (TAC) sources affecting the nearby and proposed sensitive receptors were evaluated. The analysis was conducted following guidance provided by the Bay Area Air Quality Management District (BAAQMD).[1]

PROJECT DESCRIPTION

The project consists of two sites, El Paseo and 1777 Saratoga Avenue. El Paseo is approximately 8.9-acres in size and located at the southeast corner of Saratoga Avenue and Quito Road. 1777 Saratoga Avenue is approximately 1.8-acres and located at the northeast corner of Saratoga Avenue and Lawrence Expressway. Currently, the El Paseo site is developed with three commercial buildings and is part of the larger El Paseo de Saratoga Shopping Center. The 1777 Saratoga Avenue site is currently developed with four office buildings.

The project proposes to rezone both project sites to Planned Development (PD) for residential market-rate, mixed-use project that meets the City's Signature Project requirements. The project would develop one of two development options:

- Non-Education Mixed-Use Option, or
- Education Mixed-Use Option.

The two development options both propose residential and commercial uses. The Non-Education Mixed-Use Option would construct 1,100 multi-family units and 165,000 square feet (sf) of general commercial space. In comparison, the Education Mixed-Use Option would have 370 fewer multi-family residential units and 60,000 square feet of commercial space but include a 450,000-sf private kindergarten through 12th grade (K-12) education facility with an additional 120,000-sf for a 200-unit dorm facility. The Saratoga Site (under both Options) proposes 280 multi-family units and 6,000-sf of general commercial space. A breakdown of the proposed uses by project site is provided in Table 1 below.

The project proposes to include a stand-by diesel generator and electric fire pump on the ground-floor of each proposed building. This means there would be a total of five generators and fire pumps under the Education Mixed-Use Option and four generators and fire pumps under the Non-Education Mixed-Use Option. Based on the provided schematics of the generators and fire pumps, the stand-by diesel generator would be rated at 1,910 kilowatts (kW) with a 2,561 horsepower (HP) diesel engine. The fire pumps do not have their own diesel engine and are assumed to run off the stand-by generator.

[1] Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2017.

Table 1. Proposed Uses by Project

Table 0-1: Proposed Development Options*			
Land Use	**1777 Saratoga Avenue**	**El Paseo**	**TOTAL**
Non-Education Mixed-Use Option			
Multifamily Residential Units	280	820	1,100
Commercial SF	6,000	159,000**	165,000
Educational Facility SF	0	0	0
• Educational Facility Students/Staff	0	0	0
• Educational Facility Related Units	0	0	0
Education Mixed-Use Option			
Multifamily Residential Units	280	450	730
Commercial SF	6,000	60,000	66,000
Educational Facility SF***	0	450,000	450,000
• Educational Facility Students/Staff	0	2,500/500	2,500/500
• Educational Facility Related Units	0	200	200

* The numbers in this table represent the maximum amount of development proposed.
** The Non-Education Option assumes that of the 159,000 square feet of commercial proposed at the El Paseo site, approximately 52,508 would consist of general office and 36,120 of medical office. Office uses are allowed under the El Paseo site's Regional Commercial General Plan land use designation.
*** The Education Mixed-Use Option assumes the educational facility and dorm space would be converted from 370 multifamily residential units (for a total of 730 units) and an 60,000 (for a total of 165,000 square feet) of general commercial space from the Non-Education Mixed-Use Option.

AIR POLLUTANTS AND CONTAMINANTS

Air pollutants are governed by multiple federal and state standards to regulate and mitigate health impacts. At the federal level, there are six criteria pollutants for which National Ambient Air Quality Standards (NAAQS) have been established: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), suspended particulate matter (PM: $PM_{2.5}$ and PM_{10}), and sulfur dioxide (SO_2). California sets standards, similar to the NAAQS as California Ambient Air Quality Standards (CAAQS). Health effects of the primary criteria pollutants (i.e., the NAAQS) and their potential sources are described below and summarized in Table 2. Note that California includes pollutants or contaminants that are specific to certain industries and not associated with this project. These include hydrogen sulfide and vinyl chloride.

Ozone

Ozone is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and oxides of nitrogen (NO_X). The main sources of ROG and NO_X, often referred to as ozone precursors, are combustion processes (including combustion in motor vehicle engines) and the evaporation of solvents, paints, and fuels. In the Bay Area, automobiles are the single largest source of ozone precursors. Ozone is referred to as a regional air pollutant because its precursors are transported and diffused by wind concurrently with ozone production through the photochemical reaction process. Ozone causes eye irritation, airway constriction, shortness of breath, and can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema.

Carbon Monoxide

Carbon monoxide is an odorless, colorless gas usually formed as the result of the incomplete combustion of fuels. The single largest source of CO is motor vehicles. While CO transport is limited, it disperses with distance from the source under normal meteorological conditions. However, under certain extreme meteorological conditions, CO concentrations near congested roadways or intersections may reach unhealthful levels that adversely affect local sensitive receptors (e.g., residents, schoolchildren, the elderly, hospital patients, etc.). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service (LOS) or with extremely high traffic volumes. Exposure to high concentrations of CO reduces the oxygen-carrying capacity of the blood and can cause headaches, nausea, dizziness, fatigue, impair central nervous system function, and induce angina (chest pain) in persons with serious heart disease. Very high levels of CO can be fatal.

Nitrogen Dioxide

Nitrogen Dioxide is a reddish-brown gas that is a byproduct of combustion processes. Automobiles and industrial operations are the main sources of NO_2. Aside from its contribution to ozone formation, NO_2 also contribute to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition. NO_2 may be visible as a coloring component on high pollution days, especially in conjunction with high ozone levels. NO_2 decreases lung function and may reduce resistance to infection. On January 22, 2010 the U.S. Environmental Protection Agency (EPA) strengthened the health-based NAAQS for NO_2.

Sulfur Dioxide

Sulfur dioxide is a colorless, irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO_2 levels in the region. SO_2 irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight.

Particulate Matter

Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles are those that are larger than 2.5 microns but smaller than 10 microns (PM_{10}). $PM_{2.5}$ refers to fine suspended particulate matter with an aerodynamic diameter of 2.5 microns or less that is not readily filtered out by the lungs. Nitrates, sulfates, dust, and combustion particulates are major components of PM_{10} and $PM_{2.5}$. These small particles can be directly emitted into the atmosphere as by-products of fuel combustion, through abrasion, such as tire or brake lining wear, or through fugitive dust (wind or mechanical erosion of soil). They can also be formed in the atmosphere through chemical reactions. Particulates may transport carcinogens and other toxic compounds that adhere to the particle surfaces and can enter the human body through the lungs.

Lead

Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been mobile and industrial sources. As a result of the phase-out of leaded gasoline, metal processing is currently the primary source of lead emissions. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufactures.

Twenty years ago, mobile sources were the main contributor to ambient lead concentrations in the air. In the early 1970s, the U.S. EPA established national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. The EPA banned the use of leaded gasoline in highway vehicles in December 1995. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector and levels of lead in the air decreased dramatically.

Toxic Air Contaminants (TACs)

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated by the EPA and the California Air Resources Board (CARB). Some examples of TACs include benzene, butadiene, formaldehyde, and hydrogen sulfide. The identification, regulation, and monitoring of TACs is relatively recent compared to that for criteria pollutants.

High volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic (distribution centers, truck stops) were identified as posing the highest risk to adjacent receptors. Other facilities associated with increased risk include warehouse distribution centers, large retail or industrial facilities, high volume transit centers, or schools with a high volume of bus traffic. Health risks from TACs are a function of both concentration and duration of exposure.

Table 2. Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	• Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter.	• Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO_2)	• Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions.	• Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O_3)	• Atmospheric reaction of organic gases with nitrogen oxides in sunlight.	• Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	• Contaminated soil.	• Impairment of blood functions and nerve con-struction. • Behavioral and hearing problems in children.
Suspended Particulate Matter ($PM_{2.5}$ and PM_{10})	• Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions.	• Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardiorespiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Sulfur Dioxide (SO_2)	• Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes.	• Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.
Toxic Air Contaminants	• Cars and trucks, especially diesels. • Industrial sources such as chrome platers. • Neighborhood businesses such as dry cleaners and service stations. • Building materials and product.	• Cancer. • Chronic eye, lung, or skin irritation. • Neurological and reproductive disorders.

Source: CARB, 2009. ARB Fact Sheet: Air Pollution and Health, see: https://www.arb.ca.gov/research/health/fs/fs1/fs1.htm accessed May 1, 2018

SETTING

The project is located in Santa Clara County, which is part of the San Francisco Bay Area Air Basin. The Air Basin includes the counties of San Francisco, Santa Clara, San Mateo, Marin, Napa, Contra Costa, and Alameda, along with the southeast portion of Sonoma County and the southwest portion of Solano County.

This Project is within the jurisdiction of the BAAQMD. Air quality conditions in the San Francisco Bay Area have improved significantly since the BAAQMD was created in 1955. Ambient concentrations of air pollutants, and the number of days during which the region exceeds air quality standards, have fallen dramatically. Exceedances of air quality standards occur primarily during meteorological conditions conducive to high pollution levels, such as cold, windless winter nights or hot, sunny summer afternoons.

Local Climate and Air Quality

Air quality is a function of both local climate and local sources of air pollution. Air quality is the balance of the natural dispersal capacity of the atmosphere and emissions of air pollutants from human uses of the environment. Climate and topography are major influences on air quality.

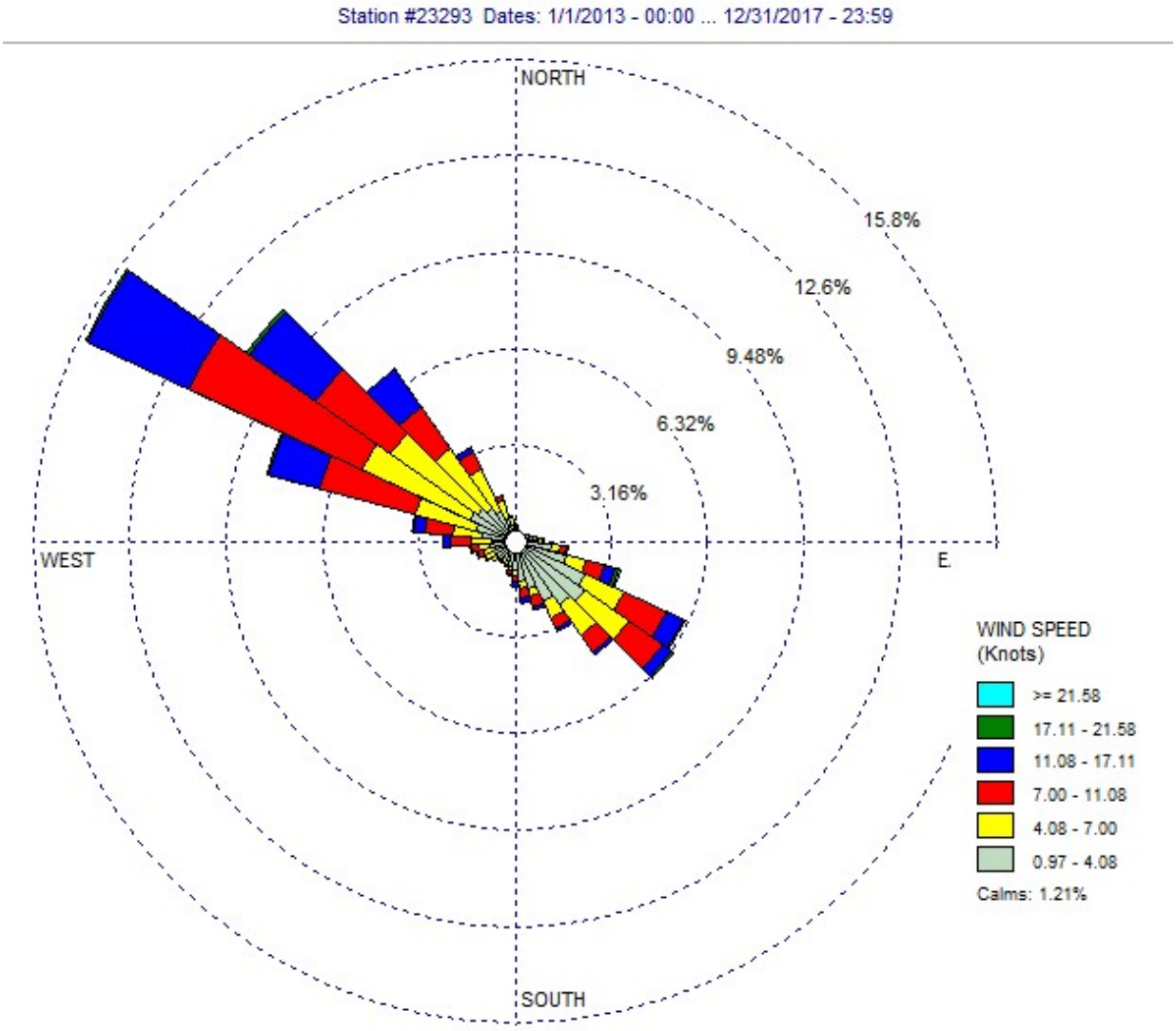
Climate and Meteorology

During the summer, mostly clear skies result in warm daytime temperatures and cool nights in the Santa Clara Valley. Winter temperatures are mild, except for very cool but generally frost-less mornings. Further inland where the moderating effect of the bay is not as strong, temperature extremes are greater. Rainfall amounts are modest, ranging from 13 inches in the lowlands to 20 inches in the hills. Wind patterns are influenced by local terrain, with a northwesterly breeze in response to the sea breeze infiltrating San Francisco Bay typically developing during the daytime. Winds are usually stronger in the spring and summer. The southerly winds experienced are more common in late fall and winter. The wind rose shown in Figure 1 describes the patterns and frequency of winds at the project site. Wind data were collected from 2013 through 2017.

Air Pollution Potential

Ozone and fine particle pollution, or $PM_{2.5}$, are the major regional air pollutants of concern in the San Francisco Bay Area. Ozone is primarily a problem in the summer, and fine particle pollution in the winter. Most of Santa Clara County is well south of the cooler waters of the San Francisco Bay and far from the cooler marine air which usually reaches across San Mateo County in summer. Ozone frequently forms on hot summer days when the prevailing seasonal northerly winds carry ozone precursors southward across the county, causing health standards to be exceeded. Santa Clara County experiences many exceedances of the $PM_{2.5}$ standard each winter. This is due to the high population density, wood smoke, industrial and freeway traffic, and poor wintertime air circulation caused by extensive hills to the east and west that block wind flow into the region.

Figure 1. Windrose for San José International Airport based on Data Processed by BAAQMD



Attainment Status Designations

The CARB is required to designate areas of the state as attainment, nonattainment, or unclassified for all state standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A "nonattainment" designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An "unclassified" designation signifies that data does not support either an attainment or nonattainment status. The California Clean Air Act (CCAA) divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

Table 3 shows the state and federal standards for criteria pollutants and provides a summary of the attainment status for the San Francisco Bay Area with respect to national and state ambient air quality standards.

Table 3. NAAQS, CAAQS, and San Francisco Bay Area Attainment Status

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Carbon Monoxide (CO)	8-Hour	9 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Attainment
	1-Hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Attainment
Nitrogen Dioxide (NO_2)	Annual Mean	0.030 ppm (57 mg/m^3)	Attainment	0.053 ppm (100 µg/m^3)	Attainment
	1-Hour	0.18 ppm (338 µg/m^3)	Attainment	0.100 ppm	Unclassified
Ozone (O_3)	8-Hour	0.07 ppm (137 µg/m^3)	Nonattainment	0.070 ppm	Nonattainment
	1-Hour	0.09 ppm (180 µg/m^3)	Nonattainment	Not Applicable	Not Applicable
Suspended Particulate Matter (PM_{10})	Annual Mean	20 µg/m^3	Nonattainment	Not Applicable	Not Applicable
	24-Hour	50 µg/m^3	Nonattainment	150 µg/m^3	Unclassified
Suspended Particulate Matter ($PM_{2.5}$)	Annual Mean	12 µg/m^3	Nonattainment	12 µg/m^3	Attainment
	24-Hour	Not Applicable	Not Applicable	35 µg/m^3	Nonattainment
Sulfur Dioxide (SO_2)	Annual Mean	Not Applicable	Not Applicable	80 µg/m^3 (0.03 ppm)	Attainment
	24-Hour	0.04 ppm (105 µg/m^3)	Attainment	365 µg/m^3 (0.14 ppm)	Attainment
	1-Hour	0.25 ppm (655 µg/m^3)	Attainment	0.075 ppm (196 µg/m^3)	Attainment

Lead (Pb) is not listed in the above table because it has been in attainment since the 1980s. ppm = parts per million, mg/m^3 = milligrams per cubic meter, µg/m^3 = micrograms per cubic meter

Source: Bay Area Air Quality Management District, 2017. *Air Quality Standards and Attainment Status.* January 5.

Existing Air Pollutant Levels

BAAQMD monitors air pollution at various sites within the Bay Area. The closest air monitoring station (158 Jackson Street) that monitored O_3, CO, NO, NO_2, PM_{10}, and $PM_{2.5}$ over the past 5 years (2015 through 2019) is in the City of San José, approximately 6.5 miles northeast of the project site. The data shows that during the past few years, the project area has exceeded the state and/or federal O_3, PM_{10}, and $PM_{2.5}$ ambient air quality standards. Table 4 lists air quality trends in data collected for the past 5 years and published by the BAAQMD and CARB, which is the most recent time-period available. Ozone standards (includes 1-hr concentration and 8-hr concentration) were exceeded on 0 to 4 days annually in San José and 3 to 15 days throughout the Bay Area. Measured 24-hour PM_{10} and $PM_{2.5}$ concentrations are exceeded on 0 to 6 monitoring days in San José and up to 18 days at any place in the Bay Area (note these levels were influences by smoke from wildfires).

Table 4. Ambient Air Quality Concentrations from 2014 through 2018

Pollutant	Standard	2015	2016	2017	2018	2019
Ozone						
Max 1-hr concentration		94 ppb	87 ppb	121 ppb	78 ppb	95 ppb
No. days exceeded: CAAQS	90 ppb	0	0	3	0	1
Max 8-hr concentration		81 ppb	66 ppb	98 ppb	61 ppb	81 ppb
No. days exceeded: CAAQS	70 ppb	2	0	4	0	2
NAAQS	70 ppb	2	0	4	0	2
Carbon Monoxide						
Max 1-hr concentration		2.4 ppm	2.0 ppm	2.1 ppm	2.5 ppm	1.7 ppm
No. days exceeded: CAAQS	20 ppm	0	0	0	0	0
NAAQS	35 ppm	0	0	0	0	0
Max 8-hr concentration		1.8 ppm	1.4 ppm	1.8 ppm	2.1 ppm	1.3 ppm
No. days exceeded: CAAQS	9.0 ppm	0	0	0	0	0
NAAQS	9 ppm	0	0	0	0	0
PM_{10}						
Max 24-hr concentration		58 µg/m^3	41 µg/m^3	70 µg/m^3	122 µg/m^3	77 µg/m^3
No. days exceeded: CAAQS	50 µg/m^3	1	0	6	4	4
NAAQS	150 µg/m^3	0	0	0	0	0
Max annual concentration		22.0 µg/m^3	18.5 µg/m^3	21.6 µg/m^3	23.1 µg/m^3	19.2 µg/m^3
No. days exceeded: CAAQS	-	-	-	-	-	-
$PM_{2.5}$						
Max 24-hr concentration		49.4 µg/m^3	22.6µg/m^3	49.7 g/m^3	133.9µg/m^3	27.6 µg/m^3
No. days exceeded: NAAQS	35 µg/m^3	2	0	6	15	4
Annual Concentration		10.0 g/m^3	8.4 µg/m^3	9.5 µg/m^3	12.8µg/m^3	12.8µg/m^3
No. days exceeded: CAAQS	12 µg/m^3	-	-	-	-	-
NAAQS	12 µg/m^3	-	-	-	-	-
Nitrogen Dioxide						
Max 1-hr concentration		49 ppb	51 ppb	68 ppb	86 ppb	60 ppb
No. days exceeded: CAAQS	0.18 ppm	0	0	0	0	0
NAAQS	0.100 ppm	0	0	0	0	0
Annual Concentration		13 ppb	11 ppb	12 ppb	13 ppb	11 ppb
No. days exceeded: CAAQS	0.030 ppm	-	-	-	-	-
NAAQS	0.053 ppm	-	-	-	-	-

Source: Bay Area Air Quality Management District, 2020, Web: https://www.baaqmd.gov/about-air-quality/air-quality-summaries. California Air Resource Board, 2020, Web: https://arb.ca.gov/adam/select8/sc8start.php

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools. For cancer risk assessments, children are the most sensitive receptors, since they are more susceptible to cancer causing TACs. Residential locations are assumed to include infants and small children. The closest sensitive receptors to the project sites are residences to the south to the El Paseo project site. There are additional sensitive receptors at farther distances to the east, west, and north of the project sites. This project would also introduce new sensitive receptors in the form of residents and students (only for Education Mixed-Use Option).

Regulatory Framework

Pursuant to the Federal Clean Air Act (FCAA) of 1970, the EPA established the NAAQS. The NAAQS were established for major pollutants, termed "criteria" pollutants. Criteria pollutants are defined as those pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health.

Both the EPA and the CARB have established ambient air quality standards for common pollutants: CO, O_3, NO_2, SO_2, Pb, and PM. In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. These standards are designed to protect the health and welfare of the public with a reasonable margin of safety. These ambient air quality standards are levels of contaminants which represent safe levels that avoid specific adverse health effects associated with each criteria pollutant.

Federal Air Quality Regulations

At the federal level, the EPA has been charged with implementing national air quality programs. EPA's air quality mandates are drawn primarily from the FCAA, which was enacted in 1963. The FCAA was amended in 1970, 1977, and 1990.

The FCAA required EPA to establish primary and secondary NAAQS and required each state to prepare an air quality control plan referred to as a State Implement Plan (SIP). Federal standards include both primary and secondary standards. Primary standards set limits to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.[2] The Federal Clean Air Act Amendments of 1990 (FCAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations

[2] See: U.S. Environmental Protection Agency, Web: https://www.epa.gov/criteria-air-pollutants/naaqs-table, Accessed 13 August 2020

of the air basins as reported by their jurisdictional agencies. EPA has responsibility to review all state SIPs to determine conformity with the mandates of the FCAAA and determine if implementation will achieve air quality goals. If the EPA determines a SIP to be inadequate, a Federal Implementation Plan (FIP) may be prepared for the nonattainment area which imposes additional control measures. Failure to submit an approvable SIP or to implement the Plan within the mandated timeframe may result in the application of sanctions on transportation funding and stationary air pollution sources in the air basin.

The 1970 FCAA authorized the establishment of national health-based air quality standards and also set deadlines for their attainment. The FCAA Amendments of 1990 changed deadlines for attaining NAAQS as well as the remedial actions required of areas of the nation that exceed the standards. Under the FCAA, state and local agencies in areas that exceed the NAAQS are required to develop SIPs to show how they will achieve the NAAQS by specific dates. The FCAA requires that projects receiving federal funds demonstrate conformity to the approved SIP and local air quality attainment Plan for the region. Conformity with the SIP requirements would satisfy the FCAA requirements.

State Air Quality Regulations

The CARB is the agency responsible for the coordination and oversight of state and local air pollution control programs in California and for implementing the CCAA, adopted in 1988. The CCAA requires that all air districts in the state achieve and maintain the CAAQS by the earliest practical date. The CCAA specifies that districts should focus on reducing the emissions from transportation and air-wide emission sources and provides districts with the authority to regulate indirect sources.

CARB is also responsible for developing and implementing air pollution control plans to achieve and maintain the NAAQS. CARB is primarily responsible for statewide pollution sources and produces a major part of the SIP. Local air districts provide additional strategies for sources under their jurisdiction. CARB combines this data and submits the completed SIP to the EPA.

Other CARB duties include monitoring air quality (in conjunction with air monitoring networks maintained by air pollution control and air quality management districts), establishing CAAQS (which in many cases are more stringent than the NAAQS), determining and updating area designations and maps, and setting emissions standards for new mobile sources, consumer products, small utility engines, and off-road vehicles.

<u>California Clean Air Act</u>

In 1988, the CCAA required that all air districts in the state endeavor to achieve and maintain CAAQS for CO, O_3, SO_2, and NO_2 by the earliest practical date. The CCAA provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality

standards. Generally, the state standards for these pollutants are more stringent than the national standards.

California Air Resources Board Handbook

In 1998, CARB identified particulate matter from diesel-fueled engines as a toxic air contaminant. CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines.[3] CARB subsequently developed an Air Quality and Land Use Handbook[4] (Handbook) in 2005 that is intended to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. The 2005 CARB Handbook recommends that planning agencies consider proximity to air pollution sources when considering new locations for "sensitive" land uses, such as residences, medical facilities, daycare centers, schools, and playgrounds.

Air pollution sources of concern include freeways, rail yards, ports, refineries, distribution centers, chrome plating facilities, dry cleaners, and large gasoline service stations. Key recommendations in the Handbook relative to the Plan Area include taking steps to consider or avoid siting new, sensitive land uses:

- Within 500 feet of a freeway, urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day.
- Within 300 feet of gasoline fueling stations (note that new fueling stations utilize enhanced vapor recovery systems that substantially reduce emissions).
- Within 300 feet of dry-cleaning operations (note that dry cleaning with TACs is being phased out and will be prohibited in 2023).

Truck and Bus Regulation

CARB is actively enforcing heavy-duty diesel vehicle regulations that require fleets to replace or retrofit heavy-duty diesel vehicles, with full implementation of the program scheduled for January 1, 2023. Compliance with the program is generally considered vehicles equipped with a 2010 or newer engine model year. As of January 1, 2020, the DMV cannot register any vehicle that does not meet the requirements of the Truck and Bus Regulation.

Other CARB diesel programs affecting heavy-duty diesel vehicles include:

- Idling limits of no more than 5 minutes with special exceptions.
- Emission Control Labels must be affixed to engines of all commercial heavy-duty diesel vehicles, and must be legible as proof the engine, at minimum, meets U.S. federal emissions standards for the engine model year.
- The Periodic Smoke Inspection Program requires owners of California-based fleets of two or more diesel vehicles to perform annual smoke opacity tests and to keep records for at least two years for each vehicle.

[3] California Air Resources Board, 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October.
[4] California Air Resources Board, 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* April.

- The Heavy-Duty Vehicle Inspection Program uses random roadside inspections to verify that diesel engines do not smoke excessively and are tamper-free.

Off-Road Vehicle and Equipment Regulations

CARB has also adopted and implemented regulations to reduce DPM and nitrogen oxides (NOx) emissions from in-use (existing) and new off-road heavy-duty diesel vehicles (e.g., loaders, tractors, bulldozers, backhoes, off-highway trucks, etc.). The regulations apply to diesel-powered off-road vehicles with engines 25 horsepower (hp) or greater. The regulations are intended to reduce particulate matter and NOx exhaust emissions by requiring owners to turn over their fleet (replace older equipment with newer equipment) or retrofit existing equipment in order to achieve specified fleet-averaged emission rates. Implementation of this regulation, in conjunction with stringent Federal off-road equipment engine emission limits for new vehicles, is expected to substantially reduce emissions of DPM and NOx.

Fleet owners must report the vehicle and engine information for all vehicles within their fleets operating in California. Fleet owners must also report owner information. Fleet owners should report using DOORS, which is CARB's online reporting tool. CARB issues a unique Equipment Identification Number (EIN) that is assigned to each vehicle. The fleet owner must label their vehicles with the EIN.

Other CARB diesel programs affecting off-road vehicles and equipment include:

- Idling limits of no more than 5 minutes with special exceptions.
- Portable engines 50 hp or greater may require a permit or registration to legally operate. BAAQMD is responsible for taking enforcement action against individuals who own or operate portable equipment without a registration or permit.

Bay Area Air Quality Management District

The BAAQMD seeks to attain and maintain air quality conditions in the San Francisco Bay Area Air Basin (SFBAAB) through a comprehensive program of planning, regulation, enforcement, technical innovation, and education. The clean air strategy includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. The BAAQMD also inspects stationary sources and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by law.

Clean Air Plan

The BAAQMD is responsible for developing a Clean Air Plan which guides the region's air quality planning efforts to attain the CAAQS. The BAAQMD's 2017 Clean Air Plan is the latest Clean Air Plan which contains district-wide control measures to reduce ozone precursor emissions (i.e., ROG and NOx), particulate matter and greenhouse gas emissions. The Bay Area 2017 Clean Air Plan, which was adopted on April 19, 2017 by the BAAQMD's board of directors:

- 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, particulate matter (PM), air toxics, and greenhouse gases in a single, integrated plan;
- Reviews progress in improving air quality in recent years; and
- Continues and updates emission control measures.

BAAQMD CARE Program

The Community Air Risk Evaluation (CARE) program was initiated in 2004 to evaluate and reduce health risks associated with exposures to outdoor TACs in the Bay Area.[5] 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 being 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 will be 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 BAAQMD has identified six communities as impacted: Concord, Richmond/San Pablo, Western Alameda County, San José, Redwood City/East Palo Alto, and Eastern San Francisco. The project site is not within an at-risk community area.

Planning Healthy Places

BAAQMD developed a guidebook that provides air quality and public health information intended to assist local governments in addressing potential air quality issues related to exposure of sensitive receptors to exposure of emissions from local sources of air pollutants. The guidance provides tools and recommended best practices that can be implemented to reduce exposures. The information is provided as recommendations to develop policies and implementing measures in city or county General Plans, neighborhood or specific plans, land use development ordinances, or into projects.

BAAQMD California Environmental Quality Act Air Quality Guidelines

The BAAQMD California Environmental Quality Act (CEQA) Air Quality Guidelines[6] were prepared 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 air toxics, odors, and greenhouse gas emissions. In June 2010, the BAAQMD's Board of Directors adopted CEQA thresholds of significance and an update of their

[5] See BAAQMD: https://www.baaqmd.gov/community-health/community-health-protection-program/community-air-risk-evaluation-care-program , accessed 2/18/2021.
[6] Bay Area Air Quality Management District, 2017. *CEQA Air Quality Guidelines*. May.

CEQA Guidelines. In May 2011, the updated BAAQMD CEQA Air Quality Guidelines were amended to include a risk and hazards threshold for new receptors and modify procedures for assessing impacts related to risk and hazard impacts. A recent update to the Guidelines was published in May 2017.

Projects that have TAC emissions that could adversely affect sensitive receptors prepare health risk assessments to quantify the potential and, if appropriate, identify mitigation measures to reduce impacts. This report includes a health risk assessment that evaluates impacts form temporary project construction, long-term use of stationary equipment, and long-term traffic activity generated by the project.

BAAQMD Rules and Regulations

Combustion equipment associated with the proposed project that includes new diesel engines to power generators and possibly new natural gas-fired boilers would establish new sources of particulate matter and gaseous emissions. Emissions would primarily result from the testing of the emergency backup generators, operation of the boilers for space and water heating and some minor emissions from cooling towers. Certain emission sources would be subject to BAAQMD Regulations and Rules. The District's rules and regulations that may apply to the project include:

- Regulation 2 – Permits
  - Rule 2-1: General Requirements
  - Rule 2-2: New Source Review
- Regulation 6 – Particulate Matter and Visible Emissions
  - Rule 6-3: Wood-Burning Devices
- Regulation 9 – Inorganic Gaseous Pollutants
  - Rule 9-1: Sulfur Dioxide
  - Rule 9-7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, And Process Heaters
  - Rule 9-8: Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines

Permits

Rule 2-1-301 requires that any person installing, modifying, or replacing any equipment, the use of which may reduce or control the emission of air contaminants, shall first obtain an Authority to Construct (ATC).

Rule 2-1-302 requires that written authorization from the BAAQMD in the form of a Permit to Operate (PTO) be secured before any such equipment is used or operated.

Rule 2-1 lists sources that are exempt from permitting. At the proposed facility, the diesel fuel storage tanks are expected to be exempt from permitting.

New Source Review

Rule 2-2, New Source Review (NSR), applies to all new and modified sources or facilities that are subject to the requirements of Rule 2-1-301. The purpose of the rule is to provide for review of such sources and to provide mechanisms by which no net increase in emissions will result.

Rule 2-2-301 requires that an applicant for an ATC or PTO apply Best Available Control Technology (BACT) to any new or modified source that results in an increase in emissions and has emissions of precursor organic compounds, non-precursor organic compounds, NOx, SO_2, PM_{10}, or CO of 10.0 pounds or more per highest day. Based on the estimated emissions from the proposed project, BACT will be required for NOx emissions from the diesel-fueled generator engines.

Stationary Diesel Airborne Toxic Control Measure

The BAAQMD administers the CARB's Airborne Toxic Control Measure (ACTM) for Stationary Diesel engines (section 93115, title 17 CA Code of Regulations). The project's stationary sources will be new stationary emergency stationary emergency standby diesel engines larger than 50 hp. These limits vary based on maximum engine power. All engines are limited to PM emission rates of 0.15 g/hp-hour, regardless of size. This ACTM limits engine operation 50 hours per year for routine testing and maintenance.

BACT for Diesel Generator Engines

Since the generators will be used exclusively for emergency use during involuntary loss of power, the BACT levels listed for IC compression engines in the BAAQMD BACT Guidelines would apply. These are provided for two separate size ranges of diesel engines:

> I.C. Engine – Compression Ignition >50hp and <1.000hp: BAAQMD applies BACT 2 emission limits based on the ATCM for stationary emergency standby diesel engines larger than 50 brake-horsepower (BHP). NOx emission factor limit is subject to the CARB ACTM that ranges from 3.0 to 3.5 grams per horsepower hour (g/hp-hr). The PM (PM10 or PM2.5) limit is 0.15 g/hp-hr per CARB's ACTM.
>
> I.C. Engine – Compression Ignition <999hp: BAAQMD applies specific BACT emission limits for stationary emergency standby diesel engines equal or larger than 1,000 brake-horsepower (BHP). NOx emission factor limit is subject to the CARB ACTM that ranges from 0.5 g/hp-hr. The PM (PM10 or PM2.5) limit is 0.02 g/hp-hr. POC (i.e., ROG) limits are 0.14 g/hp-hr.

Offsets

Rule 2-2-302 require that offsets be provided for a new or modified source that emits more than 10 tons per year of NOx or precursor organic compounds. It is not expected that emissions of any pollutant will exceed the offset thresholds. Thus, is not expected that offsets for the proposed project would be required.

Prohibitory Rules

Regulation 6 pertains to particulate matter and visible emissions. Although the engines will be fueled with diesel, they will be modern, low emission engines. Thus, the engines are expected to comply with Regulation 6.

Rule 6-3 applies to emissions from wood-burning devices. Effective November 1, 2016, no person or builder shall install a wood-burning device in a new building construction. Project plans do not depict fireplaces.

Rule 9-1 applies to sulfur dioxide. The engines will use ultra-low sulfur diesel fuel (less than 15 ppm sulfur) and will not be a significant source of sulfur dioxide emissions and are expected to comply with the requirements of Rule 9-1.

Rule 9-7 limits the emissions of NOx CO from industrial, institutional and commercial boilers, steam generators and process heaters. This regulation typically applies to boilers with a heat rating of 2 million British Thermal Units (BTU) per hour

Rule 9-8 prescribes NOx and CO emission limits for stationary internal combustion engines. Since the proposed engines will be used with emergency standby generators, Regulation 9-8-110 exempts the engines from the requirements of this Rule, except for the recordkeeping requirements (9-8-530) and limitations on hours of operation for reliability-related operation (maintenance and testing). The engines will not operate more than 50 hours per year, which will satisfy the requirements of 9-8-111.

Air Pollutants of Concern in the Bay Area

High ozone levels are caused by the cumulative emissions of ROG and NO_X. These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. The highest ozone levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone levels aggravate respiratory and cardiovascular diseases, reduced lung function, and increase coughing and chest discomfort.

Particulate matter is another problematic air pollutant of the Bay Area. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Toxic Air Contaminants

Toxic air contaminants are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants.

TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the CARB, diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the state's Proposition 65 or under the Federal Hazardous Air Pollutants programs.

CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways. These regulations include the solid waste collection vehicle (SWCV) rule, in-use public and utility fleets, and the heavy-duty diesel truck and bus regulations. In 2008, CARB approved a new regulation to reduce emissions of DPM and nitrogen oxides from existing on-road heavy-duty diesel fueled vehicles.[7] The regulation requires affected vehicles to meet specific performance requirements between 2014 and 2023, with all affected diesel vehicles required to have 2010 model-year engines or equivalent by 2023. These requirements are phased in over the compliance period and depend on the model year of the vehicle.

The BAAQMD is the regional agency tasked with managing air quality in the region. At the state level, the CARB (a part of the California EPA) oversees regional air district activities and regulates air quality at the state level. The BAAQMD has published CEQA Air Quality Guidelines that are used in this assessment to evaluate air quality impacts of projects.[8] Projects that have TAC emissions that could adversely affect sensitive receptors prepare health risk assessments to quantify the potential and, if appropriate, identify mitigation measures to reduce impacts. This report includes a health risk assessment that evaluates impacts form temporary project construction, long-term use of stationary equipment, and long-term traffic activity generated by the project. The detailed health risk modeling methodology used in this assessment is contained in *Attachment 1*.

City of San José

San José Envision 2040 General Plan

The San José Envision 2040 General Plan includes goals, policies, and actions to reduce exposure of the City's sensitive population to exposure of air pollution and toxic air contaminants or TACs. The following goals, policies, and actions are applicable to the proposed project and this assessment:

[7] Available online: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm. Accessed: November 21, 2014.
[8] Bay Area Air Quality Management District. 2017. *BAAQMD CEQA Air Quality Guidelines.* May.

Applicable Goals – Air Pollutant Emission Reduction

Goal MS-10 Minimize emissions from new development.

Applicable Policies – Air Pollutant Emission Reduction

MS-10.1 Assess projected air emissions from new development in conformance with the BAAQMD CEQA Guidelines and relative to state and federal standards. Identify and implement feasible air emission reduction measures.

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.

MS-10.3 Promote the expansion and improvement of public transportation services and facilities, where appropriate, to both encourage energy conservation and reduce air pollution.

Applicable Goals – Toxic Air Contaminants

Goal MS-11 Minimize exposure of people to air pollution and toxic air contaminants such as ozone, carbon monoxide, lead, and particulate matter.

Applicable Policies – Toxic Air Contaminants

MS-11.1 Require completion of air quality modeling for sensitive land uses such as new residential developments that are located near sources of pollution such as freeways and industrial uses. Require new residential development projects and projects categorized as sensitive receptors to incorporate effective mitigation into project designs or be located an adequate distance from sources of toxic air contaminants (TACs) to avoid significant risks to health and safety.

MS-11.2 For projects that emit toxic air contaminants, require project proponents to prepare health risk assessments in accordance with BAAQMD-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.

MS-11.4 Encourage the installation of appropriate air filtration at existing schools, residences, and other sensitive receptor uses adversely affected by pollution sources.

MS-11.5 Encourage the use of pollution absorbing trees and vegetation in buffer areas between substantial sources of TACs and sensitive land uses.

Actions – Toxic Air Contaminants

MS-11.7 Consult with BAAQMD to identify stationary and mobile TAC sources and determine the need for and requirements of a health risk assessment for proposed developments.

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.

Applicable Policies – Construction Air Emissions

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 BAAQMD CEQA Guidelines for the relevant project size and type.

Applicable Actions – Construction Air Emissions

MS-13.4 Adopt and periodically update dust, particulate, and exhaust control standard measures for demolition and grading activities to include on project plans as conditions of approval based upon construction mitigation measures in the BAAQMD CEQA Guidelines.

Significance Thresholds

In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA and these significance thresholds were contained in the District's 2011 CEQA Air Quality Guidelines. These thresholds were designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA. The thresholds were challenged through a series of court challenges and were mostly upheld. BAAQMD updated the CEQA Air Quality Guidelines[9] in 2017 to include the latest significance thresholds, which were used in this analysis and are summarized in Table 5

[9] BAAQMD. 2021. See https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/tools/ceqa-guidelines-may-2017-thresholds-table-pdf.pdf?la=en.

Table . Impacts above these thresholds are considered significant.

Table 5. BAAQMD CEQA Significance Thresholds

Criteria Air Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
ROG	54	54	10
NO_x	54	54	10
PM_{10}	82 (Exhaust)	82	15
$PM_{2.5}$	54 (Exhaust)	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards	**Single Sources Within 1,000-foot Zone of Influence**	**Combined Sources (Cumulative from all sources within 1,000-foot zone of influence)**	
Excess Cancer Risk	10 per one million	100 per one million	
Hazard Index	1.0	10.0	
Incremental annual $PM_{2.5}$	0.3 $\mu g/m^3$	0.8 $\mu g/m^3$	
Note: ROG = reactive organic gases, NOx = nitrogen oxides, PM_{10} = course particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, $PM_{2.5}$ = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less.			

Source: Bay Area Air Quality Management District, 2017

AIR QUALITY IMPACTS AND MITIGATION MEASURES

Impact AIR-1: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The Bay Area is considered a non-attainment area for ground-level ozone and $PM_{2.5}$ under both the Federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for PM_{10} under the California Clean Air Act, but not the federal act. The area has attained both State and federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone and PM_{10}, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for ozone precursor pollutants (ROG and NO_X), PM_{10}, and $PM_{2.5}$ and apply to both construction period and operational period impacts.

Construction Period Emissions

The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate emissions from construction and operation of the site assuming full build-out of the project. The project land use types and size, and anticipated construction schedule were input to CalEEMod. The CARB EMission FACtors 2017 (EMFAC2017) model was used to predict emissions from construction traffic, which includes worker travel, vendor trucks, and haul trucks.[10] The model output from CalEEMod along with construction inputs are included as *Attachment 2* and EMFAC2017 vehicle emissions modeling outputs are included in *Attachment 3*.

CalEEMod Inputs

Land Use Inputs

For both the Education Mixed-Use Option and Non-Education Mixed-Use Option, the proposed project would be constructed in two phases: the podium construction phase and the buildings construction phase. The Saratoga Site would also be constructed at the same time as the El Paseo Site, for both options. Separate CalEEMod runs were conducted for each site, option, and phase to capture the consecutive and congruent total project construction over several years. The proposed project land uses were entered into CalEEMod as described in Table 6.

[10] See CARB's EMFAC2017 Web Database at https://www.arb.ca.gov/emfac/2017/

Table 6. Summary of Project Land Use CalEEMod Inputs for Construction[11]

Project Land Uses	Size	Units	Square Feet	Acres
El Paseo Site: Education Mixed-Use Option, Phase 1 Podium				
Enclosed Parking with Elevator	850	Space	350,000	8.85
Parking Lot	260	Space	104,000	
El Paseo Site: Education Mixed-Use Option, Phase 2 Buildings 1-4				
Apartments Mid Rise	450	Dwelling Unit	430,000	8.85
Apartments Mid Rise (Dorms)	200	Dwelling Unit	140,000	
Elementary School	450	1,000 sf	450,000	
Strip Mall	60	1,000 sf	60,000	
El Paseo Site: Non-Education Mixed-Use Option, Phase 1 Podium				
Enclosed Parking with Elevator	1,036	Space	366,620	8.85
Parking Lot	157	Space	62,800	
El Paseo Site: Non-Education Mixed-Use Option, Phase 2 Buildings 1-3				
Apartments Mid Rise	820	Dwelling Unit	939,657	8.85
Strip Mall	159	1,000 sf	159,000	
Enclosed Parking with Elevator	444	Space	184,395	
Saratoga Site, Both Options				
Apartments Mid Rise	280	Dwelling Unit	350,000	1.82
Strip Mall	6	1,000 sf	6,000	
Enclosed Parking with Elevator	331	Space	182,396	

Construction Inputs

CalEEMod computes annual emissions for construction that are based on the project type, size, and acreage. The model provides emission estimates for both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. The construction build-out scenario, including equipment list and schedule, were based on construction information provided by the project applicant.

The construction equipment worksheet provided included the schedule for each phase. Within each phase, the quantity of equipment to be used along with the average hours per day and total number of workdays was provided. Since different equipment would have different estimates of the working days per phase, the hours per day for each phase was computed by dividing the total number of hours that the equipment would be used by the total number of days in that phase. The construction schedule assumed that the earliest possible start date would be September 2021 and the project would be built out over a period of approximately 4 years, or 1,066 construction workdays.

[11] The Non-Education Option assumes that of the 159,000 square feet of commercial proposed at the El Paseo site, approximately 52,508 would consist of general office and 36,120 of medical office. The construction scenario for the El Paseo site would not change and the same amount of constructed square footage would remain the same even with the expansion of commercial use to office and medical office. Therefore, construction criteria pollutant and the construction TAC emissions used in the health risk assessment would remain the same.

Construction Traffic Emissions

The latest version of the CalEEMod model is based on the older version of the CARB EMFAC2014 motor vehicle emission factor model. This model has been superseded by the EMFAC2017 model; however, CalEEMod has not been updated to include EMFAC2017. Construction would produce traffic in the form of worker trips and truck traffic. The traffic-related emissions are based on worker and vendor trip estimates produced by CalEEMod and haul trips that were computed based on the estimate of demolition material to be exported, soil material imported and/or exported to the site, and the estimate of cement and asphalt truck trips. CalEEMod provides daily estimates of worker and vendor trips for each applicable phase. Haul trips for demolition and grading were estimated from the provided demolition and grading volumes. The number of concrete and asphalt total round haul trips were provided for the project and converted to total one-way trips, assuming two trips per delivery.

The construction traffic information was combined with EMFAC2017 motor vehicle emissions factors. EMFAC2017 provides aggregate emission rates in grams per mile for each vehicle type. The vehicle mix for this study was based on CalEEMod default assumptions, where worker trips are assumed to be comprised of light-duty autos (EMFAC category LDA) and light duty trucks (EMFAC category LDT1and LDT2). Vendor trips are comprised of delivery and large trucks (EMFAC category MHDT and HHDT) and haul trucks, including cement trucks, are comprised of large trucks (EMFAC category HHDT). Travel distances are based on CalEEMod default lengths, which are 10.8 miles for worker travel, 7.3 miles for vendor trips, and 20 miles for hauling (demolition material export and soil import/export). Since CalEEMod does not directly address cement or asphalt trucks, these were treated as vendor travel distances (7.3 miles). [12] Each trip was assumed to include an idle time of 5 minutes. Emissions associated with vehicle starts were also included. On road emissions in Santa Clara County for the years 2021 - 2025 were used in these calculations. Table 7 provides the traffic inputs that were combined with the EMFAC2017 emission database to compute vehicle emissions.

Table 7. Construction Traffic Data Used for EMFAC2017 Model Runs

CalEEMod Run/Land Uses and Construction Phase	Trips by Trip Type			Notes
	Total Worker Trips[1]	Total Vendor Trips[1]	Total Haul Trips[2]	
Vehicle mix[1]	72% LDA 6% LDT1 22% LDT2	38% MHDT 62% HHDT	100% HDDT	
Trip Length (miles)	10.8	7.3	20.0 Demo 7.3 Concrete/Asphalt	CalEEMod default distance with 5-min truck idle time.
El Paseo Site: Education Mixed-Use Option, Phase 1 Podium: 2021 - 2023				
Demolition	2,013	-	1,353	99,535-sf of existing building and 4,500 tons of existing pavement demolition. CalEEMod default worker trips.
Grading	2,900	-	19,375	155,000-cy soil export. CalEEMod default worker trips.

[12] Note that vendor construction traffic surveys used to develop CalEEMod default assumptions likely included cement and asphalt truck trips.

CalEEMod Run/Land Uses and Construction Phase	Trips by Trip Type			Notes
	Total Worker Trips[1]	Total Vendor Trips[1]	Total Haul Trips[2]	
Trenching	810	-	-	CalEEMod default worker trips.
Concrete	2,865	1,110	600	20 concrete trucks per phase day. CalEEMod default worker and vendor trips.
Building Construction	49,851	19,314	7,200	3,600 cement truck round trips. CalEEMod default worker and vendor trips.
El Paseo Site: Education Mixed-Use Option, Phase 2 Buildings 1-4: 2023 - 2025				
Bldg 1 Building Construction	276,484	62,577	800	400 cement truck round trips. CalEEMod default worker and vendor trips.
Bldg 2 Building Construction	260,260	58,905	800	400 cement truck round trips. CalEEMod default worker and vendor trips.
Bldg 3 Building Construction	270,400	61,200	500	250 cement truck round trips. CalEEMod default worker and vendor trips.
Bldg 4 Building Construction	297,440	67,320	500	250 cement truck round trips. CalEEMod default worker and vendor trips.
Bldg 1 Architectural Coating	35,775	-	-	CalEEMod default worker trips.
Bldg 2 Architectural Coating	35,640	-	-	CalEEMod default worker trips.
Bldg 1 Paving	360	-	-	CalEEMod default worker trips.
Bldg 3 Architectural Coating	35,640	-	-	CalEEMod default worker trips.
Bldg 2 Paving	360	-	-	CalEEMod default worker trips.
Bldg 4 Architectural Coating	44,550	-	-	CalEEMod default worker trips.
Bldg 3 Paving	390	-	-	CalEEMod default worker trips.
Bldg 4 Paving	600	-	-	CalEEMod default worker trips.
El Paseo Site: Non-Education Mixed-Use Option, Phase 1 Podium: 2021 - 2023				
Demolition	1,815	-	1,353	99,535-sf of existing building and 4,500 tons of existing pavement demolition. CalEEMod default worker trips.
Grading	3,625	-	27,888	223,108-cy soil export. CalEEMod default worker trips.
Concrete	2,700	1,050	600	20 concrete trucks per phase day. CalEEMod default worker and vendor trips.
Trenching	1,140	-	-	CalEEMod default worker trips.
Building Construction	42,660	16,590	10,000	5,000 cement truck round trips. CalEEMod default worker and vendor trips.
El Paseo Site: Non-Education Mixed-Use Option, Phase 2 Buildings 1-3: 2022 - 2025				
Bldg 1 Paving	315	-	-	CalEEMod default worker trips.
Bldg 1 Building Construction	224,328	44,928	1,700	850 cement truck round trips. CalEEMod default worker and vendor trips.

CalEEMod Run/Land Uses and Construction Phase	Trips by Trip Type			Notes
	Total Worker Trips[1]	Total Vendor Trips[1]	Total Haul Trips[2]	
Bldg 2 Building Construction	294,791	59,040	1,200	600 cement truck round trips. CalEEMod default worker and vendor trips.
Bldg 3 Building Construction	319,955	64,080	1,650	825 cement truck round trips. CalEEMod default worker and vendor trips.
Bldg 2 Architectural Coating	44,208	-	-	CalEEMod default worker trips.
Bldg 1 Architectural Coating	38,448	-	-	CalEEMod default worker trips.
Bldg 3 Architectural Coating	36,000	-	-	CalEEMod default worker trips.
Saratoga Site (Both Options): 2021 - 2024				
Demolition	1,100	-	257	17,000-sf (575 tons) of existing building and 900 tons of existing pavement demolition. CalEEMod default worker trips.
Grading	1,876	-	8,025	64,200-cy soil export. CalEEMod default worker trips.
Trenching	295	-	-	CalEEMod default worker trips.
Building Construction	126,840	27,633	2,400	1,200 cement truck round trips. CalEEMod default worker and vendor trips.
Architectural Coating	12,152	-	-	CalEEMod default worker trips.
Paving	1,521	-	12	50-cy asphalt. CalEEMod default worker trips.

Notes: [1] Based on 2021-2025 EMFAC2017 light-duty vehicle fleet mix for Santa Clara County.
[2] Includes grading and paving trips estimated by CalEEMod based on amount of material to be removed.

Summary of Computed Construction Period Emissions

Average daily emissions were annualized for each year of construction by dividing the annual construction emissions and dividing those emissions by the number of active workdays during that year. Table 8 shows the annualized average daily construction emissions of ROG, NO_X, PM_{10} exhaust, and $PM_{2.5}$ exhaust during construction of the project.

As indicated in Table 8, predicted annualized project construction emissions would exceed the BAAQMD significance thresholds for ROG and NO_x during the years 2023 - 2025 (i.e., last three years of construction) for both Education Mixed-Use Option and Non-Education Mixed-Use Option. However, with *Mitigation Measures AQ-1 through AQ-4*, the ROG and NO_x emissions would be reduced to a level below the thresholds of 54 pounds per day for both options. All other construction criteria pollutants emissions are below the BAAQMD thresholds.

Table 8. Construction Period Emissions for Project Options

Year	ROG		NOx		PM_{10} Exhaust		$PM_{2.5}$ Exhaust	
EDUCATION MIXED-USE OPTION (BOTH SITES)								
Construction Emissions Per Year (Tons)								
Year	Unmit	Mit	Unmit	Mit	Unmit	Mit	Unmit	Mit
2021	0.21	0.07	2.34	0.77	0.12	0.05	0.09	0.03
2022	0.47	0.14	5.33	1.82	0.28	0.12	0.21	0.06
2023	2.53	0.68	9.40	3.19	0.72	0.44	0.45	0.20
2024	23.62	4.43	8.58	2.48	0.62	0.40	0.38	0.17
2025	5.61	1.14	2.47	1.36	0.26	0.24	0.13	0.10
Annualized Daily Construction Emissions (pounds/day)								
Year	Unmit	Mit	Unmit	Mit	Unmit	Mit	Unmit	Mit
2021 (88 construction workdays)	4.83	1.65	53.27	17.54	2.71	1.06	2.14	0.61
2022 (260 construction workdays)	3.58	1.07	41.03	14.01	2.13	0.91	1.58	0.46
2023 (260 construction workdays)	19.44	5.26	**72.28**	24.50	5.50	3.42	3.43	1.51
2024 (260 construction workdays)	**181.68**	34.07	**66.00**	19.08	4.78	3.06	2.96	1.33
2025 (171 construction workdays)	**65.59**	13.32	28.91	15.91	3.08	2.78	1.49	1.19
BAAQMD Thresholds (pounds per day)	*54* lbs./day		*54* lbs./day		*82* lbs./day		*54* lbs./day	
Exceed Threshold?	**Yes (2024 & 2025)**	No	**Yes (2023 & 2024)**	No	No	No	No	No
NON-EDUCATION MIXED-USE OPTION (BOTH SITES)								
Construction Emissions Per Year (Tons)								
Year	Unmit	Mit	Unmit	Mit	Unmit	Mit	Unmit	Mit
2021	0.20	0.07	2.28	0.82	0.11	0.05	0.09	0.03
2022	0.53	0.26	5.45	2.75	0.34	0.24	0.21	0.12
2023	1.38	0.39	8.25	2.54	0.57	0.31	0.37	0.14
2024	12.07	2.29	5.00	1.51	0.38	0.25	0.23	0.11
2025	13.43	2.49	2.76	0.88	0.22	0.16	0.12	0.07
Annualized Daily Construction Emissions (pounds/day)								
Year	Unmit	Mit	Unmit	Mit	Unmit	Mit	Unmit	Mit
2021 (88 construction workdays)	4.49	1.59	51.73	18.69	2.57	1.09	2.00	0.63
2022 (260 construction workdays)	4.11	1.98	41.90	21.16	2.65	1.86	1.61	0.89
2023 (260 construction workdays)	10.63	2.99	**63.44**	19.56	4.36	2.42	2.87	1.08
2024 (260 construction workdays)	**92.83**	17.60	38.44	11.59	2.93	1.91	1.79	0.83
2025 (198 construction workdays)	**135.63**	25.11	27.84	8.92	2.22	1.65	1.26	0.71
BAAQMD Thresholds (pounds per day)	*54* lbs./day		*54* lbs./day		*82* lbs./day		*54* lbs./day	
Exceed Threshold?	**Yes (2024 & 2025)**	No	**Yes (2023)**	No	No	No	No	No
Notes: Unmit = Unmitigated, Mit = Mitigated								

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less-than-significant if best management practices are implemented to reduce these emissions. *Mitigation Measure AQ-1 would implement BAAQMD-recommended best management practices*.

Mitigation Measure AQ-1: Implement BAAQMD-Recommended Measures to Control Particulate Matter Emissions during Construction of either options. Measures to reduce DPM and PM_{10} from construction are recommended to ensure that short-term health impacts to nearby sensitive receptors are avoided.

Dust (PM_{10}) Control Measures:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent (i.e., three times a day). Moisture content can be verified by lab samples or moisture probe.

2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

4. All vehicle speeds on unpaved roads shall be limited to 15 mph.

5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

9. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph and visible dust extends beyond site boundaries.

10. Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction adjacent to sensitive receptors. Wind breaks should have at maximum 50 percent air porosity.

11. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.

12. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.

13. Avoid tracking of visible soil material on to public roadways by employing the following measures if necessary: (1) Site accesses to a distance of 100 feet from public paved roads shall be treated with a 6 to 12-inch compacted layer of wood chips, mulch, or gravel and (2) washing truck tires and construction equipment of prior to leaving the site.

14. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent

Effectiveness of Mitigation AQ-1:

These measures are consistent with recommendations in the BAAMQD CEQA Guidance for providing "best management practices" to control construction emissions.

Mitigation Measure AQ-2: For both options, use construction equipment that has low diesel particulate matter exhaust and NO_X emissions.

Exhaust Emission (NOx and PM) Control Measures:

1. All diesel construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA Tier 4 Final emission standards for NOx and PM (PM_{10} and $PM_{2.5}$), if feasible, otherwise,

    a. If use of Tier 4 equipment is not available, alternatively use equipment that meets U.S. EPA emission standards for Tier 3 engines and include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve an 85 percent reduction in particulate matter exhaust in comparison to uncontrolled equipment. The use of Tier 3 equipment shall not exceed 5 percent of all equipment usage (described in terms of total horsepower hours during a phase).

b. Use of alternatively fueled equipment with lower NOx emissions that meet the NOx and PM reduction requirements above.

2. Diesel engines, whether for off-road equipment or on-road vehicles, shall not be left idling for more than 2 minutes, except as provided in exceptions to the applicable state regulations (e.g., traffic conditions, safe operating conditions). The construction sites shall have posted legible and visible signs in designated queuing areas and at the construction site to clearly notify operators of idling limit.

3. Provide line power to the site during the early phases of construction to minimize the use of diesel-powered stationary equipment, such as generators, concrete/industrial saws, welders, and air compressors.

4. Cranes and aerial lifts shall be powered by electricity.

Mitigation Measure AQ-3: Require use of low VOC coatings to reduce ROG emissions (both options).

The project shall use low volatile organic compound or VOC (i.e., ROG) coatings, that are below current BAAQMD requirements (i.e., Regulation 8, Rule 3: Architectural Coatings), for at least 90 percent of all residential and nonresidential interior paints and 90 percent of exterior paints. This includes all architectural coatings applied during both construction and reapplications throughout the project's operational lifetime. At least 90 percent of coatings applied must meet a "super-compliant" VOC standard of less than 10 grams of VOC per liter of paint. For reapplication of coatings during the project's operational lifetime, the Declaration of Covenants, Conditions, and Restrictions shall contain a stipulation for low VOC coatings to be used. Examples of "super-compliant" coatings are contained in the South Coast Air Quality Management District's website.[13]

Mitigation Measure AQ-4: Heavy-Duty Truck Model Year Requirement (both options).

All on-road heavy-duty diesel trucks with a gross vehicle weight rating of 33,000 pounds or greater (EMFAC Category MHDDT or HHDDT) used at the project sites (such as haul trucks, water trucks, dump trucks, and concrete trucks) shall be *model year 2015 or newer*.

Effectiveness of Mitigation Measure AQ-2, AQ-3, and AQ-4

The effectiveness of MM AQ-2, AQ-3, and AQ-4 were based on additional CalEEMod modeling. The CalEEMod model was used to estimate the effectiveness of MM AQ-2 using Tier 4 final[14] engines and electric cranes, aerial lifts, and portable construction equipment. In addition, the CalEEMod model was used to estimate the effectiveness of MM AQ-3 using 90 percent interior and exterior super-compliant VOC coatings. These measures together were found to reduce on-site construction NO_x emissions by 96-percent and ROG emissions by 82-percent.

[13] SCAQMD: http://www.aqmd.gov/home/regulations/compliance/architectural-coatings/super-compliant-coatings
[14] Tier 4 interim and Tier 4 final are EPA diesel engine standards to regulate the amount of PM and NO_x emitted from diesel powered equipment.

The EMFAC2017 model was used to implement MM AQ-4 by distributing the fleet for 2014 or newer model trucks. Use of a newer model year trucks for material/soil hauling and vendor hauling would reduce traffic-related NO_x emissions by 20 percent and ROG emissions by 30 percent.

As a result of the applied mitigation measures, the project's ROG and NO_x construction emissions would be reduced to values below the BAAQMD thresholds for both the Education Mixed-Use Option and Non-Education Mixed-Use Option. Mitigated emissions are also reported in Table 8.

Operational Period Emissions

Operational air emissions from the project would be generated primarily from autos driven by future residents, employees, customers, vendors, and students/faculty. Evaporative emissions from architectural coatings and maintenance products (classified as consumer products) are typical emissions from these types of uses. CalEEMod was used to estimate emissions from operation of the proposed project assuming full build-out.

CalEEMod Inputs

Land Uses

Project construction would occur at the two separate El Paseo and Saratoga sites, in which the El Paseo site has two construction phases within each option over multiple years. Therefore, separate CalEEMod runs were conducted of the El Paseo Education Mixed-Use Option, El Paseo Non-Education Mixed-Use Option, and Saratoga site to calculate the operational emissions of the entire completed project. The proposed operational land uses for the completed project were input into CalEEMod as described in Table 9:

Table 9. Summary of Project Land Use CalEEMod Inputs for Operation

Project Land Uses	Size	Units	Square Feet	Acres
El Paseo Site: Education Mixed- Use Option				
Apartments Mid Rise	450	Dwelling Unit	570,000	8.85
Elementary School	2,500	Students	450,000	
Strip Mall	60	1,000 sf	60,000	
Enclosed Parking with Elevator	850	Space	350,000	
Parking Lot	260	Space	104,000	
El Paseo Site: Non-Education Mixed-Use Option				
Apartments Mid Rise	820	Dwelling Unit	939,657	8.85
Strip Mall	70.372	1,000 sf	70,372	
General Office Building	52.508	1,000 sf	52,508	
Medical Office Building	36.12	1,000 sf	36,120	
Enclosed Parking with Elevator	1,480	Space	551,015	
Parking Lot	157	Space	62,800	
Saratoga Site (Both Options)				
Apartments Mid Rise	280	Dwelling Unit	350,000	1.82
Strip Mall	6	1,000 sf	6,000	
Enclosed Parking with Elevator	331	Space	182,396	

Model Year

Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CalEEMod. The earliest year of full operation for the entire project would be 2026 if construction begins in 2021. Emissions associated with build-out later than 2026 would be lower.

Operational Trip Generation Rates

CalEEMod allows the user to enter specific vehicle trip generation rates. Therefore, the project-specific daily trip generation rate provided by the traffic consultant was entered into the model.[15] The project would produce 5,954 net daily trips under Education Mixed-Use Option and 4,703 net daily trips under Non-Education Mixed-Use Option taking into account the *Residential/Retail Internal Capture Reduction, Residential/Office Internal Capture Reduction, Office/Retail Internal Capture Reduction, Location-Based Non-Vehicle Mode Shore Reduction,* and *Project-Specific Trip Reduction.* The daily trip generation was calculated using the size of the project land uses and the adjusted total automobile trips per land use. The Saturday and Sunday trip rates were adjusted by multiplying the ratio of the CalEEMod default rates for Saturday and Sunday trips to the default weekday rate with the project-specific daily weekday trip rate. The default trip types and lengths specified by CalEEMod were used.

EMFAC2017 Adjustment

The vehicle emission factors and fleet mix used in CalEEMod are based on EMission FACtors from 2014 (EMFAC2014), which is an older CARB emission inventory for on road and off road mobile sources. Since the release of CalEEMod Version 2016.3.2, new emission factors have been produced by CARB. EMFAC2017 became available for use in March 2018 and approved by the EPA in August 2019. It includes the latest data on California's car and truck fleets and travel activity. Additionally, CARB has recently released EMFAC off-model adjustment factors to account for the Safer Affordable Efficient (SAFE) Vehicle Rule Part one.[16,17] The SAFE vehicle Rule Part One revoked California's authority to set its own GHG emission standards and set zero emission vehicle mandates in California. As a result of this ruling, mobile criteria pollutant and GHG emissions would increase. Therefore, the CalEEMod vehicle emission factors and fleet mix were updated with the emission rates and fleet mix from EMFAC2017, which were adjusted with the CARB EMFAC off-model adjustment factors. More details about the updates in emissions calculation methodologies and data are available in the EMFAC2017 Technical Support Document.[18]

---

[15] Hexagon Transportation Consultants, Inc., *El Paseo Mixed-Use Development Draft Transportation Analysis*, July 26, 2021.
[16] California Air Resource Board, 2019. *EMFAC Off-Model Adjustment Factors to Account for the SAFE Vehicle Rule Part One.* November. Web: https://ww3.arb.ca.gov/msei/emfac_off_model_adjustment_factors_final_draft.pdf
[17] California Air Resource Board, 2020. *EMFAC Off-Model Adjustment Factors for Carbon Dioxide (CO_20 Emissions to Accounts for the SAFE Vehicles Rule Part One and the Final SAFE Rule*. June. Web: https://ww3.arb.ca.gov/msei/emfac_off_model_co2_adjustment_factors_06262020-final.pdf?utm_medium=email&utm_source=govdelivery
[18] See CARB 2018: https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/road-documentation/msei-modeling-tools-emfac

Climate Smart San José

Climate Smart San José is a plan to reduce air pollution, save water, and create a stronger and healthier community. The City approved goals and milestones in February 2018 to ensure the City can substantially reduce GHG emissions through reaching the following goals and milestones:

- All new residential buildings will be Zero Net Carbon Emissions (ZNE) by 2020 and all new commercial buildings will be ZNE by 2030 (Note that ZNE buildings would be all electric with a carbon-free electricity source).
- San Jose Clean Energy (SJCE) will provide 100-percent carbon-free base power by 2021.
- One gigawatt of solar power will be installed in San Jose by 2040.
- 61 percent of passenger vehicles will be powered by electricity by 2030.

The California Energy Commission (CEC) updates the California Building Energy Efficiency Standards every three years, in alignment with the California Code of regulations. Title 24 Parts 6 and 11 of the California Building Energy Efficiency Standards and the California Green Building Standards Code (CALGreen) address the need for regulations to improve energy efficiency and combat climate change. The 2019 CAL Green standards include substantial changes intended to increase the energy efficiency of buildings. For example, the code encourages the installation of solar and heat pump water heaters in low-rise residential buildings. The 2019 California Code went before City Council in October 2019 for approval, with an effective date of January 1, 2020. As part of this action, the City adopted a "reach code" that requires development projects to exceed the minimum Building Energy Efficiency requirements.[19] The City's reach code applies only to new residential and non-residential construction in San José. It incentivizes all-electric construction, requires increased energy efficiency and electrification-readiness for those choosing to maintain the presence of natural gas. The code requires that non-residential construction include solar readiness. It also requires additional EV charging readiness and/or electric vehicle service equipment (EVSE) installation for all development types.

Energy – Electricity and Natural Gas

CalEEMod defaults for energy use were used, which include the 2016 Title 24 Building Standards. GHG emissions modeling includes those indirect emissions from electricity consumption. The electricity produced emission rate was modified in CalEEMod. CalEEMod has a default emission factor of 641.3 pounds of CO_2 per megawatt of electricity produced, which is based on PG&E's 2008 emissions rate. However, PG&E published in 2020 emissions rates for 2010 through 2018, which showed the emission rate for delivered electricity had been reduced to 206 pounds CO2 per megawatt of electricity delivered in the year 2018.[20] This intensity factor was used in the model along with the assumption that the project would use electricity supplied by San José Clean Energy (SJCE). SJCE would provide electricity that would be 100-percent carbon free by 2021 before the project becomes operational.[21]

[19] City of San Jose Transportation and Environmental Committee, *Building Reach Code for New Construction Memorandum,* August 2019.
[20] PG&E Website, Climate Change Webapge - 2021. Web: https://www.pgecorp.com/corp_responsibility/reports/2019/en02_climate_change.html
[21] See: https://www.sanjoseca.gov/your-government/departments-offices/environmental-services/climate-smart-san-jos/2019-reach-code-initiative

Additionally, the City of San José passed an ordinance in October 2019 that prohibits the use of natural gas infrastructure in new residential buildings (i.e., single-family homes and low-rise multi-family buildings).[22] This ordinance applies to any new construction starting January 1, 2020. However, this project's residential use would be mid-rise, and therefore it was assumed in the model then that the residential portion of the project would use natural gas.

Project Generators

The project proposes to include a stand-by emergency diesel generator on the ground-floor of each proposed building. This was understood to mean that there would be a total of five generators under Education Mixed-Use Option and four generators and fire pumps under Non-Education Mixed-Use Option. Based on the provided schematics of the generators and fire pumps, the stand-by diesel generator would be rated at 1,910 kilowatts (kW) with a 2,561 horsepower (HP) diesel engine. The fire pumps do not have their own diesel engine and are assumed to run off the stand-by generator. These generators would be tested periodically and power the buildings in the event of a power failure. For modeling purposes, it was assumed that the generators would be operated primarily for testing and maintenance purposes. CARB and BAAQMD requirements limit these engine operations to 50 hours each per year of non-emergency operation. During testing periods, the engine would typically be run for less than one hour. The engine would be required to meet CARB and EPA emission standards and consume commercially available California low-sulfur diesel fuel. The generator emissions were modeled using CalEEMod. Additionally, the generators would have to meet BAAQMD BACT requirements for IC Engine-Compression Ignition: Stationary Emergency, non-Agricultural, non-direct drive fire pump sources. These include emission limits similar to U.S. EPA Tier 4 engines.

Wood-Burning Devices

CalEEMod assumes new construction would include some woodburning fireplaces and stoves. The project would not include wood-burning devices. Therefore, the number of woodstoves and woodburning fireplaces were zeroed out. In addition, these devices are prohibited by BAAQMD Regulation 6, Rule 3.

Other Inputs

Default model assumptions for emissions associated with solid waste generation and water/wastewater use were applied to the project. Water/wastewater use was changed to 100% aerobic conditions to represent wastewater treatment plant conditions. The project site would not send wastewater to septic tanks or facultative lagoons.

Existing Land Use

The existing El Paseo and Saratoga sites consist of retail and office uses. CalEEMod model runs were developed to compute emissions from use of the existing land uses at the baseline year of 2020. Inputs for the existing El Paseo modeling scenario included 72,940-sf entered as "Strip

[22] City of San Jose, 2019. "Ordinance No. 30330", October. Web: https://records.sanjoseca.gov/Ordinances/ORD30330.pdf

Mall" and the existing Saratoga modeling scenario included 25,184-sf entered as "General Office Building". The existing trip generation rates and other inputs were applied to the existing modeling in the same manner described for the proposed project.

Summary of Computed Operational Emissions

Annual emissions were predicted using CalEEMod and daily emissions were estimating assuming 365 days of operation. Table 10 shows net average daily construction emissions of ROG, NO_X, total PM_{10}, and total $PM_{2.5}$ during operation of the project. The operational period emissions would not exceed the BAAQMD significance thresholds for the Education Mixed-Use Option nor Non-Education Mixed-Use Option.

Table 10. Operational Period Emissions for Project Options

Scenario	ROG	NOx	PM_{10}	$PM_{2.5}$
Education Mixed-Use Option – Annual Emissions				
2026 El Paseo Education Mixed-Use Option Annual Project Operational Emissions (*tons/year*)	9.62	4.53	5.93	1.68
2020 Annual Existing El Paseo and Saratoga Sites Operational Emissions (*tons/year*)	1.41	1.45	1.34	0.37
Education Mixed-Use Option Net Annual Emissions	8.21	3.08	4.59	1.31
Non-Education Mixed-Use Option – Annual Emissions				
2026 Non-Education Mixed-Use Option Annual Project Operational Emissions (*tons/year*)	9.64	4.14	5.60	1.59
2020 Annual Existing El Paseo and Saratoga Sites Operational Emissions (*tons/year*)	1.41	1.45	1.34	0.37
Non-Education Mixed-Use Option Net Annual Emissions	8.23	2.69	4.26	1.22
BAAQMD Thresholds (tons /year)	*10 tons*	*10 tons*	*15 tons*	*10 tons*
Exceed Threshold?	*No*	*No*	*No*	*No*
Education Mixed-Use Option – Average Daily Emissions				
2026 Education Mixed-Use Option Daily Project Operational Emissions (*pounds/day*)[1]	45.00	16.89	25.13	7.17
Non-Education Mixed-Use Option – Average Daily Emissions				
2026 Non-Education Mixed-Use Option Daily Project Operational Emissions (*pounds/day*)[1]	45.09	14.75	23.33	6.68
BAAQMD Thresholds (pounds/day)	*54* lbs.	*54* lbs.	*82* lbs.	*54* lbs.
Exceed Threshold?	*No*	*No*	*No*	*No*
Notes: [1] Assumes 365-day operation.				

Impact AIR-2: Expose sensitive receptors to substantial pollutant concentrations?

Project impacts related to increased community risk can occur either by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the project vicinity or by significantly exacerbating existing cumulative TAC impacts. This project would introduce new sources of TACs during construction (i.e., on-site construction and truck hauling emissions) and operation (i.e., mobile sources and stationary sources).

Project construction activity would generate dust and equipment exhaust that would affect nearby sensitive receptors. During project operation, the project would generate traffic, consisting of mostly light-duty vehicles. In addition, the project would include the installation of stand-by generators powered by diesel engines that would also have TACs and air pollutants emissions.

Project impacts to existing sensitive receptors were addressed for temporary construction activities and long-term operational conditions. There are also several sources of existing TACs and localized air pollutants in the vicinity of the project. The impact of the existing sources of TACs were also assessed in terms of the cumulative risk which includes the project contribution, as well as the risk on the new sensitive receptors introduced by the project.

Community Risk Methodology for Construction and Operation

Community risk impacts were addressed by predicting increased cancer risk, the increase in annual $PM_{2.5}$ concentrations and computing the Hazard Index (HI) for non-cancer health risks. The risk impacts from the project are the combination of risks from construction and operation sources. These sources include on-site construction activity, construction truck hauling, stand-by emergency generator operation, and increased traffic from the project. To evaluate the increased cancer risks from the project, a 30-year exposure period is typically used, per BAAQMD guidance,[23] with the residential sensitive receptors being exposed to both project construction and operation emissions during this timeframe.

The project increased cancer risk is computed by summing the project construction cancer risk and operation cancer risk contributions. Unlike the increased maximum cancer risk, the annual $PM_{2.5}$ concentration and HI values are not additive but based on the annual maximum values for the entirety of the project. The project's maximally exposed individual (MEI) is identified as the sensitive receptor that is most impacted by the project's construction and operation.

The methodology for computing community risks impacts is contained in *Attachment 1*. This involved the calculation of TAC and $PM_{2.5}$ emissions, dispersion modeling of these emissions, and computations of cancer risk and non-cancer health effects.

Modeled Sensitive Receptors

Receptors for this assessment included locations where sensitive populations would be present for extended periods of time (i.e., chronic exposures). This includes the existing residences to the south, east, west, and north of the project site, as shown in Figure 2. Residential receptors are

[23] BAAQMD, 2016. *BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines*. December 2016.

assumed to include all receptor groups (i.e., infants, children, and adults) with almost continuous exposure to project emissions.

Community Risks from Project Construction

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. Construction diesel exhaust poses both a potential health and nuisance impact to nearby receptors. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to $PM_{2.5}$. A health risk assessment of the project construction activities was conducted that evaluated potential health effects to nearby sensitive receptors from construction emissions of DPM and $PM_{2.5}$.[24] This assessment included dispersion modeling to predict the off-site concentrations resulting from project construction, so that increased cancer risks and non-cancer health effects could be evaluated.

Construction Emissions

The CalEEMod and EMFAC 2017 models provided total annual PM_{10} exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road construction worker, vendor, and hauling vehicles. Total emissions from all construction stages are reported in Table 11 and are on an annual basis per site and option. The annual on-road emissions result from haul truck travel during demolition and grading activities, worker travel, and vendor deliveries during construction. A trip length of one mile was used for vehicle travel while at or near the construction sites to represent localized vehicle emissions from construction. It was assumed that these emissions from on-road vehicles traveling at or near the site would occur at the construction sites. Fugitive $PM_{2.5}$ dust emissions were computed by CalEEMod and EMFAC 2017 for the overall construction period and are included as part of the total $PM_{2.5}$ emissions reported in Table 11.

Table 2. Unmitigated Construction Emissions of DPM and Fugitive $PM_{2.5}$ (tons)

Site	Description	2021	2022	2023	2024	2025
El Paseo Site: Education Mixed-Use Option	PM_{10} Exhaust (DPM)	0.0461	0.1299	0.2812	0.2521	0.0519
	$PM_{2.5}$ Fugitive	0.0107	0.0051	0.0296	0.0284	0.0185
El Paseo Site: Non-Education Mixed-Use Option	PM_{10} Exhaust (DPM)	0.0383	0.0856	0.2475	0.1427	0.0748
	$PM_{2.5}$ Fugitive	0.0112	0.0147	0.0189	0.0170	0.0128
Saratoga Site: Both Options	PM_{10} Exhaust (DPM)	0.0347	0.0430	0.0417	0.0185	-
	$PM_{2.5}$ Fugitive	0.0080	0.0087	0.0030	0.0020	-

Dispersion Modeling

The U.S. EPA AERMOD dispersion model was used to predict DPM and $PM_{2.5}$ concentrations at sensitive receptors (residences) in the vicinity of the project construction area. The AERMOD dispersion model is a BAAQMD-recommended model for use in modeling analysis of these types of emission activities for CEQA projects.[25] Emission sources for the construction site were

[24] DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.
[25] BAAQMD, 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0.* May.

grouped into two categories: exhaust emissions of DPM and fugitive $PM_{2.5}$ dust emissions. The construction emissions for Education Mixed-Use Option and Non-Education Mixed-Use Option would be the different, so multiple construction models were completed.

Combustion equipment DPM exhaust emissions were modeled as a series of point sources with a nine-foot release height (construction equipment exhaust stack height) placed at 33 feet (10 meter) intervals throughout both El Paseo construction sites and at 23 feet (7 meter) intervals throughout the Saratoga construction site. This resulted in 312 individual point sources at El Paseo and 139 individual point sources at Saratoga being used to represent mobile equipment DPM exhaust emissions in the respective construction areas, with DPM emissions occurring throughout the project construction sites. In addition, the following stack parameters were used: a vertical release, a stack diameter of 2.5 inches, an exhaust temperature of 918˚F, and an exit velocity of 309 feet per second. Since these are point sources plume rise is calculated by the AERMOD dispersion model. Emissions from vehicle travel on- and off-site were also distributed among the point sources throughout the site. The locations of the point sources used for the modeling are identified in Figure 2.

For modeling fugitive $PM_{2.5}$ emissions, a near-ground level release height of 7 feet (2 meters) was used for the area source. Fugitive dust emissions at construction sites come from a variety of sources, including truck and equipment travel, grading activities, truck loading (with loaders) and unloading (rear or bottom dumping), loaders and excavators moving and transferring soil and other materials, etc. All of these activities result in fugitive dust emissions at various heights at the point(s) of generation. Once generated, the dust plume will tend to rise as it moves downwind across the site and exit the site at a higher elevation than when it was generated. For all these reasons, a 7-foot release height was used as the average release height across the construction site. Emissions from the construction equipment and on-road vehicle travel were distributed throughout the modeled area sources.

The modeling used a five-year meteorological data set (2013-2017) from the San José International Airport prepared for use with the AERMOD model by the BAAQMD. Construction emissions were modeled as occurring daily between 7:00 a.m. to 7:00 p.m. for the El Paseo Site Education Mixed-Use Option and between 8:00 a.m. to 5:00 p.m. for the El Paseo Site Non-Education Mixed-Use Option and Saratoga Site for the entire construction period per the project applicant's construction schedule. For a short period of time (15 days), there would be nighttime construction during the 15-hour concrete pours on the El Paseo site with concrete pumps and trucks.[26] Annual DPM and $PM_{2.5}$ concentrations from construction activities during the 2021-2025 period were calculated using the model. DPM and $PM_{2.5}$ concentrations were calculated at nearby sensitive receptor locations. Receptor heights of 5 feet (1.5 meters) used to represent the breathing heights of residents in nearby single-family homes.[27]

[26] The health risk construction emissions for the 15-hour concrete pours for the El Paseo Site Education and Non-Education Mixed-Use Options for the podium phases were modeled with 8-hour pours. However, as shown in Table 8, the longer concrete pour duration would minimally, if at all, increase the construction PM emissions and did not change the mitigation or significance impact for project construction emissions. Therefore, this slight emissions increase would not make a measurable difference in the construction health risk modeling, concentrations, or risks as it would not change the significance impact or mitigation measures.

[27] Bay Area Air Quality Management District, 2012, Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0. May. Web: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en

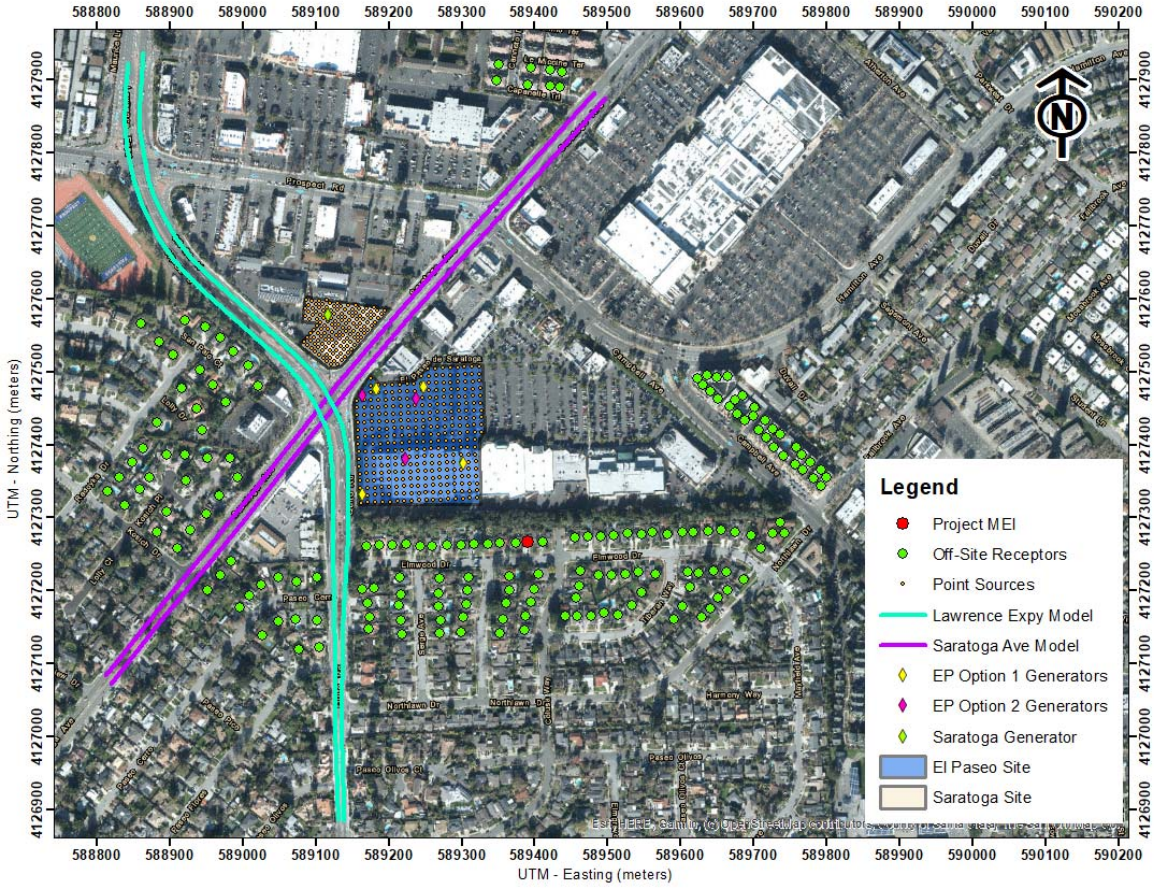
Summary of Construction Community Risk Impacts

The increased cancer risk calculations were based on applying the BAAQMD recommended age sensitivity factors to the TAC concentrations, as described in *Attachment 1*. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. Infant and adult exposures were assumed to occur at all residences during the entire construction period.

The maximum modeled annual $PM_{2.5}$ concentration was calculated based on combined exhaust and fugitive concentrations. The maximum computed HI values was based on the ratio of the maximum DPM concentration modeled and the chronic inhalation refence exposure level of 5 $\mu g/m^3$.

The maximum modeled annual DPM and $PM_{2.5}$ concentrations, which includes both the DPM and fugitive $PM_{2.5}$ concentrations, were identified at nearby sensitive receptors to find the MEI. Results of this assessment indicated that the MEI most affected by construction of both project options was located on the first floor (5 feet above ground) of a single-family residence to the southeast of the El Paseo project site. The location of the MEI and nearby sensitive receptors are shown in Figure 2. Table 12 lists the community risks from construction of both options at the location of the residential MEI. *Attachment 4* to this report includes the emission calculations used for the construction modeling and the cancer risk calculations.

Figure 2. Locations of Project Construction Site, Project Traffic, Project Generators, Off-Site Sensitive Receptors, and Maximum TAC Impacts



Community Risks from Project Operation – Traffic and Generators

Operation of the project would have long-term emissions from mobile sources (i.e., traffic) and stationary sources (i.e., generators). While these emissions would not be as intensive at or near the site as construction activity, they would contribute to long-term effects to sensitive receptors.

Operational Traffic

The project would generate either 6,410 net trips per day for Education Mixed-Use Option or 5,159 net trips per day for Non-Education Mixed-Use Option.[28] A majority of these trips would be from light-duty, gasoline vehicles (i.e., passenger cars). To address the added community risks, the impact from local project traffic was assessed using the CT-EMFAC2017 emissions model, AERMOD dispersion model, and cancer risk calculations following BAAQMD methodology described in *Attachment 1*.

Traffic Emissions

This analysis involved the development of DPM, organic TACs, and $PM_{2.5}$ emissions for traffic on both Lawrence Expressway/Quito Road and Saratoga Avenue using the Caltrans (CT) version of the EMFAC2017 emissions model, known as CT-EMFAC2017. CT-EMFAC2017 provides emission factors for mobile source criteria pollutants and TACs, including DPM. Emission processes modeled include running exhaust for DPM, $PM_{2.5}$ and total organic compounds (e.g., TOG), running evaporative losses for TOG, and tire and brake wear and fugitive road dust for $PM_{2.5}$. All $PM_{2.5}$ emissions from all vehicles were used, rather than just the $PM_{2.5}$ fraction from diesel powered vehicles, because all vehicle types (i.e., gasoline and diesel powered) produce $PM_{2.5}$. Additionally, $PM_{2.5}$ emissions from vehicle tire and brake wear from re-entrained roadway dust were included in these emissions. DPM emissions are projected to decrease in the future and are reflected in the CT-EMFAC2017 emissions data. Inputs to the model include region (i.e., Santa Clara County), type of road (i.e., major/collector), truck percentage for non-state highways in Santa Clara County (3.51 percent),[29] traffic mix assigned by EMFAC2017 for the county, year of analysis (2026 – project operational year), and season (annual).

The CT-EMFAC2017 model computed vehicle emission factors for the year 2026. Year 2026 emissions were conservatively assumed as being representative of future conditions over the time period that cancer risks are evaluated at the project MEI. For the project MEI receptor, a 27-year exposure period to traffic emissions was used since the maximum construction exposure at the MEI would occur during the last three years of project construction.

Traffic Dispersion Modeling Inputs

A conservative analysis was conducted where all project traffic emissions from on- and near-site travel were assumed to occur along Lawrence Expressway/Quito Road and Saratoga Avenue.

[28] Operational traffic emissions were modeled with 456 trips less under either option. This difference in trips would result in a negligible difference in traffic emissions.
[29] Bay Area Air Quality Management District, 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0.* May. Web: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en

These roadways are closest to the nearby sensitive receptors. The gross daily trips predicted by the traffic consultant were used to assess project traffic impacts.[30] The estimated project trip distribution for project both options by the traffic consultant at the Lawrence Expressway/Quito Road and Saratoga Avenue intersection was used to distribute project trips along the roadways for project both options.

The average hourly traffic distributions for Santa Clara County roadways were developed using the EMFAC model,[31] which were then applied to the trip volumes to obtain estimated hourly traffic volumes and emissions for both roadways for both options. For all hours of the day, other than during peak a.m. and p.m. periods, average speeds of 50 mph on Lawrence Expressway/Quito Road and 40 mph on Saratoga Avenue were assumed for all vehicles based on posted speed limit signs on the roadway. Traffic speeds during the peak a.m. and p.m. periods were assumed to be 10 miles per hour slower (i.e., 40 mph on Lawrence Expressway/Quito Road and 30 mph on Saratoga Avenue) to account for congestion and the amount of access in the area.

Dispersion Modeling

Operational traffic roadway travel emissions were modeled with the AERMOD model using line-area sources (a series of adjacent area sources along a line) to represent traffic emissions on roadway segments within about one-quarter mile of the project site. Five years (2013-2017) of hourly meteorological data from the San José International Airport prepared for use with the AERMOD model by the BAAQMD, were used for the modeling. TAC and $PM_{2.5}$ concentrations for 2026 were calculated by the model at the same sensitive receptor locations with the same receptor heights of 5 feet (1.5 meters) used for the construction health risk modeling.

Figure 2 shows the project roadway segments modeled and residential MEI receptor location used in the modeling. Table 12 lists the project roadway risks and hazards at the location of the MEI. The emission rates and roadway calculations used in the project impact analysis are shown in *Attachment 4*.

Project Stand-By Diesel Generators

The project proposes a stand-by emergency diesel generator for the ground-floor of each proposed building. This means there would be a total of five generators under Education Mixed-Use Option and four generators under Non-Education Mixed-Use Option. Based on the provided schematics of the generators, the stand-by diesel generator would be rated at 1,910 kilowatts (kW) with a 2,561 horsepower (HP) diesel engine. There are fire pumps that do not have their own diesel engine and are assumed to run off the stand-by generator. Figure 2 shows the location of the modeled stand-by generators for both options.

Operation of a diesel generator would be a source of TAC emissions. The generator would be operated for testing and maintenance purposes, with a maximum of 50 hours per year of non-emergency operation under normal conditions. During testing periods, the engine would typically

[30] Hexagon Transportation Consultants, Inc., *El Paseo Mixed-Use Development Draft Transportation Analysis*, July 26, 2021.
[31] The Burden output from EMFAC2007, a previous version of CARB's EMFAC model, was used for this since the current web-based version of EMFAC2017 does not include Burden type output with hour by hour traffic volume information.

be run for less than one hour under light engine loads. The generator engine would be required to meet EPA emission standards and consume commercially available low sulfur diesel fuel. The emissions from the operation of the generator were calculated using the CalEEMod model.

This diesel engine would be subject to CARB's Stationary Diesel Airborne Toxics Control Measure (ATCM) and require permits from the BAAQMD, since it will be equipped with an engine larger than 50-HP. BACT requirements would apply to these generators that would limit DPM emissions. As part of the BAAQMD permit requirements for toxics screening analysis, the engine emissions will have to meet Best Available Control Technology for Toxics (TBACT) and pass the toxic risk screening level of less than ten in a million. The risk assessment would be prepared by BAAQMD. Depending on results, BAAQMD would set limits for DPM emissions (e.g., more restricted engine operation periods). Sources of air pollutant emissions complying with all applicable BAAQMD regulations generally will not be considered to have a significant air quality community risk impact.

To obtain an estimate of potential cancer risks and $PM_{2.5}$ impacts from operation of the stand-by generators, the U.S. EPA AERMOD dispersion model was used to calculate the maximum annual DPM concentration at the off-site MEI location. The same receptor, breathing height, and BAAQMD San José International Airport meteorological data used in the construction dispersion modeling were used for the generator models. Stack parameters for modeling the generators were either based on project-specific generator parameters (i.e., engine size, exhaust gas flowrate, and exhaust gas temperature) or based on BAAQMD default parameters (stack height, stack diameter) for stand-by diesel generators if that project-specific information were not available.[32] Annual average DPM and $PM_{2.5}$ concentrations were modeled assuming that generator testing could occur at any time of the day (24 hours per day, 365 days per year).

To calculate the increased cancer risk from the project generators at the MEI for both options, the cancer risks exposure duration was adjusted to account for the residential MEI being exposed to construction for the first three years (maximum construction risk during last 3 years of construction period) of the 30-year lifetime period. The exposure duration for the generators was adjusted for 27 years. Table 12 lists the community risks from stand-by diesel generators at the location of residential MEI under both project options. The emissions and health risk calculations for the proposed generators are included in *Attachment 4*.

Summary of Project-Related Community Risks at the Off-Site Project MEI

For this project, the sensitive receptor identified as the construction MEI is also the project MEI. At this location, the MEI would be exposed to three years of construction cancer risks (maximum construction exposure risk) and 27 years of operational (i.e., project traffic and stand-by generators) cancer risks. The cancer risks from construction and operation of the project were summed together. The annual $PM_{2.5}$ concentration, and HI values are based on an annual maximum risk for the entirety of the project.

[32] Bay Area Air Quality Management District, San Francisco Department of Public Health, and San Francisco Planning Department, 2012. *The San Francisco Community Risk Reduction Plan: Technical Support Document,* BAAQMD, December. Web: https://www.gsweventcenter.com/Appeal_Response_References/2012_1201_BAAQMD.pdf

As shown in Table 12, the unmitigated increased cancer risks from project construction and operation activities at the residential project MEI location would exceed the single-source significance threshold. However, with *Mitigation Measures AQ-1* and *AQ-2*, the mitigated project risk and hazard values would no longer exceed the BAAQMD single-source significance threshold. The non-cancerous hazards (i.e., $PM_{2.5}$ and HI) from construction and operation activities would not exceed the single-source significance threshold, unmitigated or mitigated.

Table 12. Maximum Project Risk Impacts at the Off-Site Receptors

Source		Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Education Mixed-Use Option				
Max Project Construction (Years 0-3)	Unmitigated	**55.06**	0.23	0.04
	Mitigated*	9.44	0.07	0.01
Project Traffic Operation on Lawrence Expressway/Quito Road and Saratoga Avenue (Years 3-30)		0.05	0.02	<0.01
Project Generators Operation, 5 2,561-hp Generators (Years 3-30)		0.15	<0.01	<0.01
Total Project Education Mixed-Use Option Impact				
	Unmitigated	**55.26**	0.23	0.04
	Mitigated*	9.64	0.07	0.01
BAAQMD Single-Source Threshold		***10.0***	***0.3***	***1.0***
Exceed Threshold?	Unmitigated	***Yes***	*No*	*No*
	Mitigated	*No*	*No*	*No*
Non-Education Mixed-Use Option				
Max Project Construction (Years 0-3)	Unmitigated	**35.79**	0.17	0.03
	Mitigated*	5.25	0.04	<0.01
Project Traffic Operation on Lawrence Expressway/Quito Road and Saratoga Avenue (Years 3-30)		0.05	0.01	<0.01
Project Generators Operation, 4 2,561-hp Generators (Years 3-30)		0.15	<0.01	<0.01
Total Project Non-Education Mixed-Use Option Impact				
	Unmitigated	**35.99**	0.17	0.03
	Mitigated*	5.45	0.04	<0.01
BAAQMD Single-Source Threshold		***10.0***	***0.3***	***1.0***
Exceed Threshold?	Unmitigated	***Yes***	*No*	*No*
	Mitigated	*No*	*No*	*No*

Notes: * Construction equipment with Tier 4 final engines, electric cranes, aerial lifts, and portable equipment, and enhanced BMPs as Mitigation Measures.

Cumulative Community Risks of all TAC Sources at Project MEI

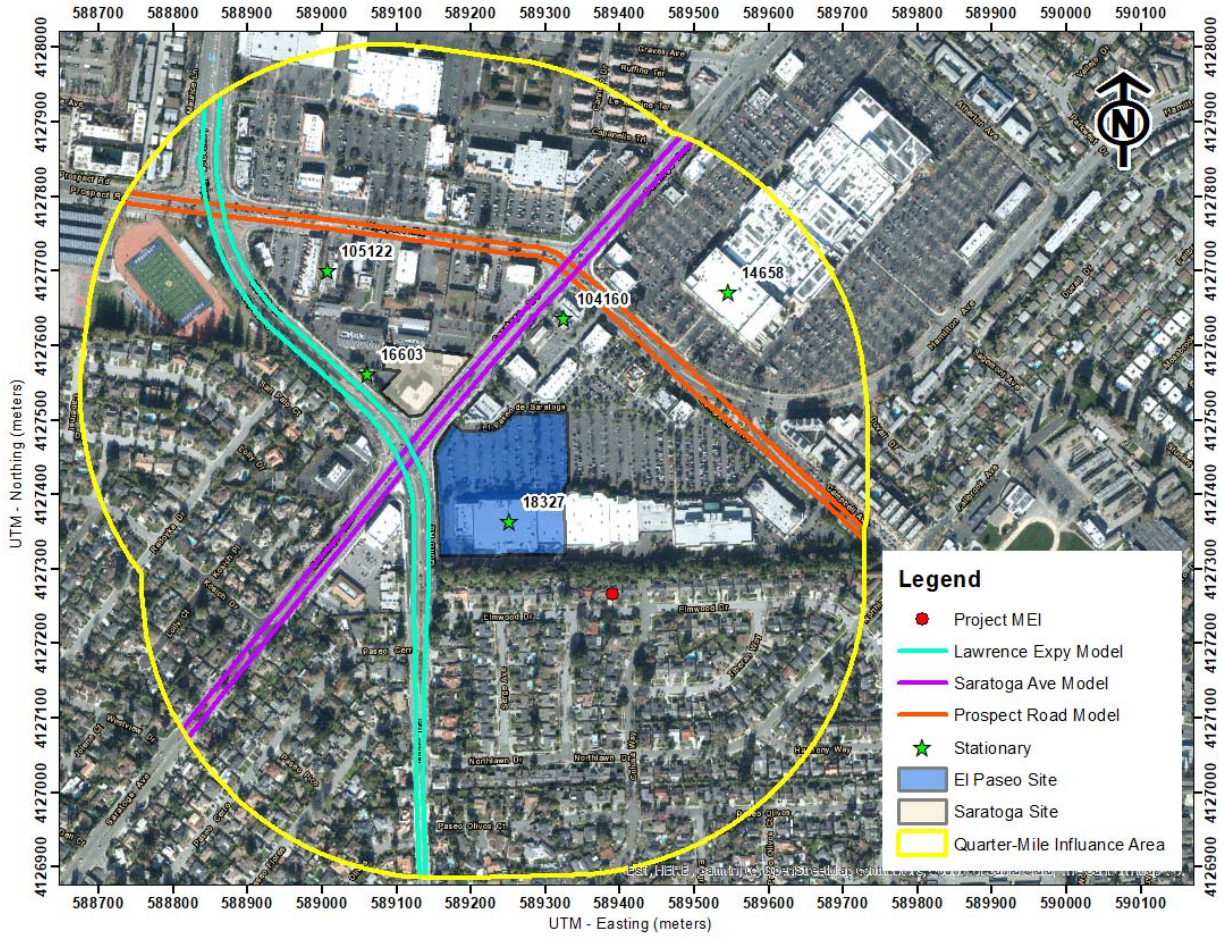
Community health risk assessments typically look at all substantial sources of TACs that can affect sensitive receptors that are located within one-quarter mile of a project site (i.e., influence area). These sources include freeways or highways, rail lines, busy surface streets, and stationary sources identified by BAAQMD.

A review of the project area indicates that traffic on Lawrence Expressway/Quito Road, Saratoga Avenue, and Prospect Road/Campbell Avenue would exceed 10,000 vehicles per day. Other nearby streets are assumed to have less than 10,000 vehicles per day. Note that the traffic volumes differ for the Education Mixed-Use Option and Non-Education Mixed-Use Option due to

differences in land uses. Therefore, Lawrence Expressway/Quito Road, Saratoga Avenue, and Prospect Road/Campbell Avenue were analyzed for both options.

A review of BAAQMD's stationary source geographic information systems (GIS) map tool identified five stationary sources with the potential to affect the project MEI. Figure 3 shows the location of the sources affecting the MEI. Community risk impacts from these sources upon the MEI reported in Table . Details of the modeling and community risk calculations are included

Figure 3. Project Site and Nearby TAC and $PM_{2.5}$ Sources



Local Roadways – Lawrence Expressway/Quito Road, Saratoga Avenue, and Prospect Road/Campbell Avenue

A refined analysis of potential health impacts from vehicle traffic on Lawrence Expressway/Quito Road, Saratoga Avenue, and Prospect Road/Campbell Avenue was conducted. The refined analysis involved predicting emissions for the traffic volume and mix of vehicle types on these roadways near the project site and using an atmospheric dispersion model to predict exposure to TACs. The associated cancer risks are then computed based on the modeled exposures. *Attachment 1* includes a description of how community risk impacts, including cancer risk are computed.

Traffic Emissions Modeling

This analysis involved the development of DPM, organic TACs, and $PM_{2.5}$ emissions for traffic on these roadways using the Caltrans version of the EMFAC2017 emissions model, known as CT-EMFAC2017. CT-EMFAC2017 provides emission factors for mobile source criteria pollutants and TACs, including DPM. Emission processes modeled include running exhaust for DPM, $PM_{2.5}$ and total organic compounds (e.g., TOG), running evaporative losses for TOG, and tire and brake wear and fugitive road dust for $PM_{2.5}$. All $PM_{2.5}$ emissions from all vehicles were used, rather than just the $PM_{2.5}$ fraction from diesel powered vehicles, because all vehicle types (i.e., gasoline and diesel powered) produce $PM_{2.5}$. Additionally, $PM_{2.5}$ emissions from vehicle tire and brake wear from re-entrained roadway dust were included in these emissions. DPM emissions are projected to decrease in the future and are reflected in the CT-EMFAC2017 emissions data. Inputs to the model include region (i.e., Santa Clara County), type of road (i.e., major/collector), truck percentage for non-state highways in Santa Clara County (3.51 percent),[33] traffic mix assigned by EMFAC2017 for the county, year of analysis (2021 – construction start year), and season (annual).

In order to estimate TAC and $PM_{2.5}$ emissions over the 30-year exposure period used for calculating the increased cancer risks for sensitive receptors at the MEI and project site, the CT-EMFAC2017 model was used to develop vehicle emission factors for the year 2022 (project construction year). Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CT-EMFAC2017. Year 2022 emissions were conservatively assumed as being representative of future conditions over the time period that cancer risks are evaluated since, as discussed above, overall vehicle emissions, and in particular diesel truck emissions, will decrease in the future.

The average daily traffic (ADT) on Lawrence Expressway/Quito Road, Saratoga Avenue, and Prospect Road/Campbell Avenue was based on the AM and PM peak-hour data background traffic volumes for both options.[34] Assuming a 1 percent per year increase, for the Education Mixed-Use Option the predicted ADTs on Lawrence Expressway/Quito Road, Saratoga Avenue, and Prospect Road/Campbell Avenue would be 25,997, 27,630, and 24,728 vehicles, respectively. For the Non-Education Mixed-Use Option, the predicted ADTs on Lawrence Expressway/Quito Road, Saratoga Avenue, and Prospect Road/Campbell Avenue would be 24,797, 26,162, and 23,037 vehicles, respectively.

The average hourly traffic distributions for Santa Clara County roadways were developed using the EMFAC model,[35] which were then applied to the ADT volumes to obtain estimated hourly traffic volumes and emissions for these roadways. For all hours of the day, other than during peak a.m. and p.m. periods, average speeds of 50 mph on Lawrence Expressway/Quito Road and 40 mph on Saratoga Avenue were assumed for all vehicles based on posted speed limit signs on the roadway. Traffic speeds during the peak a.m. and p.m. periods were assumed to be 10 miles per

[33] Bay Area Air Quality Management District, 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0.* May. Web: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en

[34] Hexagon Transportation Consultants, Inc., *El Paseo Mixed-Use Development Draft Transportation Analysis*, July 26, 2021.

[35] The Burden output from EMFAC2007, a previous version of CARB's EMFAC model, was used for this since the current web-based version of EMFAC2017 does not include Burden type output with hour by hour traffic volume information.

hour slower (i.e., 40 mph on Lawrence Expressway/Quito Road and 30 mph on Saratoga Avenue) to account for congestion and the amount of access in the area.

Dispersion Modeling

These roadways travel emissions were modeled with the AERMOD model using line-area sources (a series of adjacent area sources along a line) to represent traffic emissions on roadway segments within about one-quarter mile of the project site. Five years (2013-2017) of hourly meteorological data from the San José International Airport prepared for use with the AERMOD model by the BAAQMD were used for the modeling. TAC and $PM_{2.5}$ concentrations for 2021 were calculated by the model at the same sensitive receptor locations used for the construction health risk modeling.

Figure 3 shows the roadway segments modeled and residential MEI receptor location used in the modeling. Table 13 lists the roadway risks and hazards at the location of the MEI. The emission rates and roadway calculations used in the cumulative impact analysis are shown in *Attachment 5*.

BAAQMD Permitted Stationary Sources

Permitted stationary sources of air pollution near the project site were identified using BAAQMD's *Permitted Stationary Sources 2018* GIS website.[36] This mapping tool identifies the location of nearby stationary sources and their estimated risk and hazard impacts. Five permitted facilities were identified with three being diesel generators and two being gas dispensing. A Stationary Source Information Form (SSIF) containing the identified sources was prepared and submitted to BAAQMD. BAAQMD provided updated emissions data and risk values on confirmed no other sources were within the one-quarter mile area of the project site.[37] After further review, one source (#18327) is part of the existing El Paseo project site and would be removed as part of the project.

The screening level risks and hazards for the stationary sources were adjusted for distance using BAAQMD's *Distance Adjustment Multiplier Tool for Diesel Internal Combustion Engines and Gasoline Dispensing Facility.* Note that no age-sensitivity factors were included in the screening analysis, so risks would be similar or lower if adjustments were included. Table 13 lists the risks and hazards from the stationary source up the MEI.

Summary of Cumulative Risks at the Project MEI

Table 13 reports both the project and cumulative community risk impacts at the sensitive receptors most affected by project construction and operation (i.e., the MEI). The project would have an exceedance with respect to community risk caused by project construction and operation activities, since the maximum unmitigated cancer risk exceeds the BAAQMD single-source threshold. The $PM_{2.5}$ concentration and hazard risk values, which include unmitigated and mitigated, would not exceed their respective single-source thresholds. However, with the implementation of *Mitigation Measures AQ-1 and AQ-2* described above under Impact AQ-1, the project's cancer risk impact would be lowered to a level below the single-source threshold. The combined unmitigated

[36] BAAQMD, Web: https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65
[37] Email correspondence with Eric Chan, BAAQMD, February 25, 2021.

increased cancer risk, annual $PM_{2.5}$ concentration, and HI would not exceed the BAAQMD cumulative-source thresholds. Therefore, the project would not contribute to a cumulative increase in TAC emissions within the local area.

Table 13. Cumulative Community Risk Impacts at the Location of the Off-Site MEI

Source	Maximum Cancer Risk (per million)	$PM_{2.5}$ concentration ($\mu g/m^3$)	Hazard Index
Project Impacts			
Total Project Education Mixed-Use Option Impact			
Unmitigated	**55.26**	0.23	0.04
Mitigated	9.64	0.07	0.01
Total Project Non-Education Mixed-Use Option Impact			
Unmitigated	**35.99**	0.17	0.03
Mitigated	5.45	0.04	<0.01
BAAQMD Single-Source Threshold	***>10.0***	***>0.3***	***>1.0***
Exceed Threshold? Unmitigated	***Yes***	*No*	*No*
Mitigated	*No*	*No*	*No*
Cumulative Sources			
Education MU Option - Lawrence Expressway/Quito Road, ADT 25,997	1.67	0.08	<0.01
Education MU Option - Saratoga Avenue, ADT 27,630	1.12	0.05	<0.01
Education MU Option - Prospect Road/Campbell Avenue, ADT 24,728	0.44	0.02	<0.01
Non-Education MU Option - Lawrence Expressway/Quito Road, ADT 24,797	1.59	0.07	<0.01
Non-Education MU Option - Saratoga Avenue, ADT 26,162	1.06	0.05	<0.01
Non-Education MU Option - Prospect Road/Campbell Avenue, ADT 23,037	0.41	0.02	<0.01
Target Corp - Target San Jose T-1427 (Facility ID #14658, Generator) MEI Distance at >1,000 feet	<0.01	-	-
Verizon Wireless-816226 (Facility ID #16603, Generator) MEI Distance at >1,000 feet	0.08	-	-
EL Paseo Chevron #9-1325 (Facility ID #104160, Gas Dispensing Facility) MEI Distance at >1,000 feet	0.41	-	<0.01
Classic Car Wash (Facility ID #105122, Gas Dispensing Facility) MEI Distance at >1,000 feet	<0.01	-	-
Cumulative Sources – Education Mixed-Use Option			
Unmitigated	59.00	0.38	<0.08
Mitigated	13.38	0.22	<0.05
Cumulative Sources – Non-Education Mixed-Use Option			
Unmitigated	39.56	0.31	<0.07
Mitigated	9.02	0.19	<0.05
BAAQMD Cumulative Source Threshold	***>100***	***>0.8***	***>10.0***
Exceed Threshold – Education or Non-Education MU Options?			
Unmitigated	*No*	*No*	*No*
Mitigated	*No*	*No*	*No*

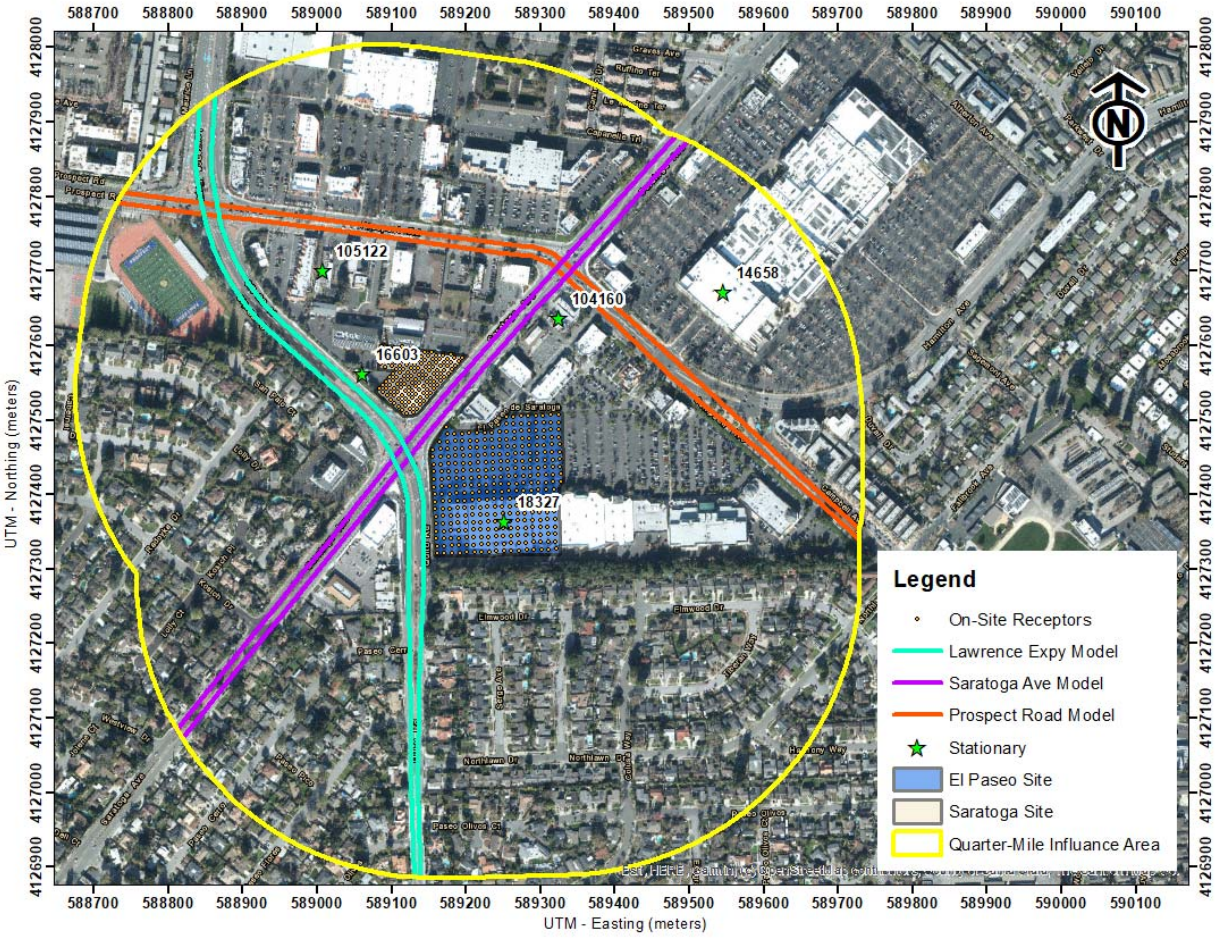
Effectiveness of Mitigation Measure AQ-1 and AQ-2

CalEEMod was used to compute emissions associated with this mitigation measure assuming that all equipment met U.S. EPA Tier 4 final engines standards, electric cranes, aerial lifts, and portable construction equipment, and the BAAQMD enhanced best management practices were applied. With the implementation of *Mitigation Measure AQ-1 and AQ-2*, the increased cancer risk from project construction for Education Mixed-Use Option would be reduced from 55.06 per million to 9.44 per million and for Non-Education Mixed-Use Option would be reduced from 35.79 per million to 5.25 per million. The mitigated community risk values for both options would no longer exceed the BAAQMD single-source threshold of greater than 10.0 per million. When Education Mixed-Use Option project operation impacts are added, mitigated cancer risk would be 9.66 per million. When Non-Education Mixed-Use Option project operation impacts are added, mitigated cancer risk would be 5.43 per million.

Non-CEQA Impacts: Exposure of Project Residents to Existing TACs Source

In addition to evaluating health impact from project construction, a health risk assessment was completed to assess the impact that existing TAC sources would have on the new proposed sensitive receptors (residents, school children) that the project would introduce. The same TAC sources identified above were used in this health risk assessment.[38] Figure 4 shows the on-site sensitive receptors in relation to the nearby TAC sources. All on-site community risk results are listed in Table 14. *Attachment 5* includes the dispersion modeling and risk calculations for TAC source impacts upon the proposed on-site sensitive receptors.

Figure 4. On-Site Project Sensitive Receptors and Nearby TAC and $PM_{2.5}$ Sources



[38] We note that to the extent this analysis considers *existing* air quality issues in relation to the impact on *future residents* of the Project, it does so for informational purposes only pursuant to the judicial decisions in *CBIA v. BAAQMD* (2015) 62 Cal.4th 369, 386 and *Ballona Wetlands Land Trust v. City of Los Angeles* (2011) 201 Cal.App.4th 455, 473, which confirm that the impacts of the environment on a project are excluded from CEQA unless the project itself "exacerbates" such impacts.

Local Roadways – Lawrence Expressway/Quito Road, Saratoga Avenue, and Prospect Road/Campbell Avenue

The roadway analysis for the project residents and school children were conducted in the same manner as described above for the off-site MEI analysis presented above. A grid of receptors representing project sensitive receptors was placed within the project sites. The grid spacing was every 33 feet (10 meters) for the El Paseo site and every 23 feet (7 meters) for the Saratoga site. For the El Paseo Site under both options, roadway impacts were modeled at receptor heights of 5 feet (1.5 meters) and 15 feet (4.5 meters) representing sensitive receptors on the first and second floors on the future El Paseo buildings. For the Saratoga Site, roadway impacts were modeled at receptor heights of 27 feet (8.2 meters) and 37 feet (11.3 meters) representing sensitive receptors on the second and third floors (first and second residential levels) on the future Saratoga buildings. The portions of Lawrence Expressway/Quito Road, Saratoga Avenue, and Prospect Road/Campbell Avenue included in the modeling are shown in Figure 4 along with the project site and receptor locations where impacts were modeled.

Maximum increased cancer risks were calculated for the residents/school children at the project site using the maximum modeled TAC concentrations. For both project options, the project sites were evaluated for cancer risk with residential exposure parameters, which would be more conservative than school children exposure due to the inclusion of third trimester and infant exposure and additional exposure duration. Therefore, for all on-site receptors under both options, a 30-year exposure period was used in calculating cancer risks assuming the residents would include third trimester pregnancy and infants/children and were assumed to be in the new housing area for 24 hours per day for 350 days per year. The highest impacts from the roadways occurred on the first of the El Paseo Site receptors (under both options) closest to the roadways and the second-floors (first residential levels) of the Saratoga Site receptors closest to the roadways. The highest impacts from 3rd Street occurred at the second-floor (first residential levels) receptor in the southwest corner unit of the proposed project closest to the roadway. Cancer risks associated with Lawrence Expressway/Quito Road, Saratoga Avenue, and Prospect Road/Campbell Avenue are greatest closest to those roadways and decrease with distance from the roadways. The roadway community risk impacts at the project site are shown in Table 4. Details of the emission calculations, dispersion modeling, and cancer risk calculations are contained in *Attachment 5*.

BAAQMD Permitted Stationary Sources

Due to the sensitivity of a school uses under the Education Mixed-Use Option, a public records request was made to BAAMQD to identify any stationary sources within the one-quarter mile influence area. There were five sources listed on BAAQMD's *Permitted Stationary Sources 2018* GIS website.[39] BAAQMD confirmed that there were no additional stationary sources within one-quarter mile from the El Paseo project site.[40] The stationary source screening analysis for the new project sensitive receptors was conducted in the same manner as described above for the project MEI. Table 14 shows the health risk assessment results from the stationary sources.

[39] BAAQMD, https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65
[40] Email correspondence with Eric Chan, BAAQMD, February 25, 2021.

Summary of Cumulative Community Risks at the Project Site

Community risk impacts from the TAC sources upon the project site are reported in Table 14. The risks from the singular TAC sources are compared against the BAAQMD single-source threshold. The risks from all the sources are then combined and compared against the BAAQMD cumulative-source threshold. As shown in Table 14, the increased cancer risk from the roadways at certain El Paseo buildings under both options would exceed the single source threshold and the $PM_{2.5}$ concentrations from the roadways at certain El Paseo buildings under both options would exceed both the single- and cumulative-source thresholds. *Condition of Approval AQ-1* is recommended to reduce the increased cancer risk and $PM_{2.5}$ concentration from the local roadways.

Table 14. Cumulative Community Risk Impacts Upon the Onsite Sensitive Receptors

Source	Maximum Cancer Risk (per million)	$PM_{2.5}$ concentration ($\mu g/m^3$)	Hazard Index
Education Mixed-Use Option – Roadways at El Paseo Building 1			
Education MU Option - Lawrence Expressway/Quito Road, ADT 25,997	**10.32**	**0.56**	<0.01
Education MU Option - Saratoga Avenue, ADT 27,630	8.01	**0.52**	<0.01
Education MU Option - Prospect Road/Campbell Avenue, ADT 24,728	0.92	0.04	<0.01
Education Mixed-Use Option – Roadways at El Paseo Building 2			
Education MU Option - Lawrence Expressway/Quito Road, ADT 25,997	**10.53**	**0.58**	<0.01
Education MU Option - Saratoga Avenue, ADT 27,630	4.00	0.21	<0.01
Education MU Option - Prospect Road/Campbell Avenue, ADT 24,728	0.53	0.02	<0.01
Education Mixed-Use Option – Roadways at El Paseo Building 3			
Education MU Option - Lawrence Expressway/Quito Road, ADT 25,997	4.11	0.19	<0.01
Education MU Option - Saratoga Avenue, ADT 27,630	2.61	0.13	<0.01
Education MU Option - Prospect Road/Campbell Avenue, ADT 24,728	0.69	0.03	<0.01
Education Mixed-Use Option – Roadways at El Paseo Building 4			
Education MU Option - Lawrence Expressway/Quito Road, ADT 25,997	3.82	0.18	<0.01
Education MU Option - Saratoga Avenue, ADT 27,630	3.78	0.20	<0.01
Education MU Option - Prospect Road/Campbell Avenue, ADT 24,728	1.46	0.06	<0.01
Education Mixed-Use Option – Roadways at Saratoga Site			
Education MU Option - Lawrence Expressway/Quito Road, ADT 25,997	5.02	0.18	<0.01
Education MU Option - Saratoga Avenue, ADT 27,630	2.51	0.06	<0.01
Education MU Option - Prospect Road/Campbell Avenue, ADT 24,728	1.51	0.06	<0.01
Non-Education Mixed-Use Option – Roadways at El Paseo Building 1			
Non-Education MU Option - Lawrence Expressway/Quito Road, ADT 24,797	**10.04**	**0.55**	<0.01
Non-Education MU Option - Saratoga Avenue, ADT 26,162	7.59	**0.49**	<0.01
Non-Education MU Option - Prospect Road/Campbell Avenue, ADT 23,037	0.84	0.03	<0.01

Source	Maximum Cancer Risk (per million)	$PM_{2.5}$ concentration ($\mu g/m^3$)	Hazard Index
Non-Education Mixed-Use Option – Roadways at El Paseo Building 2			
Non-Education MU Option - Lawrence Expressway/Quito Road, ADT 24,797	6.13	**0.30**	<0.01
Non-Education MU Option - Saratoga Avenue, ADT 26,162	2.62	0.13	<0.01
Non-Education MU Option - Prospect Road/Campbell Avenue, ADT 23,037	0.67	0.03	<0.01
Non-Education Mixed-Use Option – Roadways at El Paseo Building 3			
Non-Education MU Option - Lawrence Expressway/Quito Road, ADT 24,797	3.07	0.14	<0.01
Non-Education MU Option - Saratoga Avenue, ADT 26,162	3.57	0.19	<0.01
Non-Education MU Option - Prospect Road/Campbell Avenue, ADT 23,037	1.31	0.05	<0.01
Non-Education Mixed-Use Option – Roadways at Saratoga Site			
Non-Education MU Option - Lawrence Expressway/Quito Road, ADT 24,797	4.79	0.17	<0.01
Non-Education MU Option - Saratoga Avenue, ADT 26,162	2.37	0.06	<0.01
Non-Education MU Option - Prospect Road/Campbell Avenue, ADT 23,037	1.40	0.06	<0.01
Stationary Sources at Closest Project Location			
Target Corp - Target San Jose T-1427 (Facility ID #14658, Generator) Project Distance at 1,000 feet	<0.01	-	-
Verizon Wireless-816226 (Facility ID #16603, Generator) Project Distance at 30 feet	1.91	-	-
EL Paseo Chevron #9-1325 (Facility ID #104160, Gas Dispensing Facility) Project Distance at 390 feet	1.80	-	0.01
Classic Car Wash (Facility ID #105122, Gas Dispensing Facility) Project Distance at 330 feet	0.01	-	-
BAAQMD Single-Source Threshold	***>10.0***	***>0.3***	***>1.0***
Exceed Threshold?	***Yes***	***Yes***	*No*
Cumulative Sources – Education MU Option El Paseo Building 1	22.98	**1.12**	<0.04
Cumulative Sources – Education MU Option El Paseo Building 2	18.79	**0.81**	<0.04
Cumulative Sources – Education MU Option El Paseo Building 3	11.14	0.35	<0.04
Cumulative Sources – Education MU Option El Paseo Building 4	12.79	0.44	<0.04
Cumulative Sources – Education MU Option Saratoga Site	12.77	0.30	<0.04
Cumulative Sources – Non-Education MU Option El Paseo Building 1	22.20	**1.07**	<0.04
Cumulative Sources – Non-Education MU Option El Paseo Building 2	13.15	0.46	<0.04
Cumulative Sources – Non-Education MU Option El Paseo Building 3	11.68	0.38	<0.04
Cumulative Sources – Non-Education MU Option Saratoga Site	12.29	0.29	<0.04
BAAQMD Cumulative Source Threshold	***>100***	***>0.8***	***>10.0***
Exceed Threshold?	*No*	***Yes***	*No*

Recommended Condition of Approval AQ-1: **Include high-efficiency particulate filtration systems in residential ventilation systems (Both Options).**

Filtration in ventilation systems at the project site would be recommended to reduce the level of harmful pollutants to below the significant thresholds. The significant exposure for new project residential receptors is judged by two effects: (1) increased cancer risk, and (2) annual $PM_{2.5}$ concentration. Exposure to increased cancer risk and annual $PM_{2.5}$ concentrations from the surrounding roadway traffic on Lawrence Expressway/Quito Road and Saratoga Avenue are above their respective thresholds. Cancer risk is mostly the result of exposure to diesel particulate matter, although, gasoline vehicle exhaust contributes to this effect. Annual $PM_{2.5}$ concentrations are based on the exposure to $PM_{2.5}$ resulting from emissions attributable to truck and auto exhaust, the wearing of brakes and tires and re-entrainment of roadway dust from vehicles traveling over pavement. The modeled $PM_{2.5}$ exposure to project site drives this condition of approval. Reducing particulate matter exposure would reduce both annual $PM_{2.5}$ exposures and cancer risk.

The project shall include the following measures to minimize long-term increased cancer risk and annual $PM_{2.5}$ exposure for new project occupants:

1. Install air filtration in the sensitive receptor buildings where increased cancer risk exceed 10 per million and annual $PM_{2.5}$ concentrations exceed 0.3 $\mu g/m^3$. This would include Buildings 1 and 2 on the El Paseo Site under both options. Air filtration devices shall be rated MERV13 or higher for all portions of the site. To ensure adequate health protection to sensitive receptors (i.e., third trimester fetuses, infants, children, and adults), this ventilation system, whether mechanical or passive, all fresh air circulated into the dwelling units shall be filtered. Specific portions of the project site that requires this filtration could be further identified by modeling.

2. The ventilation system shall be designed to keep the building at positive pressure when doors and windows are closed to reduce the intrusion of unfiltered outside air into the building

3. As part of implementing this measure, an ongoing maintenance plan for the buildings' heating, ventilation, and air conditioning (HVAC) air filtration system shall be required.

4. Ensure that the use agreement and other property documents: (1) require cleaning, maintenance, and monitoring of the affected buildings for air flow leaks, (2) include assurance that new owners or tenants are provided information on the ventilation system, and (3) include provisions that fees associated with owning or leasing a unit(s) in the building include funds for cleaning, maintenance, monitoring, and replacements of the filters, as needed.

Effectiveness: A properly installed and operated ventilation system with MERV13 would achieve an 80-percent reduction.[41] Increased cancer risk and $PM_{2.5}$ exposures for MERV13 filtration cases

[41] Bay Area Air Quality Management District (2016). Appendix B: Best Practices to Reduce Exposure to Local Air Pollution, *Planning Healthy Places A Guidebook for Addressing Local Sources of Air Pollutants in Community Planning* (p. 38). http://www.baaqmd.gov/~/media/files/planning-and-research/planning-healthy-places/php_may20_2016-pdf.pdf?la=en

were calculated assuming a combination of outdoor and indoor exposure. For use of MERV13 filtration systems, without the additional use of sealed, inoperable widows and outdoor exposure of three hours to ambient $PM_{2.5}$ concentrations and 21 hours of indoor exposure to filtered air was assumed. In this case, the effective control efficiency using a MERV13 filtration system is about 70 percent for $PM_{2.5}$ exposure. The installation of MERV13 filtration systems to Buildings 1 and 2 on the El Paseo Site under both options would reduce the maximum increased cancer risk and annual $PM_{2.5}$ concentration caused by Lawrence Expressway/Quito Road and Saratoga Avenue.

Under the Education Mixed-Use Option for Buildings 1 and 2, the cancer risk would be reduced from 10.32 per million to 4.31 per million and 10.53 per million to 4.41 per million. The $PM_{2.5}$ concentration would be reduced from 0.56 $\mu g/m^3$ to 0.17 $\mu g/m^3$, 0.52 $\mu g/m^3$ to 0.16 $\mu g/m^3$, and 0.58 $\mu g/m^3$ to 0.17 $\mu g/m^3$. This would reduce the cumulative $PM_{2.5}$ concentration total from 1.12 $\mu g/m^3$ to 0.37 $\mu g/m^3$ and 0.81 $\mu g/m^3$ to 0.40 $\mu g/m^3$. Under the Non-Education Mixed-Use Option for Buildings 1 and 2, the cancer risk would be reduced from 10.04 per million to 4.21 per million. The $PM_{2.5}$ concentration would be reduced from 0.55 $\mu g/m^3$ to 0.17 $\mu g/m^3$, 0.49 $\mu g/m^3$ to 0.15 $\mu g/m^3$, and 0.30 $\mu g/m^3$ to 0.09 $\mu g/m^3$. This would reduce the cumulative $PM_{2.5}$ concentration total from 1.07 $\mu g/m^3$ to 0.35 $\mu g/m^3$. Therefore with the recommended MERV13 filtration, the roadway risks and concentrations at Buildings 1 and 2 at the El Paseo Site under both options would no longer exceed their respective single- and cumulative-source thresholds.

Supporting Documentation

Attachment 1 is the methodology used to compute community risk impacts, including the methods to compute increased cancer risk from exposure to project emissions.

Attachment 2 includes the CalEEMod output for project construction and operational criteria air pollutant. Also included are any modeling assumptions.

Attachment 3 includes the EMFAC2017 emissions modeling. The input files for these calculations are voluminous and are available upon request in digital format.

Attachment 4 is the project health risk assessment. This includes the summary of the dispersion modeling and the cancer risk calculations for construction and operation. The AERMOD dispersion modeling files for this assessment, which are quite voluminous, are available upon request and would be provided in digital format.

Attachment 5 includes the cumulative community risk calculations, modeling results, and health risk calculations from sources affecting the construction MEI and on-site sensitive receptors.

Attachment 1: Health Risk Calculation Methodology

A health risk assessment (HRA) for exposure to Toxic Air Contaminants (TACs) requires the application of a risk characterization model to the results from the air dispersion model to estimate potential health risk at each sensitive receptor location. The State of California Office of Environmental Health Hazard Assessment (OEHHA) and California Air Resources Board (CARB) develop recommended methods for conducting health risk assessments. The most recent OEHHA risk assessment guidelines were published in February of 2015.[42] These guidelines incorporate substantial changes designed to provide for enhanced protection of children, as required by State law, compared to previous published risk assessment guidelines. CARB has provided additional guidance on implementing OEHHA's recommended methods.[43] This HRA used the 2015 OEHHA risk assessment guidelines and CARB guidance. The BAAQMD has adopted recommended procedures for applying the newest OEHHA guidelines as part of Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants.[44] Exposure parameters from the OEHHA guidelines and the recent BAAQMD HRA Guidelines were used in this evaluation.

Cancer Risk

Potential increased cancer risk from inhalation of TACs is calculated based on the TAC concentration over the period of exposure, inhalation dose, the TAC cancer potency factor, and an age sensitivity factor to reflect the greater sensitivity of infants and children to cancer causing TACs. The inhalation dose depends on a person's breathing rate, exposure time and frequency and duration of exposure. These parameters vary depending on the age, or age range, of the persons being exposed and whether the exposure is considered to occur at a residential location or other sensitive receptor location.

The current OEHHA guidance recommends that cancer risk be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, they recommend evaluating risks for the third trimester of pregnancy to age zero, ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 70 (adult exposure). However, CARB and the BAAQMD recommend the use of a residential exposure duration of 30 years for sources with long-term emissions (e.g., roadways). For workers, assumed to be adults, a 25-year exposure period is recommended by the BAAQMD. For school children a 9-year exposure period is recommended by the BAAQMD.

Age sensitivity factors (ASFs) associated with the different types of exposure are an ASF of 10 for the third trimester and infant exposures, an ASF of 3 for a child exposure, and an ASF of 1 for an adult exposure. Also associated with each exposure type are different breathing rates, expressed as liters per kilogram of body weight per day (L/kg-day) or liters per kilogram of body weight per 8-hour period for the case of worker or school child exposures. As recommended by the BAAQMD

[42] OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments.* Office of Environmental Health Hazard Assessment. February.
[43] CARB, 2015. *Risk Management Guidance for Stationary Sources of Air Toxics*. July 23.
[44] BAAQMD, 2016. *BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines.* December 2016.

for residential exposures, 95th percentile breathing rates are used for the third trimester and infant exposures, and 80th percentile breathing rates for child and adult exposures. For children at schools and daycare facilities, BAAQMD recommends using the 95th percentile 8-hour breathing rates for moderate intensity.

Under previous OEHHA and BAAQMD HRA guidance, residential receptors are assumed to be at their home 24 hours a day, or 100 percent of the time. In the 2015 Risk Assessment Guidance, OEHHA includes adjustments to exposure duration to account for the fraction of time at home (FAH), which can be less than 100 percent of the time, based on updated population and activity statistics. The FAH factors are age-specific and are: 0.85 for third trimester of pregnancy to less than 2 years old, 0.72 for ages 2 to less than 16 years, and 0.73 for ages 16 to 70 years. Use of the FAH factors is allowed by the BAAQMD if there are no schools in the project vicinity have a cancer risk of one in a million or greater assuming 100 percent exposure (FAH = 1.0).

Functionally, cancer risk is calculated using the following parameters and formulas:

Cancer Risk (per million) = $CPF \times Inhalation\ Dose \times ASF \times ED/AT \times FAH \times 10^6$

Where:

CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air} \times DBR^* \times A \times (EF/365) \times 10^{-6}$

Where:

C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
8HrBR = 8-hour breathing rate (L/kg body weight-8 hours)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

* An 8-hour breathing rate (8HrBR) is used for worker and school child exposures.

The health risk parameters used in this evaluation are summarized as follows:

Parameter	*Exposure Type* →	Infant		Child	Adult
	Age Range →	3rd Trimester	0<2	2 < 16	16 - 30
DPM Cancer Potency Factor (mg/kg-day)$^{-1}$		1.10E+00	1.10E+00	1.10E+00	1.10E+00
Daily Breathing Rate (L/kg-day) 80th Percentile Rate		273	758	572	261
Daily Breathing Rate (L/kg-day) 95th Percentile Rate		361	1,090	745	335
8-hour Breathing Rate (L/kg-8 hours) 95th Percentile Rate		-	1,200	520	240
Inhalation Absorption Factor		1	1	1	1
Averaging Time (years)		70	70	70	70
Exposure Duration (years)		0.25	2	14	14**
Exposure Frequency (days/year)*		350	350	350	350**
Age Sensitivity Factor		10	10	3	1
Fraction of Time at Home (FAH)		0.85-1.0	0.85-1.0	0.72-1.0	0.73*

* Exposure Frequency can change dependent on the type of receptors (i.e. residential, worker, school, daycare). For worker exposures (adult), the exposure duration and frequency are 25 years 250 days/year and FAH is not applicable.

Non-Cancer Hazards

Non-cancer health risk is usually determined by comparing the predicted level of exposure to a chemical to the level of exposure that is not expected to cause any adverse effects (reference exposure level), even to the most susceptible people. Potential non-cancer health hazards from TAC exposure are expressed in terms of a hazard index (HI), which is the ratio of the TAC concentration to a reference exposure level (REL). OEHHA has defined acceptable concentration levels for contaminants that pose non-cancer health hazards. TAC concentrations below the REL are not expected to cause adverse health impacts, even for sensitive individuals. The total HI is calculated as the sum of the HIs for each TAC evaluated and the total HI is compared to the BAAQMD significance thresholds to determine whether a significant non-cancer health impact from a project would occur.

Typically, for residential projects located near roadways with substantial TAC emissions, the primary TAC of concern with non-cancer health effects is diesel particulate matter (DPM). For DPM, the chronic inhalation REL is 5 micrograms per cubic meter ($\mu g/m^3$).

Annual $PM_{2.5}$ Concentrations

While not a TAC, fine particulate matter ($PM_{2.5}$) has been identified by the BAAQMD as a pollutant with potential non-cancer health effects that should be included when evaluating potential community health impacts under the California Environmental Quality Act (CEQA). The thresholds of significance for $PM_{2.5}$ (project level and cumulative) are in terms of an increase in the annual average concentration. When considering $PM_{2.5}$ impacts, the contribution from all sources of $PM_{2.5}$ emissions should be included. For projects with potential impacts from nearby local roadways, the $PM_{2.5}$ impacts should include those from vehicle exhaust emissions, $PM_{2.5}$ generated from vehicle tire and brake wear, and fugitive emissions from re-suspended dust on the roads.

Attachment 2: CalEEMod Input Assumptions and Outputs

Air Quality/Noise Construction Information Data Request

Project Name: El Paseo: Site prep/Podium Construction

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size

_____ Dwelling Units

Part of 8.85 acre site total project acres disturbed

_____ s.f. residential

_____ s.f. retail

_____ s.f. office/commercial

_____ s.f. other, specify:

350000 s.f. parking garage — 850 spaces

_____ s.f. parking lot — 260 spaces

Construction Hours am to pm

Pile Driving? Y/N? NO

Project include OPERATIONAL GENERATOR OR FIRE PUMP on-site? Y/N? Yes

IF YES (if BOTH separate values) -->

Kilowatts/Horsepower: 60 hz

Fuel Type: Diesel

Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Annual Hours	Comments
	Demolition	**Start Date:**	**9/1/2021**	**Total phase:**	**61**			**Overall Import/Export Volumes**
		End Date:	**12/1/2021**					
4	Concrete/Industrial Saws	81	0.73	4	28	1.83606557	448	**Demolition Volume**
4	Excavators	158	0.38	8	39	5.1147541	1248	Square footage of buildings to be demolished:
	Rubber-Tired Dozers	247	0.4			0	0	(or total tons to be hauled)
4	Tractors/Loaders/Backhoes	97	0.37	8	50	6.55737705	1600	**99,535 SF** square feet or
1	Crushing/Processing Equipment	85	0.78	8	22	2.8852459	176	**?** Hauling volume (tons)
								Any pavement demolished and hauled? **4,500 tons** Asphalt removal
	Site Preparation	**Start Date:**	**10/21/2021**	**Total phase:**				
		End Date:	**3/24/2022**					
	Graders	187	0.41			#DIV/0!	0	
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Grading / Excavation	**Start Date:**	**10/21/2021**	**Total phase:**	**116**			
		End Date:	**4/13/2022**					**Soil Hauling Volume**
3	Excavators	158	0.38	8	94	6.48275862	2256	Export volume = **155,000** cubic yards?
3	Graders	187	0.41	8	11	0.75862069	264	Import volume = **0** cubic yards?
	Rubber Tired Dozers	247	0.4			0	0	
	Concrete/Industrial Saws	81	0.73			0	0	
4	Tractors/Loaders/Backhoes	97	0.37	8	94	6.48275862	3008	
	Other Equipment?							
	Trenching/Foundation	**Start Date:**	**6/2/2022**	**Total phase:**	**81**			
		End Date:	**9/25/2022**					
2	Tractor/Loader/Backhoe	97	0.37	8	44	4.34567901	704	
	Excavators	158	0.38			0	0	
2	*Concrete Pumps*	84	0.74	10	22	2.71604938	440	
	Building - Exterior	**Start Date:**	**7/20/2022**	**Total phase:**	**261**			**Cement Trucks? 3,600 Total Round-Trips**
		End Date:	**8/3/2023**					
4	Cranes	231	0.29	10	261	10	312	Electric? (Y/N) **Yes** Otherwise assumed diesel **(Tower Cranes Only)**
12	Forklifts	89	0.2	8	261	8	240	Liquid Propane (LPG)? (Y/N) **No** Otherwise Assumed diesel
	Generator Sets	84	0.74			0	0	Or temporary line power? (Y/N) **Yes**
	Tractors/Loaders/Backhoes	97	0.37			0	30	
8	Welders	46	0.45	8	33	1.01149425	2112	
2	*Concrete Pumps*	84	0.74	8	44	1.348659	704	
	Building - Interior/Architectural Coating	**Start Date:**		**Total phase:**				
		End Date:						
	Air Compressors	78	0.48			#DIV/0!	0	
	Aerial Lift	62	0.31			#DIV/0!	0	
	Other Equipment?							
	Paving	**Start Date:**		**Total phase:**				
		Start Date:						
	Cement and Mortar Mixers	9	0.56			#DIV/0!	0	
	Pavers	130	0.42			#DIV/0!	0	**Asphalt? ___ cubic yards or ____ round trips? None: all sitework on top of podium.**
	Paving Equipment	132	0.36			#DIV/0!	0	
	Rollers	80	0.38			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Other Equipment?							
	Concrete	**Start Date:**	**6/2/2022**	**Total phase:**	**15**			
		Start Date:	**8/3/2023**					
1	*Concrete Pumps*	84	0.74	15	15			
20	*Concrete Trucks*	62	0.31	15	15			

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs

It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate

Modify horepower or load factor, as appropriate

Complete one sheet for each project component

Air Quality/Noise Construction Information Data Request

Project Name: El Paseo: Building 1

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size

0 Dwelling Units — part of 8.85 total project acres disturbed

0 s.f. residential

0 s.f. retail

280,000 s.f. office/commercial (school)

0 s.f. other, specify:

0 s.f. parking garage ____ spaces

0 s.f. parking lot ____ spaces

Construction Hours 7 am to 7 pm

Pile Driving? Y/N? NO

Project include OPERATIONAL GENERATOR OR FIRE PUMP on-site? Y/N? Yes

IF YES (if BOTH separate values) -->

Kilowatts/Horsepower: 60 hz

Fuel Type: Diesel

Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Annual Hours	Comments
	Demolition	Start Date:	NA	Total phase:				Overall Import/Export Volumes
		End Date:						See Podium Sheet for Demolition, Mass Excavation and Podium Construction
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	Demolition Volume
	Excavators	158	0.38			#DIV/0!	0	Square footage of buildings to be demolished
	Rubber-Tired Dozers	247	0.4			#DIV/0!	0	(*or* total tons to be hauled)
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	_?_ square feet *or*
1	Crushing/Processing Equipment	85	0.78			#DIV/0!	0	_?_ Hauling volume (tons)
								Any pavement demolished and hauled? _?_ tons
	Site Preparation	Start Date:	NA	Total phase:				See Podium Sheet For This Info
		End Date:						
	Graders	187	0.41			#DIV/0!	0	
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Grading / Excavation	Start Date:	NA	Total phase:				See Podium Sheet For This Info
		End Date:						Soil Hauling Volume
	Excavators	158	0.38			#DIV/0!	0	Export volume = _ cubic yards?
	Graders	187	0.41			#DIV/0!	0	Import volume = 0 cubic yards?
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Other Equipment?							
	Trenching/Foundation	Start Date:	NA	Total phase:				See Podium Sheet For This Info
		End Date:						
	Tractor/Loader/Backhoe	97	0.37			#DIV/0!	0	
	Excavators	158	0.38			#DIV/0!	0	
	Concrete Pumps	84	0.74			#DIV/0!	0	
	Building - Exterior	Start Date:	1/4/2023	Total phase:	409			Cement Trucks? _400_ Total Round-Trips
		End Date:	8/22/2024					
1	Cranes	231	0.29	10	344	8.41075795	312	Electric? (Y/N) _Yes__ Otherwise assumed diesel
3	Forklifts	89	0.2	8	344	6.72860636	240	Liquid Propane (LPG)? (Y/N) _No_ Otherwise Assumed diesel
	Generator Sets	84	0.74			0	0	Or temporary line power? (Y/N) _Yes__
	Tractors/Loaders/Backhoes	97	0.37			0	30	
1	Welders	46	0.45	8	33	0.64547677	264	
1	*Concrete Pumps*	84	0.74	8	44	0.8606357	352	
	Building - Interior/Architectural Coating	Start Date:	11/9/2023	Total phase:	265			
		End Date:	12/4/2024					
2	Air Compressors	78	0.48	8	265	8	4240	
6	Aerial Lift	62	0.31	8	265	8	12720	
	Other Equipment?							
	Paving	Start Date:	3/6/2024	Total phase:	24			
		Start Date:	4/7/2024					
	Cement and Mortar Mixers	9	0.56			0	0	
1	Pavers	130	0.42	8	11	3.66666667	88	Asphalt? ___ cubic yards or ____ round trips?
1	Paving Equipment	132	0.36	8	11	3.66666667	88	
2	Rollers	80	0.38	8	11	3.66666667	176	
2	Tractors/Loaders/Backhoes	97	0.37	8	22	7.33333333	352	
	Other Equipment?							
	Additional Phases	Start Date:		Total phase:				
		Start Date:						

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs

It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate

Modify horepower or load factor, as appropriate

Complete one sheet for each project component

Air Quality/Noise Construction Information Data Request

Project Name: El Paseo: Building 2

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size
200 Dwelling Units (dorms) part of 8.85 total total project acres disturbed
140,000 s.f. residential
s.f. retail
170,000 s.f. office/commercial (school)
s.f. other, specify:
0 s.f. parking garage spaces
0 s.f. parking lot spaces

Construction Hours 7 am to 7 pm

Pile Driving? Y/N? NO

Project include OPERATIONAL GENERATOR OR FIRE PUMP on-site? Y/N? Yes
IF YES (if BOTH separate values) -->
Kilowatts/Horsepower: 60 hz
Fuel Type: Diesel
Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Annual Hours	Comments
	Demolition	**Start Date:**	**NA**	**Total phase:**				**Overall Import/Export Volumes**
		End Date:						**See Podium Sheet for Demolition, Mass Excavation and Podium Construction**
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	**Demolition Volume**
	Excavators	158	0.38			#DIV/0!	0	Square footage of buildings to be demolished
	Rubber-Tired Dozers	247	0.4			#DIV/0!	0	(*or* total tons to be hauled)
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	? square feet *or*
1	Crushing/Processing Equipment	85	0.78			#DIV/0!	0	? Hauling volume (tons)
								Any pavement demolished and hauled? ? tons
	Site Preparation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						
	Graders	187	0.41			#DIV/0!	0	
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Grading / Excavation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						**Soil Hauling Volume**
	Excavators	158	0.38			#DIV/0!	0	Export volume = _ cubic yards?
	Graders	187	0.41			#DIV/0!	0	Import volume = 0 cubic yards?
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Other Equipment?							
	Trenching/Foundation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						
	Tractor/Loader/Backhoe	97	0.37			#DIV/0!	0	
	Excavators	158	0.38			#DIV/0!	0	
	Concrete Pumps	84	0.74			#DIV/0!	0	
	Building - Exterior	**Start Date:**	**3/3/2023**	**Total phase:**	**385**			**Cement Trucks? 400 Total Round-Trips**
		End Date:	**9/14/2024**					
1	Cranes	231	0.29	10	330	8.57142857	312	Electric? (Y/N) _Yes__ Otherwise assumed diesel
3	Forklifts	89	0.2	8	330	6.85714286	240	Liquid Propane (LPG)? (Y/N) _No_ Otherwise Assumed diesel
	Generator Sets	84	0.74			0	0	Or temporary line power? (Y/N) _Yes__
	Tractors/Loaders/Backhoes	97	0.37			0	30	
1	Welders	46	0.45	8	33	0.68571429	264	
1	*Concrete Pumps*	84	0.74	8	44	0.91428571	352	
	Building - Interior/Architectural Coating	**Start Date:**	**1/10/2024**	**Total phase:**	**264**			
		End Date:	**1/30/2025**					
2	Air Compressors	78	0.48	8	264	8	4224	
6	Aerial Lift	62	0.31	8	264	8	12672	
	Other Equipment?							
	Paving	**Start Date:**	**5/1/2024**	**Total phase:**	**24**			
		Start Date:	**6/2/2024**					
	Cement and Mortar Mixers	9	0.56			0	0	
1	Pavers	130	0.42	8	11	3.66666667	88	**Asphalt? ___ cubic yards or ____ round trips?**
1	Paving Equipment	132	0.36	8	11	3.66666667	88	
2	Rollers	80	0.38	8	11	3.66666667	176	
2	Tractors/Loaders/Backhoes	97	0.37	8	22	7.33333333	352	
	Other Equipment?							
	Additional Phases	**Start Date:**		**Total phase:**				
		Start Date:						

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs

It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate

Modify horepower or load factor, as appropriate

Complete one sheet for each project component

Air Quality/Noise Construction Information Data Request

Project Name: El Paseo: Building 3

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size
- 150 Dwelling Units — part of 8.85 total project acres disturbed
- 150000 s.f. residential
- 10,000 s.f. retail
- ____ s.f. office/commercial
- ____ s.f. other, specify:
- ____ s.f. parking garage ____ spaces
- ____ s.f. parking lot ____ spaces

Construction Hours ____ am to ____ pm

Pile Driving? Y/N? NO

Project include OPERATIONAL GENERATOR OR FIRE PUMP on-site? Y/N? YES see

IF YES (if BOTH separate values) -->

Kilowatts/Horsepower: 60 hz

Fuel Type: Diesel

Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Annual Hours	Comments
	Demolition	**Start Date:**	**NA**	**Total phase:**				**Overall Import/Export Volumes**
		End Date:						**See Podium Sheet for Demolition, Mass Excavation and Podium Construction**
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	**Demolition Volume**
	Excavators	158	0.38			#DIV/0!	0	Square footage of buildings to be demolished
	Rubber-Tired Dozers	247	0.4			#DIV/0!	0	(*or* total tons to be hauled)
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	_?_ square feet *or*
1	Crushing/Processing Equipment	85	0.78			#DIV/0!	0	_?_ Hauling volume (tons)
								Any pavement demolished and hauled? _?_ tons
	Site Preparation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						
	Graders	187	0.41			#DIV/0!	0	
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Grading / Excavation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						**Soil Hauling Volume**
	Excavators	158	0.38			#DIV/0!	0	Export volume = _ cubic yards?
	Graders	187	0.41			#DIV/0!	0	Import volume = 0 cubic yards?
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Other Equipment?							
	Trenching/Foundation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						
	Tractor/Loader/Backhoe	97	0.37			#DIV/0!	0	
	Excavators	158	0.38			#DIV/0!	0	
	Concrete Pumps	84	0.74			#DIV/0!	0	
	Building - Exterior	**Start Date:**	**4/25/2023**	**Total phase:**	**400**			**Cement Trucks? _250_ Total Round-Trips**
		End Date:	**11/28/2024**					
1	Cranes	231	0.29	10	330	8.25	312	Electric? (Y/N) _Yes__ Otherwise assumed diesel
3	Forklifts	89	0.2	8	330	6.6	240	Liquid Propane (LPG)? (Y/N) _No_ Otherwise Assumed diesel
	Generator Sets	84	0.74			0	0	Or temporary line power? (Y/N) _Yes__
	Tractors/Loaders/Backhoes	97	0.37			0	30	
1	Welders	46	0.45	8	33	0.66	264	
1	*Concrete Pumps*	84	0.74	8	33	0.66	264	
	Building - Interior/Architectural Coating	**Start Date:**	**3/24/2024**	**Total phase:**	**264**			
		End Date:	**4/14/2025**					
2	Air Compressors	78	0.48	8	264	8	4224	
6	Aerial Lift	62	0.31	8	264	8	12672	
	Other Equipment?							
	Paving	**Start Date:**	**7/10/2024**	**Total phase:**	**26**			
		Start Date:	**8/15/2024**					
	Cement and Mortar Mixers	9	0.56			0	0	
1	Pavers	130	0.42	8	11	3.38461538	88	**Asphalt? ___ cubic yards or ____ round trips?**
1	Paving Equipment	132	0.36	8	11	3.38461538	88	
2	Rollers	80	0.38	8	11	3.38461538	176	
2	Tractors/Loaders/Backhoes	97	0.37	8	22	6.76923077	352	
	Other Equipment?							
	Additional Phases	**Start Date:**		**Total phase:**				
		Start Date:						

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs

It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate

Modify horepower or load factor, as appropriate

Complete one sheet for each project component

Air Quality/Noise Construction Information Data Request

Project Name: El Paseo: Building 4

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size
- 300 Dwelling Units — Part of 8.85 total project acres disturbed
- 280,000 s.f. residential
- 50,000 s.f. retail
- ____ s.f. office/commercial
- ____ s.f. other, specify:
- ____ s.f. parking garage — ____ spaces
- ____ s.f. parking lot — ____ spaces

Construction Hours 7 am to 7 pm

Pile Driving? Y/N? NO

Project include OPERATIONAL GENERATOR OR FIRE PUMP on-site? Y/N? YES

IF YES (if BOTH separate values) -->

Kilowatts/Horsepower: 60 hz

Fuel Type: Diesel

Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Annual Hours	Comments
	Demolition	**Start Date:**	**NA**	**Total phase:**				**Overall Import/Export Volumes**
		End Date:						**See Podium Sheet for Demolition, Mass Excavation and Podium Construction**
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	**Demolition Volume**
	Excavators	158	0.38			#DIV/0!	0	Square footage of buildings to be demolished
	Rubber-Tired Dozers	247	0.4			#DIV/0!	0	(*or* total tons to be hauled)
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	_?_ square feet *or*
1	Crushing/Processing Equipment	85	0.78			#DIV/0!	0	_?_ Hauling volume (tons)
								Any pavement demolished and hauled? _?_ tons
	Site Preparation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						
	Graders	187	0.41			#DIV/0!	0	
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Grading / Excavation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						**Soil Hauling Volume**
	Excavators	158	0.38			#DIV/0!	0	Export volume = _ cubic yards?
	Graders	187	0.41			#DIV/0!	0	Import volume = 0 cubic yards?
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Other Equipment?							
	Trenching/Foundation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						
	Tractor/Loader/Backhoe	97	0.37			#DIV/0!	0	
	Excavators	158	0.38			#DIV/0!	0	
	Concrete Pumps	84	0.74			#DIV/0!	0	
	Building - Exterior	**Start Date:**	**6/10/2023**	**Total phase:**	**440**			**Cement Trucks? _250_ Total Round-Trips**
		End Date:	**3/19/2025**					
1	Cranes	231	0.29	10	330	7.5	312	Electric? (Y/N) _Yes__ Otherwise assumed diesel
3	Forklifts	89	0.2	8	330	6	240	Liquid Propane (LPG)? (Y/N) _No_ Otherwise Assumed diesel
	Generator Sets	84	0.74			0	0	Or temporary line power? (Y/N) _Yes__
	Tractors/Loaders/Backhoes	97	0.37			0	30	
1	Welders	46	0.45	8	33	0.6	264	
1	*Concrete Pumps*	84	0.74	8	33	0.6	264	
	Building - Interior/Architectural Coating	**Start Date:**	**5/23/2024**	**Total phase:**	**330**			
		End Date:	**9/15/2025**					
2	Air Compressors	78	0.48	8	264	6.4	4224	
6	Aerial Lift	62	0.31	8	264	6.4	12672	
	Other Equipment?							
	Paving	**Start Date:**	**1/9/2025**	**Total phase:**	**40**			
		Start Date:	**3/1/2025**					
	Cement and Mortar Mixers	9	0.56			0	0	
1	Pavers	130	0.42	8	11	2.2	88	**Asphalt? ___ cubic yards or ____ round trips?**
1	Paving Equipment	132	0.36	8	11	2.2	88	
2	Rollers	80	0.38	8	11	2.2	176	
2	Tractors/Loaders/Backhoes	97	0.37	8	22	4.4	352	
	Other Equipment?							
	Additional Phases	**Start Date:**		**Total phase:**				
		Start Date:						

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs

It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate

Modify horepower or load factor, as appropriate

Complete one sheet for each project component

Air Quality/Noise Construction Information Data Request

Project Name: El Paseo: Site prep/Podium Construction

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size ____ Dwelling Units 8.85 total project acres disturbed

____ s.f. residential

____ s.f. retail

____ s.f. office/commercial

____ s.f. other, specify:

366620 s.f. parking garage 1036 spaces

____ s.f. parking lot 157 spaces

Construction Hours 8 am to 5pm pm

Pile Driving? Y/N? No

Project include OPERATIONAL GENERATOR OR FIRE PUMP on-site? Y/N? Yes

IF YES (if BOTH separate values) -->

Kilowatts/Horsepower: 60 hz

Fuel Type: diesel

Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Annual Hours	Comments
	Demolition	**Start Date:**	**9/1/2021**	**Total phase:**	**55**			**Overall Import/Export Volumes**
		End Date:	**11/18/2021**					
4	Concrete/Industrial Saws	81	0.73	4	25	1.81818182	400	**Demolition Volume**
4	Excavators	158	0.38	8	35	5.09090909	1120	Square footage of buildings to be demolished:
	Rubber-Tired Dozers	247	0.4			0	0	(*or* total tons to be hauled)
4	Tractors/Loaders/Backhoes	97	0.37	8	45	6.54545455	1440	**99,535 SF** square feet *or*
1	Crushing/Processing Equipment	85	0.78	8	20	2.90909091	160	**?** Hauling volume (tons)
								Any pavement demolished and hauled? **4,500 tons**: Asphalt removal
	Site Preparation	**Start Date:**	**10/22/2021**	**Total phase:**				
		End Date:	**5/20/2021**					
	Graders	187	0.41			#DIV/0!	0	
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Grading / Excavation	**Start Date:**	**10/22/2021**	**Total phase:**	**145**			
		End Date:	**5/20/2021**					**Soil Hauling Volume**
3	Excavators	158	0.38	8	85	4.68965517	2040	223108 cubic yards off haul
3	Graders	187	0.41	8	10	0.55172414	240	Import volume = **0** cubic yards?
	Rubber Tired Dozers	247	0.4			0	0	
	Concrete/Industrial Saws	81	0.73			0	0	
4	Tractors/Loaders/Backhoes	97	0.37	8	85	4.68965517	2720	
	Other Equipment?							
	Trenching/Foundation	**Start Date:**	**7/15/2022**	**Total phase:**	**114**			
		End Date:	**12/29/2022**					
2	Tractor/Loader/Backhoe	97	0.37	8	40	2.80701754	640	
	Excavators	158	0.38			0	0	
2	*Concrete Pumps*	84	0.74	10	20	1.75438596	400	
	Building - Exterior	**Start Date:**	**11/8/2022**	**Total phase:**	**237**			**Cement Trucks? 5,000 Total Round-Trips**
		End Date:	**9/18/2023**					
4	Cranes	231	0.29	10	237	10	312	Electric? (Y/N) **Yes** Otherwise assumed diesel **(Tower Cranes Only)**
12	Forklifts	89	0.2	8	237	8	240	Liquid Propane (LPG)? (Y/N) No Otherwise Assumed diesel
	Generator Sets	84	0.74			0	0	Or temporary line power? (Y/N) **Yes**
	Tractors/Loaders/Backhoes	97	0.37			0	30	
8	Welders	46	0.45	8	30	1.01265823	1920	
2	*Concrete Pumps*	84	0.74	8	40	1.35021097	640	
	Building - Interior/Architectural Coating	**Start Date:**		**Total phase:**				
		End Date:						
	Air Compressors	78	0.48			#DIV/0!	0	
	Aerial Lift	62	0.31			#DIV/0!	0	
	Other Equipment?							
	Paving	**Start Date:**		**Total phase:**				
		Start Date:						
	Cement and Mortar Mixers	9	0.56			#DIV/0!	0	
	Pavers	130	0.42			#DIV/0!	0	**Asphalt? ___ cubic yards or ____ round trips? None: all sitework on top of podium.**
	Paving Equipment	132	0.36			#DIV/0!	0	
	Rollers	80	0.38			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Other Equipment?							
	Concrete	**Start Date:**	**7/15/2022**	**Total phase:**	**15**			
		Start Date:	**9/18/2023**					
1	*Concrete Pumps*	84	0.74	15	15			
20	*Concrete Trucks*	62	0.31	15	15			

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs

It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate

Modify horepower or load factor, as appropriate

Complete one sheet for each project component

Air Quality/Noise Construction Information Data Request

Project Name: El Paseo: Building 1 Option 2

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size	279	Dwelling Units	8.85 total project acres disturbed
	320571	s.f. residential	
		s.f. retail	
	63934	s.f. office/commercial	
		s.f. other, specify:	
		s.f. parking garage	spaces
		s.f. parking lot	spaces
Construction Hours	8 am	to	5 pm

Pile Driving? Y/N? No

Project include OPERATIONAL GENERATOR OR FIRE PUMP on-site? Y/N? yes

IF YES (if BOTH separate values) -->

Kilowatts/Horsepower: 60hz

Fuel Type: _diesel

Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Annual Hours	Comments
	Demolition	**Start Date:**	**NA**	**Total phase:**				**Overall Import/Export Volumes**
		End Date:						**See Podium Sheet for Demolition, Mass Excavation and Podium Construction**
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	**Demolition Volume**
	Excavators	158	0.38			#DIV/0!	0	Square footage of buildings to be demolished
	Rubber-Tired Dozers	247	0.4			#DIV/0!	0	(*or* total tons to be hauled)
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	**_?_** square feet *or*
1	Crushing/Processing Equipment	85	0.78			#DIV/0!	0	**_?_** Hauling volume (tons)
								Any pavement demolished and hauled? **_? tons**
	Site Preparation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						
	Graders	187	0.41			#DIV/0!	0	
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Grading / Excavation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						**Soil Hauling Volume**
	Excavators	158	0.38			#DIV/0!	0	Export volume = _ cubic yards?
	Graders	187	0.41			#DIV/0!	0	Import volume = 0 cubic yards?
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Other Equipment?							
	Trenching/Foundation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						
	Tractor/Loader/Backhoe	97	0.37			#DIV/0!	0	
	Excavators	158	0.38			#DIV/0!	0	
	Concrete Pumps	84	0.74			#DIV/0!	0	
	Building - Exterior	**Start Date:**	**4/14/2023**	**Total phase:**	**270**			**Cement Trucks? _850_ Total Round-Trips**
		End Date:	**6/8/2025**					
1	Cranes	231	0.29	10	312	11.5555556	312	Electric? (Y/N) _Yes_ Otherwise assumed diesel
3	Forklifts	89	0.2	8	312	9.24444444	240	Liquid Propane (LPG)? (Y/N) _No_ Otherwise Assumed diesel
	Generator Sets	84	0.74			0	0	Or temporary line power? (Y/N) _Yes_
	Tractors/Loaders/Backhoes	97	0.37			0	30	
1	Welders	46	0.45	8	30	0.88888889	240	
1	*Concrete Pumps*	84	0.74	8	40	1.18518519	320	
Building - Interior/Architectural Coating		**Start Date:**	**6/16/2024**	**Total phase:**	**267**			
		End Date:	**7/20/2025**					
2	Air Compressors	78	0.48	8	240	7.19101124	3840	
6	Aerial Lift	62	0.31	8	240	7.19101124	11520	
	Other Equipment?							
	Paving	**Start Date:**	**6/16/2022**	**Total phase:**	**21**			
		Start Date:	**7/17/2022**					
	Cement and Mortar Mixers	9	0.56			0	0	
1	Pavers	130	0.42	8	10	3.80952381	80	**Asphalt? ___ cubic yards or ____ round trips?**
1	Paving Equipment	132	0.36	8	10	3.80952381	80	
2	Rollers	80	0.38	8	10	3.80952381	160	
2	Tractors/Loaders/Backhoes	97	0.37	8	20	7.61904762	320	
	Other Equipment?							
	Additional Phases	**Start Date:**		**Total phase:**				
		Start Date:						

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs
It is assumed that water trucks would be used during grading
Add or subtract phases and equipment, as appropriate
Modify horepower or load factor, as appropriate

Complete one sheet for each project component

Air Quality/Noise Construction Information Data Request

Project Name: El Paseo: Building 2 Option 2

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size	302	Dwelling Units	8.85 total project acres disturbed
	331606	s.f. residential	
	12638	s.f. retail	
	15161	s.f. office/commercial	
		s.f. other, specify:	
	184395	s.f. parking garage	444 spaces
		s.f. parking lot	spaces
Construction Hours	8 am	to	5 pm

Pile Driving? Y/N? NO

Project include OPERATIONAL GENERATOR OR FIRE PUMP on-site? Y/N? yes

IF YES (if BOTH separate values) -->

Kilowatts/Horsepower: 60hz

Fuel Type: _diesel

Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Annual Hours	Comments
	Demolition	**Start Date:**	**NA**	**Total phase:**				**Overall Import/Export Volumes**
		End Date:						**See Podium Sheet for Demolition, Mass Excavation and Podium Construction**
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	**Demolition Volume**
	Excavators	158	0.38			#DIV/0!	0	Square footage of buildings to be demolished
	Rubber-Tired Dozers	247	0.4			#DIV/0!	0	(*or* total tons to be hauled)
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	? square feet *or*
1	Crushing/Processing Equipment	85	0.78			#DIV/0!	0	? Hauling volume (tons)
								Any pavement demolished and hauled? ? **tons**
	Site Preparation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						
	Graders	187	0.41			#DIV/0!	0	
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Grading / Excavation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						**Soil Hauling Volume**
	Excavators	158	0.38			#DIV/0!	0	Export volume = cubic yards?
	Graders	187	0.41			#DIV/0!	0	Import volume = 0 cubic yards?
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Other Equipment?							
	Trenching/Foundation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						
	Tractor/Loader/Backhoe	97	0.37			#DIV/0!	0	
	Excavators	158	0.38			#DIV/0!	0	
	Concrete Pumps	84	0.74			#DIV/0!	0	
	Building - Exterior	**Start Date:**	**8/7/2023**	**Total phase:**	**410**			**Cement Trucks? 600 Total Round-Trips**
		End Date:	**4/28/2025**					
1	Cranes	231	0.29	10	300	7.31707317	312	Electric? (Y/N) Yes Otherwise assumed diesel
3	Forklifts	89	0.2	8	300	5.85365854	240	Liquid Propane (LPG)? (Y/N) No Otherwise Assumed diesel
	Generator Sets	84	0.74			0	0	Or temporary line power? (Y/N) Yes
	Tractors/Loaders/Backhoes	97	0.37			0	30	
1	Welders	46	0.45	8	30	0.58536585	240	
1	*Concrete Pumps*	84	0.74	8	40	0.7804878	320	
	Building - Interior/Architectural Coating	**Start Date:**	**5/24/2024**	**Total phase:**	**307**			
		End Date:	**8/20/2025**					
2	Air Compressors	78	0.48	8	240	6.25407166	3840	
6	Aerial Lift	62	0.31	8	240	6.25407166	11520	
	Other Equipment?							
	Paving	**Start Date:**	**NA**	**Total phase:**				
		Start Date:						
	Cement and Mortar Mixers	9	0.56			#DIV/0!	0	
1	Pavers	130	0.42	8	10	#DIV/0!	80	**Asphalt? ___ cubic yards or ____ round trips?**
1	Paving Equipment	132	0.36	8	10	#DIV/0!	80	
2	Rollers	80	0.38	8	10	#DIV/0!	160	
2	Tractors/Loaders/Backhoes	97	0.37	8	20	#DIV/0!	320	
	Other Equipment?							
	Additional Phases	**Start Date:**		**Total phase:**				
		Start Date:						

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs

It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate

Modify horepower or load factor, as appropriate

Complete one sheet for each project component

Air Quality/Noise Construction Information Data Request

Project Name: El Paseo: Option 2 Building 3

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size	239	Dwelling Units	8.85 total project acres disturbed
	287480	s.f. residential	
	55336	s.f. retail	
	11931	s.f. office/commercial	
		s.f. other, specify:	
		s.f. parking garage	spaces
		s.f. parking lot	spaces
Construction Hours	8 am	to	5 pm

Pile Driving? Y/N? No

Project include OPERATIONAL GENERATOR OR FIRE PUMP on-site? Y/N? yes

IF YES (if BOTH separate values) -->

Kilowatts/Horsepower: 60hz

diesel

Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Annual Hours	Comments
	Demolition	**Start Date:**	**NA**	**Total phase:**				**Overall Import/Export Volumes**
		End Date:						**See Podium Sheet for Demolition, Mass Excavation and Podium Construction**
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	**Demolition Volume**
	Excavators	158	0.38			#DIV/0!	0	Square footage of buildings to be demolished
	Rubber-Tired Dozers	247	0.4			#DIV/0!	0	(*or* total tons to be hauled)
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	**_?_** square feet *or*
1	Crushing/Processing Equipment	85	0.78			#DIV/0!	0	**_?_** Hauling volume (tons)
								Any pavement demolished and hauled? **_? tons**
	Site Preparation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						
	Graders	187	0.41			#DIV/0!	0	
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Grading / Excavation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						**Soil Hauling Volume**
	Excavators	158	0.38			#DIV/0!	0	Export volume = _ cubic yards?
	Graders	187	0.41			#DIV/0!	0	Import volume = 0 cubic yards?
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Other Equipment?							
	Trenching/Foundation	**Start Date:**	**NA**	**Total phase:**				**See Podium Sheet For This Info**
		End Date:						
	Tractor/Loader/Backhoe	97	0.37			#DIV/0!	0	
	Excavators	158	0.38			#DIV/0!	0	
	Concrete Pumps	84	0.74			#DIV/0!	0	
	Building - Exterior	**Start Date:**	**10/3/2023**	**Total phase:**	**445**			**Cement Trucks? _825_ Total Round-Trips**
		End Date:	**8/11/2025**					
1	Cranes	231	0.29	10	300	6.74157303	312	Electric? (Y/N) _Yes_ Otherwise assumed diesel
3	Forklifts	89	0.2	8	300	5.39325843	240	Liquid Propane (LPG)? (Y/N) _No_ Otherwise Assumed diesel
	Generator Sets	84	0.74			0	0	Or temporary line power? (Y/N) _Yes_
	Tractors/Loaders/Backhoes	97	0.37			0	30	
1	Welders	46	0.45	8	30	0.53932584	240	
1	*Concrete Pumps*	84	0.74	8	30	0.53932584	240	
Building - Interior/Architectural Coating		**Start Date:**	**10/21/2024**	**Total phase:**	**250**			
		End Date:	**12/26/2025**					
2	Air Compressors	78	0.48	8	240	7.68	3840	
6	Aerial Lift	62	0.31	8	240	7.68	11520	
	Other Equipment?							
	Paving	**Start Date:**	**NA**	**Total phase:**				
		Start Date:						
	Cement and Mortar Mixers	9	0.56			#DIV/0!	0	
1	Pavers	130	0.42	8	10	#DIV/0!	80	**Asphalt? ___ cubic yards or ____ round trips?**
1	Paving Equipment	132	0.36	8	10	#DIV/0!	80	
2	Rollers	80	0.38	8	10	#DIV/0!	160	
2	Tractors/Loaders/Backhoes	97	0.37	8	20	#DIV/0!	320	
	Other Equipment?							
	Additional Phases	**Start Date:**		**Total phase:**				
		Start Date:						

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs
It is assumed that water trucks would be used during grading
Add or subtract phases and equipment, as appropriate
Modify horepower or load factor, as appropriate

Complete one sheet for each project component

Air Quality/Noise Construction Information Data Request

Project Name: 1777 SARATOGA AVE

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size
- 280 Dwelling Units
- 1.82 total project acres disturbed
- 350,000 s.f. residential
- s.f. retail
- 6000 s.f. office/commercial
- s.f. other, specify:
- 182,396 s.f. parking garage — 331 spaces
- s.f. parking lot — spaces

Construction Hours 8 am to 5 pm

Pile Driving? Y/N? NO

Project include OPERATIONAL GENERATOR OR FIRE PUMP on-site? Y/N? Yes
- IF YES (if BOTH separate values) -->
- Kilowatts/Horsepower: 60 hz
- Fuel Type: Diesel
- Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Annual Hours	Comments
	Demolition	**Start Date:**	9/1/2021	**Total phase:**	55			**Overall Import/Export Volumes**
		End Date:	11/18/2021					
2	Concrete/Industrial Saws	81	0.73	4	15	1.09090909	120	**Demolition Volume**
3	Excavators	158	0.38	8	30	4.36363636	720	Square footage of buildings to be demolished
	Rubber-Tired Dozers	247	0.4			0	0	(*or* total tons to be hauled)
3	Tractors/Loaders/Backhoes	97	0.37	8	40	5.81818182	960	17,000 square feet *or*
								575 Hauling volume (tons)
								Any pavement demolished and hauled? 900 tons
	Site Preparation	**Start Date:**		**Total phase:**				
		End Date:						
	Graders	187	0.41			#DIV/0!	0	
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Grading / Excavation	**Start Date:**	11/18/2021	**Total phase:**	67			
		End Date:	2/19/2022					**Soil Hauling Volume**
3	Excavators	158	0.38	8	60	7.1641791	1440	Export volume = 64,200 cubic yards?
3	Graders	187	0.41	8	60	7.1641791	1440	Import volume = 0 cubic yards?
	Rubber Tired Dozers	247	0.4			0	0	
	Concrete/Industrial Saws	81	0.73			0	0	
4	Tractors/Loaders/Backhoes	97	0.37	8	60	7.1641791	1920	
1	Drill Rig: Auger Cast Piles	221	0.5	8	55	6.56716418	440	
	Other Equipment?							
	Trenching/Foundation	**Start Date:**	6/17/2022	**Total phase:**	59			
		End Date:	9/11/2022					
2	Tractor/Loader/Backhoe	97	0.37	8	20	2.71186441	320	
	Excavators	158	0.38			0	0	
	Other Equipment?							
	Building - Exterior	**Start Date:**	7/29/2022	**Total phase:**	453			**Cement Trucks? 1200 Total Round-Trips**
		End Date:	5/18/2024					
2	Cranes	231	0.29			0	0	Electric? (Y/N) YES: 2 Tower Cranes: electrically operated
5	Forklifts	89	0.2	4	240	2.1192053	4800	Liquid Propane (LPG)? (Y/N) YES Otherwise Assumed diesel
	Generator Sets	84	0.74			0	0	Or temporary line power? (Y/N) Yes, temporary line power fro cranes
3	Tractors/Loaders/Backhoes	97	0.37	4	340	3.00220751	4080	
	Welders	46	0.45			0	0	
	Other Equipment?					0		
	Building - Interior/Architectural Coating	**Start Date:**	11/3/2023	**Total phase:**	217			
		End Date:	9/28/2024					
	Air Compressors	78	0.48			0	0	
4	Aerial Lift	62	0.31	8	160	5.89861751	5120	
	Other Equipment?							
	Paving	**Start Date:**	1/4/2024	**Total phase:**	117			
		Start Date:	6/20/2024					
	Cement and Mortar Mixers	9	0.56			0	0	
1	Pavers	130	0.42	8	10	0.68376068	80	**Asphalt? 50 cubic yards or ____ round trips?**
2	Paving Equipment	132	0.36	8	10	0.68376068	160	
1	Rollers	80	0.38	8	12	0.82051282	96	
1	Tractors/Loaders/Backhoes	97	0.37	8	40	2.73504274	320	
	Other Equipment?							
	Additional Phases	**Start Date:**		**Total phase:**				
		Start Date:						

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs

It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate

Modify horepower or load factor, as appropriate

Complete one sheet for each project component

El Paseo Development in San Jose - School Option

Land Use	Size	Daily Trip Rate	Daily Trips	AM Peak Hour Trip Rate	AM Peak Hour Trips In	AM Peak Hour Trips Out	AM Peak Hour Trips Total	PM Peak Hour Trip Rate	PM Peak Hour Trips In	PM Peak Hour Trips Out	PM Peak Hour Trips Total
Proposed Land Uses											
Residential[1]	730 du	5.44	3,971	0.36	68	195	263	0.44	196	125	321
Residential/Retail Internal Capture (15%)[3]			-422		-4	-6	-10		-22	-19	-41
Location-Based Non-Vehicle Mode Share (6%)[4]			-213		-4	-11	-15		-10	-7	-17
Project-Specific Trip Reduction (18%)[5]			-600		-11	-32	-43		-30	-17	-47
Sub-Total Residential			*2,736*		*49*	*146*	*195*		*134*	*82*	*216*
1777 Saratoga Site Residential	*280 du*		*1,040*		*19*	*56*	*75*		*51*	*32*	*83*
El Paseo Site Residential	*450 du*		*1,687*		*30*	*90*	*120*		*83*	*50*	*133*
El Paseo Shopping Mall with Project[2]	314,260 s.f.	41.68	13,097	0.98	192	117	309	4.03	609	659	1,268
Commercial/Retail on Project Site[2]	67,500 s.f.	41.68	2,813	0.98	41	25	66	4.03	131	141	272
Retail/Residential Internal Capture (15%)[3]			-422		-6	-4	-10		-19	-22	-41
Location-Based Non-Vehicle Mode Share (9%)[4]			-215		-3	-2	-5		-10	-11	-21
Pass-By Reduction (17% Daily/0% AM/34% PM)[5]			-370		0	0	0		-35	-36	-71
Sub-Total Commercial/Retail on Project Site			*1,806*		*32*	*19*	*51*		*67*	*72*	*139*
1777 Saratoga Site Retail	*6,000 s.f.*		*101*		*3*	*2*	*5*		*6*	*6*	*12*
El Paseo Site Retail	*61,500 s.f.*		*1,045*		*29*	*17*	*46*		*61*	*66*	*127*
K-12 Private School[7]	2,500 students	–[7]	4,802	–[7]	927	593	1,520	–[7]	139	184	323
Project-Specific Trip Reduction (10%)[8]			-480		-93	-59	-152		-14	-18	-32
Sub-Total School (El Paseo Site)			*4,322*		*834*	*534*	*1,368*		*125*	*166*	*291*
Total Gross Project Trips			***8,864***		***915***	***699***	***1,614***		***326***	***320***	***646***
1777 Saratoga Site Gross Trips			*1,210*		*22*	*58*	*80*		*57*	*38*	*95*
El Paseo Site Gross Trips			*7,654*		*893*	*641*	*1,534*		*269*	*282*	*551*
Existing Land Uses											
1777 Saratoga Site Office[9]	25,184 s.f.	9.74	245	1.16	25	4	29	1.15	5	24	29
Office/Retail Internal Capture (3%)[3]			-7		-1	0	-1		0	-1	-1
Location-Based Non-Vehicle Mode Share (5%)[4]			-12		-1	0	-1		0	-1	-1
Sub-Total 1777 Saratoga Site			*226*		*23*	*4*	*27*		*5*	*22*	*27*
El Paseo Shopping Mall[2]	343,200 s.f.	40.52	13,906	0.94	200	123	323	3.94	649	704	1,353
El Paseo Site Commercial/Retail[2]	72,940 s.f.[10]	40.52	2,956	0.94	43	26	69	3.94	138	149	287
Retail/Office Internal Capture (3%)[3]			-7		0	-1	-1		-1	0	-1
Location-Based Non-Vehicle Mode Share (9%)[4]			-265		-4	-2	-6		-12	-14	-26
Pass-By Reduction (17% Daily/0% AM/34% PM)[5]			-456		0	0	0		-43	-45	-88
Sub-Total El Paseo Site			*2,228*		*39*	*23*	*62*		*82*	*90*	*172*
Net Project Trips			**5,954**		**853**	**672**	**1,525**		**239**	**208**	**447**
1777 Saratoga Site Net Trips			***984***		***-1***	***54***	***53***		***52***	***16***	***68***
El Paseo Site Net Trips			***4,970***		***854***	***618***	***1,472***		***187***	***192***	***379***

Notes:
All trip rates are from ITE Trip Generation Manual, 10th Edition, 2017.
1. Mid-Rise Multifamily Housing (ITE Land Use 221): average trip rates in trips per dwelling unit were used.
2. Shopping Center (Land Use 820): fitted curve equation was used to calculate the trips for the entire shopping mall and to derive the average trip rates in trips per 1,000 s.f. The average trip rates were then used to calculate the commercial/retail trips of the project site.
7. See School Trip Generation Estimates table.
8. A reduction was applied because the proposed school will be required to reduce VMT through implementing TDM measures. The reduction percentage is obtained from the results of VMT modeling for the proposed school.
9. General Office (ITE Land Use 710): average trip rates in trips per 1,000 s.f. were used.
10. There is a total of 96,440 s.f. of existing commercial square footage on site. However, only 72,856 s.f. are operating within 2 years of the study and credited.

	6.65	6.39	5.86
3.75		3.60	3.30
	6.65	6.39	5.86
3.75		3.60	3.30
	44.32	42.04	20.43
26.83		25.45	12.37
	44.32	42.04	20.43
27.42		26.01	12.64
	1.29	0	0
1.73		0.00	0.00
	44.32	42.04	20.43
8.97		8.51	4.14
	44.32	42.04	20.43
30.55		28.97	14.08

El Paseo Development in San Jose - Residential Option

Land Use	Size	Daily Trip Rate	Daily Trips	AM Peak Hour Trip Rate	AM Peak Hour Trips In	AM Peak Hour Trips Out	AM Peak Hour Trips Total	PM Peak Hour Trip Rate	PM Peak Hour Trips In	PM Peak Hour Trips Out	PM Peak Hour Trips Total
Proposed Land Uses											
Residential[1]	1,100 du	5.44	5,984	0.36	103	293	396	0.44	295	189	484
Residential/Retail Internal Capture (15%)[5]			-473		-4	-7	-11		-24	-22	-46
Residential/Office Internal Capture (3%)[5]			-53		-4	-2	-5		-1	-1	-6
Location-Based Non-Vehicle Mode Share (6%)[6]			-327		-6	-17	-23		-16	-10	-26
Project-Specific Trip Reduction (18%)[7]			-924		-16	-48	-64		-46	-27	-73
Sub-Total Residential			*4,207*		*73*	*219*	*293*		*208*	*129*	*333*
1777 Saratoga Site Residential	*250 du*		*1,071*		*19*	*56*	*75*		*53*	*32*	*85*
El Paseo Site Residential	*820 du*		*3,136*		*54*	*163*	*216*		*155*	*97*	*245*
El Paseo Shopping Mall with Project[2]	323,132 s.f.	41.31	13,347	0.97	194	119	313	4.00	621	673	1,294
Commercial/Retail on Project Site[2]	76,372 s.f.	41.31	3,155	0.97	46	28	74	4.00	146	159	305
Retail/Residential Internal Capture (15%)[5]			-473		-7	-4	-11		-22	-24	-46
Retail/Office Internal Capture (3%)[5]			-53		-4	-1	-5		-1	-5	-6
Location-Based Non-Vehicle Mode Share (9%)[6]			-237		-3	-2	-5		-11	-12	-23
Pass-By Reduction (17% Daily/0% AM/34% PM)[8]			-407		0	0	0		-38	-40	-78
Sub-Total Commercial/Retail on Project Site			*1,985*		*32*	*21*	*53*		*74*	*78*	*152*
1777 Saratoga Site Commercial/Retail	*6,000 s.f.*		*37*		*3*	*1*	*4*		*6*	*6*	*12*
El Paseo Site Commercial/Retail	*70,372 s.f.*		*1,948*		*29*	*20*	*49*		*66*	*72*	*140*
General Office[3]	52,508 s.f.	9.74	511	1.16	52	9	61	1.15	10	50	60
Office/Retail Internal Capture (3%)[5]			-15		-2	0	-2		0	-2	-2
Office/Residential Internal Capture (3%)[5]			-15		-2	0	-2		0	-2	-2
Location-Based Non-Vehicle Mode Share (5%)[6]			-24		-2	-1	-3		-1	-2	-3
Project-Specific Trip Reduction (10%)[7]			-46		-5	0	-5		-1	-4	-5
Sub-Total Office (El Paseo Site)			*411*		*41*	*8*	*49*		*8*	*40*	*48*
Medical Clinic/Office[4]	36,120 s.f.	34.80	1,257	2.78	78	22	100	3.46	35	90	125
Office/Retail Internal Capture (3%)[5]			-38		-2	-1	-3		-1	-3	-4
Office/Residential Internal Capture (3%)[5]			-38		-2	-1	-3		-1	-3	-4
Location-Based Non-Vehicle Mode Share (5%)[6]			-59		-4	-1	-5		-2	-4	-6
Project-Specific Trip Reduction (10%)[7]			-112		-7	-2	-9		-3	-8	-11
Sub-Total Medical Office (El Paseo Site)			*1,010*		*63*	*17*	*80*		*28*	*72*	*100*
Total Gross Project Trips			*7,613*		*209*	*265*	*475*		*318*	*319*	*633*
1777 Saratoga Site Gross Trips			*1,106*		*22*	*57*	*79*		*59*	*38*	*97*
El Paseo Site Gross Trips			*6,606*		*187*	*208*	*396*		*259*	*281*	*536*
Existing Trip Credit											
1777 Saratoga Site Office[9]	25,184 s.f.	9.74	245	1.16	25	4	29	1.15	5	24	29
Office/Retail Internal Capture (3%)[5]			-7		-1	0	-1		0	-1	-1
Location-Based Non-Vehicle Mode Share (5%)[6]			-12		-1	0	-1		0	-1	-1
Sub-Total 1777 Saratoga Site			*226*		*23*	*4*	*27*		*5*	*22*	*27*
El Paseo Shopping Mall[2]	343,200 s.f.	40.52	13,906	0.94	200	123	323	3.94	649	704	1,353
El Paseo Site Commercial/Retail[2]	72,940 s.f.[9]	40.52	2,956	0.94	43	26	69	3.94	138	149	287
Retail/Office Internal Capture (3%)[5]			-7		0	-1	-1		-1	0	-1
Location-Based Non-Vehicle Mode Share (9%)[6]			-265		-4	-2	-6		-12	-14	-26
Pass-By Reduction (17% Daily/0% AM/34% PM)[8]			-456		0	0	0		-43	-45	-88
Sub-Total El Paseo Site			*2,228*		*39*	*23*	*62*		*82*	*90*	*172*
Net Project Trips			**4,703**		**147**	**238**	**386**		**231**	**207**	**434**
1777 Saratoga Site Net Trips			***882***		***-1***	***53***	***52***		***54***	***16***	***70***
El Paseo Site Net Trips			***3,821***		***148***	***185***	***334***		***177***	***191***	***364***

Notes:
All trip rates are from ITE Trip Generation Manual, 10th Edition, 2017.
1. Mid-Rise Multifamily Housing (ITE Land Use 221): average trip rates in trips per dwelling unit were used.
2. Shopping Center (Land Use 820): fitted curve equation was used to calculate the trips for the entire shopping mall and to derive the average trip rates in trips per 1,000 s.f. The average trip rates were then used to calculate the commercial/retail trips of the project site.
3. General Office (ITE Land Use 710): average trip rates in trips per 1,000 s.f. were used.
4. Medical-Dental Office Building (ITE Land Use 720): average trip rates in trips per 1,000 s.f. were used.
5. Residential/retail, office/retail, and residential/office internal trip reductions were applied to the project per the 2014 Santa Clara VTA TIA Guidelines.
6. A reduction was applied to the project based on the location-based vehicle mode share percentage outputs (Table 6 of TA Handbook) produced from the San Jose Travel Demand Model for the Sub-Urban with Single Family Home area.
7. A reduction was applied because the proposed residential and office uses will be required to reduce VMT through implementing TDM measures. The reduction percentage is obtained from the City's VMT Evaluation Tool.
8. An average 34% pass-by trip reduction was applied to the retail PM inbound and outbound peak-hour trips based the ITE Trip Generation Handbook, 3rd Edition, for Shopping Center.
9. There is a total of 96,440 s.f. of existing commercial square footage on site. However, only 72,856 s.f. are operating within 2 years of the study and credited.

	6.65	6.39	5.86
3.83		3.68	3.37
	6.65	6.39	5.86
3.82		3.67	3.37
	44.32	42.04	20.43
6.17		5.85	2.84
	44.32	42.04	20.43
27.68		26.26	12.76
	11.03	2.46	1.05
7.83		1.75	0.75
	36.13	8.96	1.55
27.96		6.93	1.20
	11.03	2.46	1.05
8.97		2.00	0.85
	44.32	42.04	20.43
30.55		28.97	14.08

Unmitigated Total Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons				MT	
Construction Equipment - CalEEMod						
2021	0.16	1.56	0.08	0.07	255	
2022	0.33	3.30	0.16	0.15	473	
2023	1.98	5.67	0.28	0.26	813	
2024	23.1	5.6	0.2	0.2	1,131	
2025	5.33	0.78	0.03	0.03	190	
EMFAC						
2021	0.06	0.79	0.04	0.02	322	
2022	0.14	2.04	0.11	0.05	941	
2023	0.55	3.72	0.44	0.19	2,979	
2024	0.48	2.93	0.39	0.17	2,529	
2025	0.27	1.69	0.24	0.10	1,480	
Total Construction Emissions by Year						
2021	0.21	2.34	0.12	0.09	577	
2022	0.47	5.33	0.28	0.21	1,413	
2023	2.53	9.40	0.72	0.45	3,792	
2024	23.62	8.58	0.62	0.38	3,660	
2025	5.61	2.47	0.26	0.13	1,669	
Total Construction Emissions						
Tons	32.4	28.1	2.0	1.3	11,112	
Pounds/Workdays	*Average Daily Emissions*				Workdays	
2021	4.83	53.27	2.71	2.14		88
2022	3.58	41.03	2.13	1.58		260
2023	19.44	72.28	5.50	3.43		260
2024	181.68	66.00	4.78	2.96		260
2025	65.59	28.91	3.08	1.49		171
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

Operational Criteria Air Pollutants						
Unmitigated	ROG	NOX	Total PM10	Total PM2.5		
Year	Tons in 2030					
CalEEMod Emissions	9.63	4.53	5.93	1.68		
	Existing Use Emissions					
Total	1.41	1.45	1.34	0.37		
	Net Annual Operational Emissions					
Tons/year	8.21	3.08	4.59	1.31		
Threshold - Tons/year	**10.0**	**10.0**	**15.0**	**10.0**		
	Average Daily Emissions					
Pounds Per Day	45.00	16.89	25.13	7.17		
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

Category	CO2e			
	Project	Existing	Project	Existing
Area	9	0		
Energy	1,672	148		
Mobile	4,906	1,346		
Waste	433	50		
Water	82	13		
TOTAL	7,102	1557	0	0
Net GHG Emissions		5,545		0.0
Service Population	0			
Per Capita Emissions		#DIV/0!		#DIV/0!
		units		
CA DOF 2020 =		pphh		

Unmitigated El Paseo Option 1 Education Construction Criteria Air Pollutants						
LAND USE	*Unmitigated*	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e
	Year	Tons				MT
	Construction Equipment - CalEEMod					
Site Prep & Podium	2021	0.09	0.82	0.04	0.04	141
	2022	0.25	2.44	0.13	0.12	340
	2023	0.21	2.08	0.10	0.10	289
Buildings 1-4	2023	1.21	2.80	0.14	0.13	402
	2024	21.05	5.23	0.21	0.20	1,044
	2025	5.33	0.78	0.03	0.03	190
	EMFAC					
Site Prep & Podium	2021	0.03	0.56	0.03	0.01	207
	2022	0.07	1.45	0.07	0.03	604
	2023	0.03	0.63	0.03	0.02	316
Buildings 1-4	2023	0.47	2.62	0.36	0.15	2,338
	2024	0.44	2.62	0.36	0.16	2,315
	2025	0.27	1.69	0.24	0.10	1,480
	Total Construction Emissions by Year					
	2021	0.12	1.39	0.07	0.06	348
	2022	0.32	3.89	0.19	0.15	944
	2023	1.92	8.14	0.63	0.39	3,345
	2024	21.49	7.85	0.58	0.36	3,359
	2025	5.61	2.47	0.26	0.13	1,669
	Total Construction Emissions					
	Tons	29.5	23.7	1.7	1.1	9,666
	Pounds/Workdays	*Average Daily Emissions*				Workdays
	2021	2.70	31.48	1.58	1.25	88
	2022	2.48	29.93	1.48	1.15	260
	2023	14.78	62.60	4.87	3.01	260
	2024	165.34	60.37	4.44	2.75	260
	2025	65.59	28.91	3.08	1.49	171
	Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**	

Operational Criteria Air Pollutants						
Unmitigated	ROG	NOX	Total PM10	Total PM2.5		
Year	Tons in 2030					
CalEEMod Emissions	7.4203	3.7613	4.9164	1.3917		
	Existing Use Emissions					
Total	1.2177	1.283	1.1865	0.3303		
	Net Annual Operational Emissions					
Tons/year	6.20	2.48	3.73	1.06		
Threshold - Tons/year	**10.0**	**10.0**	**15.0**	**10.0**		
	Average Daily Emissions					
Pounds Per Day	33.99	13.58	20.44	5.82		
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

Category	CO2e			
	Project	Existing	Project	Existing
Area	6	0		
Energy	1,325	83		
Mobile	4,075	1193		
Waste	365	39		
Water	57	7		
TOTAL	5,828	1322	0	0
Net GHG Emissions		4,506		0.0
Service Population	0			
Per Capita Emissions		#DIV/0!		#DIV/0!
		units		
CA DOF 2020 =		pphh		

Unmitigated 1777 Saratoga Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons				MT	
Construction Equipment - CalEEMod						
2021	0.07	0.73	0.03	0.03	113	
2022	0.08	0.86	0.04	0.04	133	
2023	0.55	0.79	0.04	0.03	122	
2024	2.09	0.42	0.02	0.01	87	
EMFAC						
2021	0.03	0.23	0.02	0.01	115	
2022	0.06	0.58	0.05	0.02	337	
2023	0.05	0.47	0.04	0.02	324	
2024	0.03	0.31	0.03	0.01	214	
Total Construction Emissions by Year						
2021	0.09	0.96	0.05	0.04	229	
2022	0.14	1.44	0.08	0.06	469	
2023	0.61	1.26	0.08	0.05	447	
2024	2.12	0.73	0.05	0.03	301	
	Total Construction Emissions					
Tons	3.0	4.4	0.3	0.2	1,446	
Pounds/Workdays	*Average Daily Emissions*				Workdays	
2021	2.13	21.79	1.13	0.89		88
2022	1.10	11.10	0.65	0.44		260
2023	4.66	9.68	0.63	0.41		260
2024	24.14	8.33	0.52	0.31		176
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

Operational Criteria Air Pollutants						
Unmitigated	ROG	NOX	Total PM10	Total PM2.5		
Year	Tons in 2030					
CalEEMod Emissions	2.2049	0.7731	1.0133	0.2924		
	Existing Use Emissions					
Total	0.195	0.1689	0.1562	0.0445		
	Net Annual Operational Emissions					
Tons/year	2.01	0.60	0.86	0.25		
Threshold - Tons/year	**10.0**	**10.0**	**15.0**	**10.0**		
	Average Daily Emissions					
Pounds Per Day	11.01	3.31	4.70	1.36		
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

Category	CO2e			
	Project	Existing	Project	Existing
Area	3	0		
Energy	347	65		
Mobile	831	153		
Waste	68	12		
Water	25	6		
TOTAL	1,275	235	0	0
Net GHG Emissions		1,040		0.0
Service Population	0			
Per Capita Emissions		#DIV/0!		#DIV/0!
		units		
CA DOF 2020 =		pphh		

Mitigated Total Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons				MT	
Construction Equipment - CalEEMod						
2021	0.03	0.14	0.004	0.004	236	
2022	0.04	0.19	0.006	0.006	320	
2023	0.30	0.21	0.006	0.006	349	
2024	4.1	0.1	0.004	0.004	225	
2025	0.95	0.01	0.000	0.000	19	
EMFAC						
2021	0.04	0.63	0.04	0.02	322	
2022	0.09	1.63	0.11	0.05	941	
2023	0.38	2.98	0.44	0.19	2,979	
2024	0.34	2.35	0.39	0.17	2,529	
2025	0.19	1.35	0.24	0.10	1,480	
Total Construction Emissions by Year						
2021	0.07	0.77	0.05	0.03	558	
2022	0.14	1.82	0.12	0.06	1,260	
2023	0.68	3.19	0.44	0.20	3,328	
2024	4.43	2.48	0.40	0.17	2,754	
2025	1.14	1.36	0.24	0.10	1,498	
	Total Construction Emissions					
Tons	6.5	9.6	1.2	0.6	9,399	
Pounds/Workdays	*Average Daily Emissions*				Workdays	
2021	1.65	17.54	1.06	0.61		88
2022	1.07	14.01	0.91	0.46		260
2023	5.26	24.50	3.42	1.51		260
2024	34.07	19.08	3.06	1.33		260
2025	13.32	15.91	2.78	1.19		171
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

LAND USE	Mitigated El Paseo Option 1 Education Construction Criteria Air Pollutants						
	Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
	Year	Tons				MT	
	Construction Equipment - CalEEMod						
Site Prep & Podium	2021	0.02	0.08	0.002	0.002	127	
	2022	0.03	0.12	0.004	0.004	208	
	2023	0.02	0.08	0.002	0.002	129	
Buildings 1-4	2023	0.19	0.09	0.003	0.003	156	
	2024	3.72	0.11	0.004	0.004	192	
	2025	0.95	0.01	0.000	0.000	19	
	EMFAC						
Site Prep & Podium	2021	0.02	0.45	0.03	0.01	207	
	2022	0.05	1.16	0.07	0.03	604	
	2023	0.02	0.51	0.03	0.02	316	
Buildings 1-4	2023	0.33	2.10	0.36	0.15	2,338	
	2024	0.32	2.10	0.36	0.16	2,315	
	2025	0.19	1.35	0.24	0.10	1,480	
	Total Construction Emissions by Year						
	2021	0.04	0.53	0.03	0.02	334	
	2022	0.08	1.29	0.07	0.04	812	
	2023	0.55	2.77	0.40	0.18	2,940	
	2024	4.03	2.21	0.37	0.16	2,507	
	2025	1.14	1.36	0.24	0.10	1,498	
		Total Construction Emissions					
	Tons	5.8	8.2	1.1	0.5	8,091	
	Pounds/Workdays	*Average Daily Emissions*				Workdays	
	2021	0.91	11.93	0.63	0.37		88
	2022	0.61	9.91	0.54	0.28		260
	2023	4.26	21.34	3.07	1.35		260
	2024	31.02	17.00	2.82	1.23		260
	2025	13.32	15.91	2.78	1.19		171
	Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

Mitigated 1777 Saratoga Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons				MT	
Construction Equipment - CalEEMod						
2021	0.02	0.07	0.002	0.002	109	
2022	0.02	0.07	0.002	0.002	111	
2023	0.09	0.04	0.001	0.001	63	
2024	0.37	0.02	0.001	0.001	33	
EMFAC						
2021	0.02	0.18	0.02	0.01	115	
2022	0.04	0.47	0.05	0.02	337	
2023	0.04	0.37	0.04	0.02	324	
2024	0.02	0.25	0.03	0.01	214	
Total Construction Emissions by Year						
2021	0.03	0.25	0.02	0.01	225	
2022	0.06	0.53	0.05	0.02	448	
2023	0.13	0.41	0.05	0.02	388	
2024	0.40	0.27	0.03	0.01	247	
	Total Construction Emissions					
Tons	0.6	1.5	0.1	0.1	1,307	
Pounds/Workdays	*Average Daily Emissions*				Workdays	
2021	0.75	5.61	0.43	0.24		88
2022	0.46	4.10	0.37	0.18		260
2023	1.00	3.16	0.35	0.16		260
2024	4.50	3.06	0.35	0.16		176
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

Unmitigated Total Construction Criteria Air Pollutants

Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons				MT	
Construction Equipment - CalEEMod						
2021	0.14	1.41	0.07	0.06	230	
2022	0.22	2.21	0.11	0.10	338	
2023	1.01	5.30	0.26	0.24	748	
2024	11.8	3.2	0.1	0.1	602	
2025	13.24	1.67	0.06	0.06	392	
EMFAC						
2021	0.06	0.87	0.04	0.02	343	
2022	0.32	3.24	0.24	0.11	1777	
2023	0.37	2.94	0.31	0.13	2184	
2024	0.30	1.77	0.25	0.11	1,568	
2025	0.19	1.08	0.16	0.07	999	
Total Construction Emissions by Year						
2021	0.20	2.28	0.11	0.09	572	
2022	0.53	5.45	0.34	0.21	2,115	
2023	1.38	8.25	0.57	0.37	2,933	
2024	12.07	5.00	0.38	0.23	2,171	
2025	13.43	2.76	0.22	0.12	1,391	
Total Construction Emissions						
Tons	27.6	23.7	1.6	1.0	9,182	
Pounds/Workdays	*Average Daily Emissions*				Workdays	
2021	4.49	51.73	2.57	2.00		88
2022	4.11	41.90	2.65	1.61		260
2023	10.63	63.44	4.36	2.87		260
2024	92.83	38.44	2.93	1.79		260
2025	135.63	27.84	2.22	1.26		198
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		1066

Operational Criteria Air Pollutants

Unmitigated	ROG	NOX	Total PM10	Total PM2.5		
Year	Tons in 2030					
CalEEMod Emissions	9.64	4.14	5.60	1.59		
	Existing Use Emissions					
Total	1.41	1.45	1.34	0.37		
	Net Annual Operational Emissions					
Tons/year	8.23	2.69	4.26	1.22		
Threshold - Tons/year	**10.0**	**10.0**	**15.0**	**10.0**		
	Average Daily Emissions					
Pounds Per Day	45.09	14.75	23.33	6.68		
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

Category	CO2e			
	Project 2030	Existing	Project	Existing
Area	14	0		
Energy	1,662	148		
Mobile	4,632	1,346		
Waste	516	50		
Water	121	13		
TOTAL	6,944	1557	0	0
Net GHG Emissions		5,387		0.0
Service Population	0			
Per Capita Emissions		#DIV/0!		#DIV/0!
CA DOF 2020 =		units pphh		

Unmitigated El Paseo Option 2 No Education Construction Criteria Air Pollutants

LAND USE	*Unmitigated*	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
	Year	Tons				MT	
	Construction Equipment - CalEEMod						
Site Prep & Podium	2021	0.07	0.67	0.04	0.03	116	
	2022	0.13	1.28	0.06	0.06	193	
	2023	0.33	3.26	0.16	0.15	452	
Buildings 1-3	2022	0.01	0.07	0.004	0.003	12	
	2023	0.12	1.25	0.06	0.06	174	
	2024	9.68	2.80	0.12	0.11	515	
	2025	13.24	1.67	0.06	0.06	392	
	EMFAC						
Site Prep & Podium	2021	0.03	0.64	0.03	0.02	227	
	2022	0.07	1.67	0.07	0.03	663	
	2023	0.03	1.00	0.05	0.02	481	
Buildings 1-3	2022	0.18	0.99	0.12	0.05	777	
	2023	0.29	1.48	0.22	0.09	1,379	
	2024	0.27	1.46	0.22	0.09	1,354	
	2025	0.19	1.08	0.16	0.07	999	
	Total Construction Emissions by Year						
	2021	0.10	1.32	0.06	0.05	344	
	2022	0.20	2.94	0.13	0.09	856	
	2023	0.55	5.33	0.33	0.23	1,722	
	2024	9.94	4.26	0.34	0.20	1,869	
	2025	13.43	2.76	0.22	0.12	1,391	
	Total Construction Emissions						
	Tons	24.2	16.6	1.1	0.7	6,182	
	Pounds/Workdays	*Average Daily Emissions*				Workdays	
	2021	2.37	29.94	1.43	1.11		88
	2022	1.56	22.63	1.03	0.73		260
	2023	4.27	40.98	2.57	1.75		260
	2024	76.50	32.80	2.58	1.57		260
	2025	135.63	27.84	2.22	1.26		198
	Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

Operational Criteria Air Pollutants

Unmitigated	ROG	NOX	Total PM10	Total PM2.5		
Year	Tons in 2030					
CalEEMod Emissions	7.4368	3.3706	4.5866	1.3016		
	Existing Use Emissions					
Total	1.2177	1.283	1.1865	0.3303		
	Net Annual Operational Emissions					
Tons/year	6.22	2.09	3.40	0.97		
Threshold - Tons/year	**10.0**	**10.0**	**15.0**	**10.0**		
	Average Daily Emissions					
Pounds Per Day	34.08	11.44	18.63	5.32		
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

Category	CO2e			
	Project 2030	Existing	Project	Existing
Area	10	0		
Energy	1,315	83		
Mobile	3,800	1193		
Waste	448	39		
Water	96	7		
TOTAL	5,670	1322	0	0
Net GHG Emissions		4,347		0.0
Service Population	0			
Per Capita Emissions		#DIV/0!		#DIV/0!
CA DOF 2020 =		units pphh		

Unmitigated 1777 Saratoga Construction Criteria Air Pollutants

Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons				MT	
Construction Equipment - CalEEMod						
2021	0.07	0.73	0.03	0.03	113	
2022	0.08	0.86	0.04	0.04	133	
2023	0.55	0.79	0.04	0.03	122	
2024	2.09	0.42	0.02	0.01	87	
EMFAC						
2021	0.03	0.23	0.02	0.01	115	
2022	0.06	0.58	0.05	0.02	337	
2023	0.05	0.47	0.04	0.02	324	
2024	0.03	0.31	0.03	0.01	214	
Total Construction Emissions by Year						
2021	0.09	0.96	0.05	0.04	229	
2022	0.14	1.44	0.08	0.06	469	
2023	0.61	1.26	0.08	0.05	447	
2024	2.12	0.73	0.05	0.03	301	
	Total Construction Emissions					
Tons	3.0	4.4	0.3	0.2	1,446	
Pounds/Workdays	*Average Daily Emissions*				Workdays	
2021	2.13	21.79	1.13	0.89		88
2022	1.10	11.10	0.65	0.44		260
2023	4.66	9.68	0.63	0.41		260
2024	24.14	8.33	0.52	0.31		176
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

Operational Criteria Air Pollutants

Unmitigated	ROG	NOX	Total PM10	Total PM2.5		
Year	Tons in 2030					
CalEEMod Emissions	2.2049	0.7731	1.0133	0.2924		
	Existing Use Emissions					
Total	0.195	0.1689	0.1562	0.0445		
	Net Annual Operational Emissions					
Tons/year	2.01	0.60	0.86	0.25		
Threshold - Tons/year	**10.0**	**10.0**	**15.0**	**10.0**		
	Average Daily Emissions					
Pounds Per Day	11.01	3.31	4.70	1.36		
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

Category	CO2e			
	Project 2030	Existing	Project	Existing
Area	3	0		
Energy	347	65		
Mobile	831	153		
Waste	68	12		
Water	25	6		
TOTAL	1,275	235	0	0
Net GHG Emissions		1,040		0.0
Service Population	0			
Per Capita Emissions		#DIV/0!		#DIV/0!
CA DOF 2020 =		units pphh		

Mitigated Total Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons				MT	
Construction Equipment - CalEEMod						
2021	0.03	0.13	0.00	0.00	212	
2022	0.04	0.16	0.00	0.00	263	
2023	0.13	0.19	0.01	0.01	317	
2024	2.1	0.1	0.0	0.0	149	
2025	2.35	0.02	0.00	0.00	26	
EMFAC						
2021	0.04	0.70	0.04	0.02	343	
2022	0.22	2.59	0.24	0.11	1777	
2023	0.26	2.36	0.31	0.13	2184	
2024	0.21	1.42	0.25	0.11	1,568	
2025	0.13	0.87	0.16	0.07	999	
Total Construction Emissions by Year						
2021	0.07	0.82	0.05	0.03	555	
2022	0.26	2.75	0.24	0.12	2,040	
2023	0.39	2.54	0.31	0.14	2,501	
2024	2.29	1.51	0.25	0.11	1,717	
2025	2.49	0.88	0.16	0.07	1,025	
	Total Construction Emissions					
Tons	5.5	8.5	1.0	0.5	7,838	
Pounds/Workdays	*Average Daily Emissions*				Workdays	
2021	1.59	18.69	1.09	0.63		88
2022	1.98	21.16	1.86	0.89		260
2023	2.99	19.56	2.42	1.08		260
2024	17.60	11.59	1.91	0.83		260
2025	25.11	8.92	1.65	0.71		198
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

LAND USE	Mitigated El Paseo Option 2 No Education Construction Criteria Air Pollutants						
	Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
	Year	Tons				MT	
	Construction Equipment - CalEEMod						
Site Prep & Podium	2021	0.01	0.06	0.002	0.002	103	
	2022	0.02	0.08	0.003	0.003	140	
	2023	0.02	0.11	0.003	0.003	180	
Buildings 1-3	2022	0.002	0.01	0.0002	0.0002	12	
	2023	0.01	0.04	0.001	0.001	73	
	2024	1.70	0.07	0.0021	0.00	116	
	2025	2.35	0.02	0.0005	0.00	26	
	EMFAC						
Site Prep & Podium	2021	0.02	0.51	0.03	0.02	227	
	2022	0.05	1.33	0.07	0.03	663	
	2023	0.02	0.80	0.05	0.02	481	
Buildings 1-3	2022	0.13	0.79	0.12	0.05	777	
	2023	0.20	1.18	0.22	0.09	1,379	
	2024	0.19	1.17	0.22	0.09	1,354	
	2025	0.13	0.87	0.16	0.07	999	
	Total Construction Emissions by Year						
	2021	0.04	0.58	0.03	0.02	330	
	2022	0.07	1.42	0.07	0.04	803	
	2023	0.18	1.71	0.17	0.08	1,450	
	2024	1.89	1.24	0.22	0.09	1,470	
	2025	2.49	0.88	0.16	0.07	1,025	
		Total Construction Emissions					
	Tons	4.7	5.8	0.7	0.3	5,078	
	Pounds/Workdays	*Average Daily Emissions*				Workdays	
	2021	0.84	13.08	0.66	0.39		88
	2022	0.53	10.89	0.56	0.29		260
	2023	1.36	13.14	1.34	0.62		260
	2024	14.55	9.52	1.67	0.72		260
	2025	25.11	8.92	1.65	0.71		198
	Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

Mitigated 1777 Saratoga Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons				MT	
Construction Equipment - CalEEMod						
2021	0.02	0.07	0.002	0.002	109	
2022	0.02	0.07	0.002	0.002	111	
2023	0.09	0.04	0.001	0.001	63	
2024	0.37	0.02	0.001	0.001	33	
EMFAC						
2021	0.02	0.18	0.02	0.01	115	
2022	0.04	0.47	0.05	0.02	337	
2023	0.04	0.37	0.04	0.02	324	
2024	0.02	0.25	0.03	0.01	214	
Total Construction Emissions by Year						
2021	0.03	0.25	0.02	0.01	225	
2022	0.06	0.53	0.05	0.02	448	
2023	0.13	0.41	0.05	0.02	388	
2024	0.40	0.27	0.03	0.01	247	
	Total Construction Emissions					
Tons	0.6	1.5	0.1	0.1	1,307	
Pounds/Workdays	*Average Daily Emissions*				Workdays	
2021	0.75	5.61	0.43	0.24		88
2022	0.46	4.10	0.37	0.18		260
2023	1.00	3.16	0.35	0.16		260
2024	4.50	3.06	0.35	0.16		176
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**		

El Paseo Opt 1 (Ed), San Jose - Construction Podium Unmitigated

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	850.00	Space	8.85	350,000.00	0
Parking Lot	260.00	Space	0.00	104,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2018 Rate

Land Use - Land uses based on provided PD/Construction worksheet

Construction Phase - Provided construciton schedule

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Trips and VMT - 0 Trips EMFAC2017, pavement demo = 4,500tons, building const = 3,600 cement truck round trips

Demolition - existing building demo = 99,535sf

Grading - grading = 155,000cy export

Construction Off-road Equipment Mitigation - BMPs, Tier 4 interim engine mitigation, electric cranes

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	230.00	15.00
tblConstructionPhase	NumDays	230.00	261.00
tblConstructionPhase	NumDays	20.00	61.00
tblConstructionPhase	NumDays	20.00	116.00

tblGrading	MaterialExported	0.00	155,000.00
tblLandUse	LandUseSquareFeet	340,000.00	350,000.00
tblLandUse	LotAcreage	7.65	8.85
tblLandUse	LotAcreage	2.34	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	8.00
tblOffRoadEquipment	UsageHours	8.00	1.80
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	5.10
tblOffRoadEquipment	UsageHours	8.00	6.50
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.80

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	6.50
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	HaulingTripNumber	453.00	0.00
tblTripsAndVMT	HaulingTripNumber	19,375.00	0.00
tblTripsAndVMT	VendorTripNumber	74.00	0.00
tblTripsAndVMT	VendorTripNumber	74.00	0.00
tblTripsAndVMT	WorkerTripNumber	33.00	0.00
tblTripsAndVMT	WorkerTripNumber	25.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	191.00	0.00
tblTripsAndVMT	WorkerTripNumber	191.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0868	0.8232	1.0429	1.6100e-003	0.0670	0.0440	0.1109	9.7400e-003	0.0410	0.0507	0.0000	140.5544	140.5544	0.0398	0.0000	141.5505
2022	0.2502	2.4368	2.1902	3.9200e-003	0.0180	0.1253	0.1433	2.3200e-003	0.1163	0.1186	0.0000	341.3490	341.3490	0.0988	0.0000	343.8192

2023	0.2143	2.0802	1.7134	3.3000e-003	0.0000	0.1035	0.1035	0.0000	0.0958	0.0958	0.0000	286.8021	286.8021	0.0862	0.0000	288.9577
Maximum	**0.2502**	**2.4368**	**2.1902**	**3.9200e-003**	**0.0670**	**0.1253**	**0.1433**	**9.7400e-003**	**0.1163**	**0.1186**	**0.0000**	**341.3490**	**341.3490**	**0.0988**	**0.0000**	**343.8192**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0273	0.6747	1.1678	1.6100e-003	0.0301	2.5500e-003	0.0327	4.3800e-003	2.5500e-003	6.9300e-003	0.0000	140.5543	140.5543	0.0398	0.0000	141.5504
2022	0.0506	1.1100	1.8413	3.9200e-003	8.1000e-003	6.5800e-003	0.0147	1.0500e-003	6.5800e-003	7.6200e-003	0.0000	221.7056	221.7056	0.0601	0.0000	223.2085
2023	0.0356	0.7497	1.1979	3.3000e-003	0.0000	5.7000e-003	5.7000e-003	0.0000	5.7000e-003	5.7000e-003	0.0000	141.8136	141.8136	0.0393	0.0000	142.7969
Maximum	**0.0506**	**1.1100**	**1.8413**	**3.9200e-003**	**0.0301**	**6.5800e-003**	**0.0327**	**4.3800e-003**	**6.5800e-003**	**7.6200e-003**	**0.0000**	**221.7056**	**221.7056**	**0.0601**	**0.0000**	**223.2085**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**79.42**	**52.54**	**14.95**	**0.00**	**55.00**	**94.56**	**85.17**	**54.98**	**94.14**	**92.36**	**0.00**	**34.43**	**34.43**	**38.06**	**0.00**	**34.45**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	0.7429	0.5763
2	**12-1-2021**	**2-28-2022**	0.4240	0.3500
3	**3-1-2022**	**5-31-2022**	0.1385	0.1206
4	**6-1-2022**	**8-31-2022**	0.7224	0.3072
5	**9-1-2022**	**11-30-2022**	1.1729	0.3821
6	**12-1-2022**	**2-28-2023**	1.0645	0.3530
7	**3-1-2023**	**5-31-2023**	1.0544	0.3609
8	**6-1-2023**	**8-31-2023**	0.5616	0.1922
		Highest	1.1729	0.5763

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	11/24/2021	5	61	
2	Grading	Grading	10/21/2021	3/31/2022	5	116	
3	Trenching	Trenching	6/2/2022	9/22/2022	5	81	
4	Concrete	Building Construction	6/2/2022	6/22/2022	5	15	
5	Building Construction	Building Construction	7/20/2022	7/19/2023	5	261	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 17.4

Acres of Paving: 8.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	4	1.80	81	0.73
Demolition	Crushing/Proc. Equipment	1	2.90	85	0.78
Demolition	Excavators	4	5.10	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	4	6.60	97	0.37
Grading	Excavators	3	6.50	158	0.38
Grading	Graders	3	0.80	187	0.41
Grading	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Tractors/Loaders/Backhoes	4	6.50	97	0.37
Trenching	Pumps	2	2.70	84	0.74
Trenching	Tractors/Loaders/Backhoes	2	4.30	97	0.37
Concrete	Cranes	0	0.00	231	0.29
Concrete	Forklifts	0	0.00	89	0.20

Concrete	Generator Sets	0	0.00	84	0.74
Concrete	Pumps	1	15.00	84	0.74
Concrete	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Concrete	Welders	0	0.00	46	0.45
Building Construction	Cranes	4	8.00	231	0.29
Building Construction	Forklifts	12	8.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Pumps	2	1.30	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Building Construction	Welders	8	1.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	13	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	10	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Concrete	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	26	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0490	0.0000	0.0490	7.4200e-003	0.0000	7.4200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0529	0.4803	0.6308	9.6000e-004		0.0264	0.0264		0.0249	0.0249	0.0000	84.1903	84.1903	0.0216	0.0000	84.7306
Total	**0.0529**	**0.4803**	**0.6308**	**9.6000e-004**	**0.0490**	**0.0264**	**0.0754**	**7.4200e-003**	**0.0249**	**0.0323**	**0.0000**	**84.1903**	**84.1903**	**0.0216**	**0.0000**	**84.7306**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0220	0.0000	0.0220	3.3400e-003	0.0000	3.3400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0165	0.4023	0.6942	9.6000e-004		1.5000e-003	1.5000e-003		1.5000e-003	1.5000e-003	0.0000	84.1902	84.1902	0.0216	0.0000	84.7305
Total	**0.0165**	**0.4023**	**0.6942**	**9.6000e-004**	**0.0220**	**1.5000e-003**	**0.0235**	**3.3400e-003**	**1.5000e-003**	**4.8400e-003**	**0.0000**	**84.1902**	**84.1902**	**0.0216**	**0.0000**	**84.7305**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0180	0.0000	0.0180	2.3200e-003	0.0000	2.3200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0339	0.3429	0.4121	6.4000e-004		0.0175	0.0175		0.0161	0.0161	0.0000	56.3642	56.3642	0.0182	0.0000	56.8199
Total	**0.0339**	**0.3429**	**0.4121**	**6.4000e-004**	**0.0180**	**0.0175**	**0.0355**	**2.3200e-003**	**0.0161**	**0.0185**	**0.0000**	**56.3642**	**56.3642**	**0.0182**	**0.0000**	**56.8199**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.1000e-003	0.0000	8.1000e-003	1.0500e-003	0.0000	1.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.2724	0.4736	6.4000e-004		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	56.3641	56.3641	0.0182	0.0000	56.8198
Total	**0.0108**	**0.2724**	**0.4736**	**6.4000e-004**	**8.1000e-003**	**1.0500e-003**	**9.1500e-003**	**1.0500e-003**	**1.0500e-003**	**2.1000e-003**	**0.0000**	**56.3641**	**56.3641**	**0.0182**	**0.0000**	**56.8198**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0180	0.0000	0.0180	2.3200e-003	0.0000	2.3200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0369	0.3633	0.5032	7.9000e-004		0.0177	0.0177		0.0163	0.0163	0.0000	69.3872	69.3872	0.0224	0.0000	69.9483
Total	**0.0369**	**0.3633**	**0.5032**	**7.9000e-004**	**0.0180**	**0.0177**	**0.0357**	**2.3200e-003**	**0.0163**	**0.0186**	**0.0000**	**69.3872**	**69.3872**	**0.0224**	**0.0000**	**69.9483**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.1000e-003	0.0000	8.1000e-003	1.0500e-003	0.0000	1.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.3352	0.5829	7.9000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	69.3871	69.3871	0.0224	0.0000	69.9482
Total	**0.0132**	**0.3352**	**0.5829**	**7.9000e-004**	**8.1000e-003**	**1.2900e-003**	**9.3900e-003**	**1.0500e-003**	**1.2900e-003**	**2.3400e-003**	**0.0000**	**69.3871**	**69.3871**	**0.0224**	**0.0000**	**69.9482**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Trenching - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0168	0.1541	0.1995	3.2000e-004		8.1800e-003	8.1800e-003		7.8700e-003	7.8700e-003	0.0000	27.3493	27.3493	4.6400e-003	0.0000	27.4652
Total	**0.0168**	**0.1541**	**0.1995**	**3.2000e-004**		**8.1800e-003**	**8.1800e-003**		**7.8700e-003**	**7.8700e-003**	**0.0000**	**27.3493**	**27.3493**	**4.6400e-003**	**0.0000**	**27.4652**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	6.3300e-003	0.1231	0.2129	3.2000e-004		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	27.3492	27.3492	4.6400e-003	0.0000	27.4651
Total	**6.3300e-003**	**0.1231**	**0.2129**	**3.2000e-004**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**27.3492**	**27.3492**	**4.6400e-003**	**0.0000**	**27.4651**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Concrete - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.9500e-003	0.0418	0.0525	9.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003	0.0000	7.9482	7.9482	4.1000e-004	0.0000	7.9584
Total	**4.9500e-003**	**0.0418**	**0.0525**	**9.0000e-005**		**2.1900e-003**	**2.1900e-003**		**2.1900e-003**	**2.1900e-003**	**0.0000**	**7.9482**	**7.9482**	**4.1000e-004**	**0.0000**	**7.9584**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7000e-003	0.0330	0.0570	9.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	7.9482	7.9482	4.1000e-004	0.0000	7.9584
Total	**1.7000e-003**	**0.0330**	**0.0570**	**9.0000e-005**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**7.9482**	**7.9482**	**4.1000e-004**	**0.0000**	**7.9584**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1915	1.8776	1.4351	2.7200e-003		0.0972	0.0972		0.0900	0.0900	0.0000	236.6642	236.6642	0.0713	0.0000	238.4474
Total	**0.1915**	**1.8776**	**1.4351**	**2.7200e-003**		**0.0972**	**0.0972**		**0.0900**	**0.0900**	**0.0000**	**236.6642**	**236.6642**	**0.0713**	**0.0000**	**238.4474**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0294	0.6187	0.9885	2.7200e-003		4.7000e-003	4.7000e-003		4.7000e-003	4.7000e-003	0.0000	117.0210	117.0210	0.0326	0.0000	117.8368
Total	**0.0294**	**0.6187**	**0.9885**	**2.7200e-003**		**4.7000e-003**	**4.7000e-003**		**4.7000e-003**	**4.7000e-003**	**0.0000**	**117.0210**	**117.0210**	**0.0326**	**0.0000**	**117.8368**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2143	2.0802	1.7134	3.3000e-003		0.1035	0.1035		0.0958	0.0958	0.0000	286.8021	286.8021	0.0862	0.0000	288.9577
Total	**0.2143**	**2.0802**	**1.7134**	**3.3000e-003**		**0.1035**	**0.1035**		**0.0958**	**0.0958**	**0.0000**	**286.8021**	**286.8021**	**0.0862**	**0.0000**	**288.9577**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0356	0.7497	1.1979	3.3000e-003		5.7000e-003	5.7000e-003		5.7000e-003	5.7000e-003	0.0000	141.8136	141.8136	0.0393	0.0000	142.7969
Total	**0.0356**	**0.7497**	**1.1979**	**3.3000e-003**		**5.7000e-003**	**5.7000e-003**		**5.7000e-003**	**5.7000e-003**	**0.0000**	**141.8136**	**141.8136**	**0.0393**	**0.0000**	**142.7969**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

El Paseo Opt 1 (Ed), San Jose - Construction Bldgs 1-4 Unmitigated

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	450.00	1000sqft	4.43	450,000.00	0
Apartments Mid Rise	450.00	Dwelling Unit	4.43	430,000.00	1287
Strip Mall	60.00	1000sqft	0.00	60,000.00	0
Apartments Mid Rise	200.00	Dwelling Unit	0.00	140,000.00	572

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2018 Rate

Land Use - Land uses based on PD/Construction worksheet from Opt 1 Bldgs 1-4

Construction Phase - Provided construction schedule from Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Grading -

Demolition -

Trips and VMT - 0 Trips EMFAC2017, Bldg 1 & 2 - 400 cement truck round trips each, Bldg 3 & 4 - 250 cement truck round trips each

Construction Off-road Equipment Mitigation - BMPs, Tier 4 interim engine mitigatoin, Electric cranes

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	24.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	265.00
tblConstructionPhase	NumDays	230.00	409.00
tblConstructionPhase	NumDays	20.00	24.00
tblConstructionPhase	NumDays	230.00	385.00
tblConstructionPhase	NumDays	20.00	264.00
tblConstructionPhase	NumDays	20.00	24.00
tblConstructionPhase	NumDays	230.00	400.00
tblConstructionPhase	NumDays	20.00	264.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	230.00	440.00
tblConstructionPhase	NumDays	20.00	330.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	PhaseEndDate	3/26/2024	11/13/2024
tblConstructionPhase	PhaseEndDate	1/30/2024	7/29/2024
tblConstructionPhase	PhaseEndDate	2/27/2024	4/8/2024
tblConstructionPhase	PhaseStartDate	2/28/2024	11/9/2023
tblConstructionPhase	PhaseStartDate	3/15/2023	1/4/2023
tblConstructionPhase	PhaseStartDate	1/31/2024	3/6/2024
tblLandUse	LandUseSquareFeet	450,000.00	430,000.00
tblLandUse	LandUseSquareFeet	200,000.00	140,000.00
tblLandUse	LotAcreage	10.33	4.43
tblLandUse	LotAcreage	11.84	4.43
tblLandUse	LotAcreage	1.38	0.00
tblLandUse	LotAcreage	5.26	0.00

tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	6.40
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.40
tblOffRoadEquipment	UsageHours	8.00	6.70
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	3.70
tblOffRoadEquipment	UsageHours	8.00	3.70
tblOffRoadEquipment	UsageHours	7.00	7.50
tblOffRoadEquipment	UsageHours	7.00	8.60
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.30
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	3.70
tblOffRoadEquipment	UsageHours	8.00	6.90
tblOffRoadEquipment	UsageHours	8.00	6.60
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.60
tblOffRoadEquipment	UsageHours	8.00	0.00

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	2.20
tblOffRoadEquipment	UsageHours	8.00	3.70
tblOffRoadEquipment	UsageHours	8.00	3.40
tblOffRoadEquipment	UsageHours	8.00	2.20
tblOffRoadEquipment	UsageHours	8.00	3.70
tblOffRoadEquipment	UsageHours	8.00	3.40
tblOffRoadEquipment	UsageHours	8.00	2.20
tblOffRoadEquipment	UsageHours	8.00	3.70
tblOffRoadEquipment	UsageHours	8.00	3.40
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.60
tblOffRoadEquipment	UsageHours	8.00	0.70
tblOffRoadEquipment	UsageHours	8.00	0.70
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	VendorTripNumber	153.00	0.00
tblTripsAndVMT	VendorTripNumber	153.00	0.00
tblTripsAndVMT	VendorTripNumber	153.00	0.00
tblTripsAndVMT	VendorTripNumber	153.00	0.00
tblTripsAndVMT	WorkerTripNumber	135.00	0.00
tblTripsAndVMT	WorkerTripNumber	676.00	0.00
tblTripsAndVMT	WorkerTripNumber	135.00	0.00
tblTripsAndVMT	WorkerTripNumber	135.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	135.00	0.00
tblTripsAndVMT	WorkerTripNumber	676.00	0.00
tblTripsAndVMT	WorkerTripNumber	676.00	0.00
tblTripsAndVMT	WorkerTripNumber	676.00	0.00

tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	1.2124	2.8009	2.3007	4.5700e-003	0.0000	0.1360	0.1360	0.0000	0.1260	0.1260	0.0000	399.3041	399.3041	0.1183	0.0000	402.2604
2024	21.0502	5.2270	6.9361	0.0119	0.0000	0.2129	0.2129	0.0000	0.2016	0.2016	0.0000	1,037.4006	1,037.4006	0.2544	0.0000	1,043.7601
2025	5.3348	0.7848	1.3521	2.1700e-003	0.0000	0.0264	0.0264	0.0000	0.0255	0.0255	0.0000	188.7129	188.7129	0.0418	0.0000	189.7570
Maximum	**21.0502**	**5.2270**	**6.9361**	**0.0119**	**0.0000**	**0.2129**	**0.2129**	**0.0000**	**0.2016**	**0.2016**	**0.0000**	**1,037.4006**	**1,037.4006**	**0.2544**	**0.0000**	**1,043.7601**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.9791	0.9678	1.5894	4.5700e-003	0.0000	8.8000e-003	8.8000e-003	0.0000	8.8000e-003	8.8000e-003	0.0000	190.2494	190.2494	0.0506	0.0000	191.5154
2024	20.7113	4.4236	6.7373	0.0119	0.0000	0.1028	0.1028	0.0000	0.1028	0.1028	0.0000	830.7861	830.7861	0.1876	0.0000	835.4751
2025	5.2965	0.9721	1.4574	2.1700e-003	0.0000	0.0254	0.0254	0.0000	0.0254	0.0254	0.0000	180.8707	180.8707	0.0392	0.0000	181.8513

Maximum	20.7113	4.4236	6.7373	0.0119	0.0000	0.1028	0.1028	0.0000	0.1028	0.1028	0.0000	830.7861	830.7861	0.1876	0.0000	835.4751

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	2.21	27.79	7.60	0.00	0.00	63.50	63.50	0.00	61.20	61.20	0.00	26.06	26.06	33.05	0.00	26.10

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-4-2023	4-3-2023	0.3298	0.0958
2	4-4-2023	7-3-2023	0.7364	0.2133
3	7-4-2023	10-3-2023	0.9614	0.2776
4	10-4-2023	1-3-2024	2.1131	1.4617
5	1-4-2024	4-3-2024	4.7820	4.2924
6	4-4-2024	7-3-2024	7.2651	6.8491
7	7-4-2024	10-3-2024	7.8770	7.6676
8	10-4-2024	1-3-2025	6.4200	6.4176
9	1-4-2025	4-3-2025	3.5315	3.5948
10	4-4-2025	7-3-2025	1.4914	1.5442
11	7-4-2025	9-30-2025	0.9014	0.9333
		Highest	7.8770	7.6676

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Bldg 1 Building Construction	Building Construction	1/4/2023	7/29/2024	5	409	
2	Bldg 2 Building Construction	Building Construction	3/3/2023	8/22/2024	5	385	
3	Bldg 3 Building Construction	Building Construction	4/25/2023	11/4/2024	5	400	
4	Bldg 4 Building Construction	Building Construction	6/10/2023	2/14/2025	5	440	
5	Bldg 1 Architectural Coating	Architectural Coating	11/9/2023	11/13/2024	5	265	
6	Bldg 2 Architectural Coating	Architectural Coating	1/10/2024	1/13/2025	5	264	

7	Bldg 1 Paving	Paving	3/6/2024	4/8/2024	5	24	
8	Bldg 3 Architectural Coating	Architectural Coating	3/24/2024	3/27/2025	5	264	
9	Bldg 2 Paving	Paving	5/1/2024	6/3/2024	5	24	
10	Bldg 4 Architectural Coating	Architectural Coating	5/23/2024	8/27/2025	5	330	
11	Bldg 3 Paving	Paving	7/10/2024	8/14/2024	5	26	
12	Bldg 4 Paving	Paving	1/9/2025	3/5/2025	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 1,154,250; Residential Outdoor: 384,750; Non-Residential Indoor: 765,000; Non-Residential Outdoor: 255,000;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Bldg 1 Architectural Coating	Air Compressors	2	8.00	78	0.48
Bldg 4 Architectural Coating	Air Compressors	2	6.40	78	0.48
Bldg 2 Architectural Coating	Air Compressors	2	8.00	78	0.48
Bldg 3 Architectural Coating	Air Compressors	2	8.00	78	0.48
Bldg 1 Building Construction	Cranes	1	8.40	231	0.29
Bldg 1 Building Construction	Forklifts	3	6.70	89	0.20
Bldg 1 Building Construction	Generator Sets	0	0.00	84	0.74
Bldg 1 Paving	Pavers	1	3.70	130	0.42
Bldg 1 Paving	Rollers	2	3.70	80	0.38
Bldg 4 Building Construction	Cranes	1	7.50	231	0.29
Bldg 2 Building Construction	Cranes	1	8.60	231	0.29
Bldg 1 Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Bldg 3 Building Construction	Cranes	1	8.30	231	0.29
Bldg 4 Building Construction	Forklifts	3	6.00	89	0.20
Bldg 1 Paving	Paving Equipment	1	3.70	132	0.36
Bldg 2 Building Construction	Forklifts	3	6.90	89	0.20

Bldg 3 Building Construction	Forklifts	3	6.60	89	0.20
Bldg 4 Building Construction	Generator Sets	0	0.00	84	0.74
Bldg 1 Building Construction	Welders	1	0.60	46	0.45
Bldg 2 Building Construction	Generator Sets	0	0.00	84	0.74
Bldg 3 Building Construction	Generator Sets	0	0.00	84	0.74
Bldg 4 Paving	Pavers	1	2.20	130	0.42
Bldg 2 Paving	Pavers	1	3.70	130	0.42
Bldg 3 Paving	Pavers	1	3.40	130	0.42
Bldg 4 Paving	Paving Equipment	1	2.20	132	0.36
Bldg 2 Paving	Paving Equipment	1	3.70	132	0.36
Bldg 3 Paving	Paving Equipment	1	3.40	132	0.36
Bldg 4 Paving	Rollers	2	2.20	80	0.38
Bldg 2 Paving	Rollers	2	3.70	80	0.38
Bldg 3 Paving	Rollers	2	3.40	80	0.38
Bldg 4 Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Bldg 2 Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Bldg 3 Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Bldg 4 Building Construction	Welders	1	0.60	46	0.45
Bldg 2 Building Construction	Welders	1	0.70	46	0.45
Bldg 3 Building Construction	Welders	1	0.70	46	0.45
Bldg 1 Building Construction	Pumps	1	0.90	84	0.74
Bldg 2 Building Construction	Pumps	1	0.90	84	0.74
Bldg 3 Building Construction	Pumps	1	0.70	84	0.74
Bldg 4 Building Construction	Pumps	1	0.60	84	0.74
Bldg 1 Architectural Coating	Aerial Lifts	6	8.00	63	0.31
Bldg 2 Architectural Coating	Aerial Lifts	6	8.00	63	0.31
Bldg 1 Paving	Tractors/Loaders/Backhoes	2	7.30	97	0.37
Bldg 3 Architectural Coating	Aerial Lifts	6	8.00	63	0.31
Bldg 2 Paving	Tractors/Loaders/Backhoes	2	7.30	97	0.37
Bldg 4 Architectural Coating	Aerial Lifts	6	6.40	63	0.31

Bldg 3 Paving	Tractors/Loaders/Backhoes	2	6.80	97	0.37
Bldg 4 Paving	Tractors/Loaders/Backhoes	2	4.40	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Bldg 1 Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 1 Building Construction	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 4 Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 2 Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 1 Paving	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 3 Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 4 Building Construction	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 2 Building Construction	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 3 Building Construction	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 4 Paving	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 2 Paving	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 3 Paving	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Bldg 1 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0881	0.8816	0.6898	1.4000e-003		0.0433	0.0433		0.0400	0.0400	0.0000	122.2158	122.2158	0.0369	0.0000	123.1373
Total	**0.0881**	**0.8816**	**0.6898**	**1.4000e-003**		**0.0433**	**0.0433**		**0.0400**	**0.0400**	**0.0000**	**122.2158**	**122.2158**	**0.0369**	**0.0000**	**123.1373**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0134	0.2679	0.4498	1.4000e-003		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003	0.0000	53.5490	53.5490	0.0147	0.0000	53.9153

Total	**0.0134**	**0.2679**	**0.4498**	**1.4000e-003**		**1.3900e-003**	**1.3900e-003**		**1.3900e-003**	**1.3900e-003**	**0.0000**	**53.5490**	**53.5490**	**0.0147**	**0.0000**	**53.9153**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Bldg 1 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0481	0.4751	0.3978	8.2000e-004		0.0225	0.0225		0.0208	0.0208	0.0000	71.5285	71.5285	0.0216	0.0000	72.0675
Total	**0.0481**	**0.4751**	**0.3978**	**8.2000e-004**		**0.0225**	**0.0225**		**0.0208**	**0.0208**	**0.0000**	**71.5285**	**71.5285**	**0.0216**	**0.0000**	**72.0675**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.8200e-003	0.1568	0.2633	8.2000e-004		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	31.3407	31.3407	8.5600e-003	0.0000	31.5547
Total	**7.8200e-003**	**0.1568**	**0.2633**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**31.3407**	**31.3407**	**8.5600e-003**	**0.0000**	**31.5547**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Bldg 2 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0758	0.7580	0.5940	1.2000e-003		0.0372	0.0372		0.0344	0.0344	0.0000	105.0308	105.0308	0.0317	0.0000	105.8229
Total	**0.0758**	**0.7580**	**0.5940**	**1.2000e-003**		**0.0372**	**0.0372**		**0.0344**	**0.0344**	**0.0000**	**105.0308**	**105.0308**	**0.0317**	**0.0000**	**105.8229**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0115	0.2320	0.3880	1.2000e-003		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	46.1736	46.1736	0.0127	0.0000	46.4897
Total	**0.0115**	**0.2320**	**0.3880**	**1.2000e-003**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**	**0.0000**	**46.1736**	**46.1736**	**0.0127**	**0.0000**	**46.4897**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Bldg 2 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0554	0.5462	0.4580	9.4000e-004		0.0259	0.0259		0.0239	0.0239	0.0000	82.1759	82.1759	0.0248	0.0000	82.7951
Total	**0.0554**	**0.5462**	**0.4580**	**9.4000e-004**		**0.0259**	**0.0259**		**0.0239**	**0.0239**	**0.0000**	**82.1759**	**82.1759**	**0.0248**	**0.0000**	**82.7951**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	9.0200e-003	0.1815	0.3036	9.4000e-004		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	36.1266	36.1266	9.8700e-003	0.0000	36.3734
Total	**9.0200e-003**	**0.1815**	**0.3036**	**9.4000e-004**		**9.8000e-004**	**9.8000e-004**		**9.8000e-004**	**9.8000e-004**	**0.0000**	**36.1266**	**36.1266**	**9.8700e-003**	**0.0000**	**36.3734**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Bldg 3 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0599	0.5996	0.4662	9.5000e-004		0.0294	0.0294		0.0272	0.0272	0.0000	82.7212	82.7212	0.0252	0.0000	83.3514
Total	**0.0599**	**0.5996**	**0.4662**	**9.5000e-004**		**0.0294**	**0.0294**		**0.0272**	**0.0272**	**0.0000**	**82.7212**	**82.7212**	**0.0252**	**0.0000**	**83.3514**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.9400e-003	0.1802	0.3008	9.5000e-004		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004	0.0000	35.6475	35.6475	9.9800e-003	0.0000	35.8971
Total	**8.9400e-003**	**0.1802**	**0.3008**	**9.5000e-004**		**9.9000e-004**	**9.9000e-004**		**9.9000e-004**	**9.9000e-004**	**0.0000**	**35.6475**	**35.6475**	**9.9800e-003**	**0.0000**	**35.8971**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Bldg 3 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0690	0.6817	0.5671	1.1700e-003		0.0323	0.0323		0.0298	0.0298	0.0000	102.1294	102.1294	0.0311	0.0000	102.9069
Total	**0.0690**	**0.6817**	**0.5671**	**1.1700e-003**		**0.0323**	**0.0323**		**0.0298**	**0.0298**	**0.0000**	**102.1294**	**102.1294**	**0.0311**	**0.0000**	**102.9069**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.2225	0.3714	1.1700e-003		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	44.0117	44.0117	0.0123	0.0000	44.3193
Total	**0.0110**	**0.2225**	**0.3714**	**1.1700e-003**		**1.2200e-003**	**1.2200e-003**		**1.2200e-003**	**1.2200e-003**	**0.0000**	**44.0117**	**44.0117**	**0.0123**	**0.0000**	**44.3193**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Bldg 4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0438	0.4386	0.3408	6.9000e-004		0.0215	0.0215		0.0199	0.0199	0.0000	60.4600	60.4600	0.0185	0.0000	60.9220
Total	**0.0438**	**0.4386**	**0.3408**	**6.9000e-004**		**0.0215**	**0.0215**		**0.0199**	**0.0199**	**0.0000**	**60.4600**	**60.4600**	**0.0185**	**0.0000**	**60.9220**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.5300e-003	0.1314	0.2197	6.9000e-004		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	26.0030	26.0030	7.3400e-003	0.0000	26.1864
Total	**6.5300e-003**	**0.1314**	**0.2197**	**6.9000e-004**		**7.1000e-004**	**7.1000e-004**		**7.1000e-004**	**7.1000e-004**	**0.0000**	**26.0030**	**26.0030**	**7.3400e-003**	**0.0000**	**26.1864**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Bldg 4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	0.0738	0.7297	0.6067	1.2500e-003		0.0346	0.0346		0.0319	0.0319	0.0000	109.2436	109.2436	0.0334	0.0000	110.0778
Total	**0.0738**	**0.7297**	**0.6067**	**1.2500e-003**		**0.0346**	**0.0346**		**0.0319**	**0.0319**	**0.0000**	**109.2436**	**109.2436**	**0.0334**	**0.0000**	**110.0778**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0118	0.2374	0.3969	1.2500e-003		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	46.9847	46.9847	0.0132	0.0000	47.3156
Total	**0.0118**	**0.2374**	**0.3969**	**1.2500e-003**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**46.9847**	**46.9847**	**0.0132**	**0.0000**	**47.3156**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Bldg 4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.6900e-003	0.0841	0.0756	1.6000e-004		3.8900e-003	3.8900e-003		3.5900e-003	3.5900e-003	0.0000	13.7600	13.7600	4.2000e-003	0.0000	13.8649
Total	**8.6900e-003**	**0.0841**	**0.0756**	**1.6000e-004**		**3.8900e-003**	**3.8900e-003**		**3.5900e-003**	**3.5900e-003**	**0.0000**	**13.7600**	**13.7600**	**4.2000e-003**	**0.0000**	**13.8649**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4900e-003	0.0299	0.0500	1.6000e-004		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	5.9179	5.9179	1.6600e-003	0.0000	5.9595
Total	**1.4900e-003**	**0.0299**	**0.0500**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**	**0.0000**	**5.9179**	**5.9179**	**1.6600e-003**	**0.0000**	**5.9595**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Bldg 1 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9315					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1231	0.2099	3.3000e-004		4.5100e-003	4.5100e-003		4.4300e-003	4.4300e-003	0.0000	28.8764	28.8764	6.0200e-003	0.0000	29.0269
Total	**0.9448**	**0.1231**	**0.2099**	**3.3000e-004**		**4.5100e-003**	**4.5100e-003**		**4.4300e-003**	**4.4300e-003**	**0.0000**	**28.8764**	**28.8764**	**6.0200e-003**	**0.0000**	**29.0269**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9315					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.2500e-003	0.1564	0.2310	3.3000e-004		4.4500e-003	4.4500e-003		4.4500e-003	4.4500e-003	0.0000	28.8764	28.8764	6.0200e-003	0.0000	29.0268
Total	**0.9388**	**0.1564**	**0.2310**	**3.3000e-004**		**4.4500e-003**	**4.4500e-003**		**4.4500e-003**	**4.4500e-003**	**0.0000**	**28.8764**	**28.8764**	**6.0200e-003**	**0.0000**	**29.0268**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Bldg 1 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.7403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0785	0.7284	1.2934	2.0500e-003		0.0247	0.0247		0.0242	0.0242	0.0000	177.9410	177.9410	0.0368	0.0000	178.8614
Total	**5.8188**	**0.7284**	**1.2934**	**2.0500e-003**		**0.0247**	**0.0247**		**0.0242**	**0.0242**	**0.0000**	**177.9410**	**177.9410**	**0.0368**	**0.0000**	**178.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.7403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0447	0.9640	1.4237	2.0500e-003		0.0274	0.0274		0.0274	0.0274	0.0000	177.9407	177.9407	0.0368	0.0000	178.8612
Total	**5.7849**	**0.9640**	**1.4237**	**2.0500e-003**		**0.0274**	**0.0274**		**0.0274**	**0.0274**	**0.0000**	**177.9407**	**177.9407**	**0.0368**	**0.0000**	**178.8612**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Bldg 2 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.4444					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0878	0.8147	1.4466	2.2900e-003		0.0277	0.0277		0.0271	0.0271	0.0000	199.0129	199.0129	0.0412	0.0000	200.0423
Total	**6.5321**	**0.8147**	**1.4466**	**2.2900e-003**		**0.0277**	**0.0277**		**0.0271**	**0.0271**	**0.0000**	**199.0129**	**199.0129**	**0.0412**	**0.0000**	**200.0423**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.4444					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0500	1.0782	1.5923	2.2900e-003		0.0307	0.0307		0.0307	0.0307	0.0000	199.0127	199.0127	0.0412	0.0000	200.0421
Total	**6.4943**	**1.0782**	**1.5923**	**2.2900e-003**		**0.0307**	**0.0307**		**0.0307**	**0.0307**	**0.0000**	**199.0127**	**199.0127**	**0.0412**	**0.0000**	**200.0421**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Bldg 2 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2275					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9600e-003	0.0277	0.0510	8.0000e-005		8.6000e-004	8.6000e-004		8.4000e-004	8.4000e-004	0.0000	7.0240	7.0240	1.4500e-003	0.0000	7.0602
Total	**0.2304**	**0.0277**	**0.0510**	**8.0000e-005**		**8.6000e-004**	**8.6000e-004**		**8.4000e-004**	**8.4000e-004**	**0.0000**	**7.0240**	**7.0240**	**1.4500e-003**	**0.0000**	**7.0602**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2275					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7600e-003	0.0381	0.0562	8.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003	0.0000	7.0240	7.0240	1.4500e-003	0.0000	7.0602
Total	**0.2292**	**0.0381**	**0.0562**	**8.0000e-005**		**1.0800e-003**	**1.0800e-003**		**1.0800e-003**	**1.0800e-003**	**0.0000**	**7.0240**	**7.0240**	**1.4500e-003**	**0.0000**	**7.0602**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.8 Bldg 1 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.6900e-003	0.0665	0.0996	1.5000e-004		3.2000e-003	3.2000e-003		2.9400e-003	2.9400e-003	0.0000	12.8080	12.8080	4.1400e-003	0.0000	12.9115
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.6900e-003**	**0.0665**	**0.0996**	**1.5000e-004**		**3.2000e-003**	**3.2000e-003**		**2.9400e-003**	**2.9400e-003**	**0.0000**	**12.8080**	**12.8080**	**4.1400e-003**	**0.0000**	**12.9115**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	2.7700e-003	0.0638	0.1101	1.5000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	12.8079	12.8079	4.1400e-003	0.0000	12.9115
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.7700e-003**	**0.0638**	**0.1101**	**1.5000e-004**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**12.8079**	**12.8079**	**4.1400e-003**	**0.0000**	**12.9115**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.9 Bldg 3 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.1049					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0695	0.6453	1.1459	1.8100e-003		0.0219	0.0219		0.0215	0.0215	0.0000	157.6494	157.6494	0.0326	0.0000	158.4649

Total	**5.1745**	**0.6453**	**1.1459**	**1.8100e-003**		**0.0219**	**0.0219**		**0.0215**	**0.0215**	**0.0000**	**157.6494**	**157.6494**	**0.0326**	**0.0000**	**158.4649**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.1049					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0396	0.8541	1.2614	1.8100e-003		0.0243	0.0243		0.0243	0.0243	0.0000	157.6493	157.6493	0.0326	0.0000	158.4647
Total	**5.1445**	**0.8541**	**1.2614**	**1.8100e-003**		**0.0243**	**0.0243**		**0.0243**	**0.0243**	**0.0000**	**157.6493**	**157.6493**	**0.0326**	**0.0000**	**158.4647**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.9 Bldg 3 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.5669					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.1909	0.3513	5.6000e-004		5.9000e-003	5.9000e-003		5.7700e-003	5.7700e-003	0.0000	48.3875	48.3875	9.9700e-003	0.0000	48.6368
Total	**1.5873**	**0.1909**	**0.3513**	**5.6000e-004**		**5.9000e-003**	**5.9000e-003**		**5.7700e-003**	**5.7700e-003**	**0.0000**	**48.3875**	**48.3875**	**9.9700e-003**	**0.0000**	**48.6368**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.5669					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0122	0.2621	0.3872	5.6000e-004		7.4600e-003	7.4600e-003		7.4600e-003	7.4600e-003	0.0000	48.3874	48.3874	9.9700e-003	0.0000	48.6368
Total	**1.5790**	**0.2621**	**0.3872**	**5.6000e-004**		**7.4600e-003**	**7.4600e-003**		**7.4600e-003**	**7.4600e-003**	**0.0000**	**48.3874**	**48.3874**	**9.9700e-003**	**0.0000**	**48.6368**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.10 Bldg 2 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.6900e-003	0.0665	0.0996	1.5000e-004		3.2000e-003	3.2000e-003		2.9400e-003	2.9400e-003	0.0000	12.8080	12.8080	4.1400e-003	0.0000	12.9115
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.6900e-003**	**0.0665**	**0.0996**	**1.5000e-004**		**3.2000e-003**	**3.2000e-003**		**2.9400e-003**	**2.9400e-003**	**0.0000**	**12.8080**	**12.8080**	**4.1400e-003**	**0.0000**	**12.9115**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.7700e-003	0.0638	0.1101	1.5000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	12.8079	12.8079	4.1400e-003	0.0000	12.9115
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.7700e-003**	**0.0638**	**0.1101**	**1.5000e-004**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**12.8079**	**12.8079**	**4.1400e-003**	**0.0000**	**12.9115**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.11 Bldg 4 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Archit. Coating	3.2146					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0438	0.4064	0.7216	1.1400e-003		0.0138	0.0138		0.0135	0.0135	0.0000	99.2723	99.2723	0.0205	0.0000	99.7858
Total	**3.2584**	**0.4064**	**0.7216**	**1.1400e-003**		**0.0138**	**0.0138**		**0.0135**	**0.0135**	**0.0000**	**99.2723**	**99.2723**	**0.0205**	**0.0000**	**99.7858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.2146					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0249	0.5378	0.7943	1.1400e-003		0.0153	0.0153		0.0153	0.0153	0.0000	99.2722	99.2722	0.0205	0.0000	99.7857
Total	**3.2395**	**0.5378**	**0.7943**	**1.1400e-003**		**0.0153**	**0.0153**		**0.0153**	**0.0153**	**0.0000**	**99.2722**	**99.2722**	**0.0205**	**0.0000**	**99.7857**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.11 Bldg 4 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.4572					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0451	0.4213	0.7751	1.2300e-003		0.0130	0.0130		0.0127	0.0127	0.0000	106.7646	106.7646	0.0220	0.0000	107.3148
Total	**3.5023**	**0.4213**	**0.7751**	**1.2300e-003**		**0.0130**	**0.0130**		**0.0127**	**0.0127**	**0.0000**	**106.7646**	**106.7646**	**0.0220**	**0.0000**	**107.3148**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.4572					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0268	0.5784	0.8542	1.2300e-003		0.0165	0.0165		0.0165	0.0165	0.0000	106.7644	106.7644	0.0220	0.0000	107.3146
Total	**3.4840**	**0.5784**	**0.8542**	**1.2300e-003**		**0.0165**	**0.0165**		**0.0165**	**0.0165**	**0.0000**	**106.7644**	**106.7644**	**0.0220**	**0.0000**	**107.3146**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.12 Bldg 3 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7000e-003	0.0666	0.0998	1.5000e-004		3.2000e-003	3.2000e-003		2.9500e-003	2.9500e-003	0.0000	12.8317	12.8317	4.1500e-003	0.0000	12.9354
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7000e-003**	**0.0666**	**0.0998**	**1.5000e-004**		**3.2000e-003**	**3.2000e-003**		**2.9500e-003**	**2.9500e-003**	**0.0000**	**12.8317**	**12.8317**	**4.1500e-003**	**0.0000**	**12.9354**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.7800e-003	0.0639	0.1103	1.5000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	12.8317	12.8317	4.1500e-003	0.0000	12.9354
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.7800e-003**	**0.0639**	**0.1103**	**1.5000e-004**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**12.8317**	**12.8317**	**4.1500e-003**	**0.0000**	**12.9354**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.13 Bldg 4 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.1600e-003	0.0608	0.0991	1.5000e-004		2.7400e-003	2.7400e-003		2.5200e-003	2.5200e-003	0.0000	12.7770	12.7770	4.1300e-003	0.0000	12.8803
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.1600e-003**	**0.0608**	**0.0991**	**1.5000e-004**		**2.7400e-003**	**2.7400e-003**		**2.5200e-003**	**2.5200e-003**	**0.0000**	**12.7770**	**12.7770**	**4.1300e-003**	**0.0000**	**12.8803**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.7700e-003	0.0636	0.1098	1.5000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	12.7769	12.7769	4.1300e-003	0.0000	12.8802

Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.7700e-003**	**0.0636**	**0.1098**	**1.5000e-004**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**12.7769**	**12.7769**	**4.1300e-003**	**0.0000**	**12.8802**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

El Paseo Opt 2 (No Ed), San Jose - Construction Podium Unmitigated

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	1,036.00	Space	8.85	366,620.00	0
Parking Lot	157.00	Space	0.00	62,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2018 Rate

Land Use - Land uses based on provided PD/Construction worksheet

Construction Phase - Provided construciton schedule

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Trips and VMT - 0 Trips EMFAC2017, pavement demo = 4,500tons, building const = 5,000 cement truck round trips

Demolition - existing building demo = 99,535sf

Grading - grading = 223,108cy export

Construction Off-road Equipment Mitigation - BMPs, Tier 4 interim engine mitigation, electric cranes

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	55.00
tblConstructionPhase	NumDays	20.00	145.00
tblConstructionPhase	NumDays	230.00	15.00
tblConstructionPhase	NumDays	230.00	237.00

tblGrading	MaterialExported	0.00	223,108.00
tblLandUse	LandUseSquareFeet	414,400.00	366,620.00
tblLandUse	LotAcreage	9.32	8.85
tblLandUse	LotAcreage	1.41	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	8.00
tblOffRoadEquipment	UsageHours	8.00	1.80
tblOffRoadEquipment	UsageHours	8.00	5.10
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	4.70
tblOffRoadEquipment	UsageHours	8.00	0.60
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	4.70
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	HaulingTripNumber	453.00	0.00
tblTripsAndVMT	HaulingTripNumber	27,889.00	0.00
tblTripsAndVMT	VendorTripNumber	70.00	0.00
tblTripsAndVMT	VendorTripNumber	70.00	0.00
tblTripsAndVMT	WorkerTripNumber	33.00	0.00
tblTripsAndVMT	WorkerTripNumber	25.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	180.00	0.00
tblTripsAndVMT	WorkerTripNumber	180.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0716	0.6749	0.8583	1.3200e-003	0.0703	0.0361	0.1064	0.0103	0.0338	0.0440	0.0000	115.6257	115.6257	0.0323	0.0000	116.4340
2022	0.1306	1.2762	1.2856	2.2400e-003	0.0213	0.0642	0.0855	2.8400e-003	0.0598	0.0626	0.0000	195.6419	195.6419	0.0554	0.0000	197.0259

2023	0.3323	3.2648	2.5633	5.1500e-003	0.0000	0.1595	0.1595	0.0000	0.1475	0.1475	0.0000	448.6977	448.6977	0.1357	0.0000	452.0899
Maximum	**0.3323**	**3.2648**	**2.5633**	**5.1500e-003**	**0.0703**	**0.1595**	**0.1595**	**0.0103**	**0.1475**	**0.1475**	**0.0000**	**448.6977**	**448.6977**	**0.1357**	**0.0000**	**452.0899**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0225	0.5544	0.9593	1.3200e-003	0.0316	2.0900e-003	0.0337	4.6200e-003	2.0900e-003	6.7100e-003	0.0000	115.6255	115.6255	0.0323	0.0000	116.4339
2022	0.0314	0.7095	1.2036	2.2400e-003	9.5700e-003	3.4800e-003	0.0131	1.2800e-003	3.4800e-003	4.7600e-003	0.0000	146.2129	146.2129	0.0394	0.0000	147.1973
2023	0.0495	1.0439	1.6687	5.1500e-003	0.0000	7.9100e-003	7.9100e-003	0.0000	7.9100e-003	7.9100e-003	0.0000	197.7561	197.7561	0.0545	0.0000	199.1193
Maximum	**0.0495**	**1.0439**	**1.6687**	**5.1500e-003**	**0.0316**	**7.9100e-003**	**0.0337**	**4.6200e-003**	**7.9100e-003**	**7.9100e-003**	**0.0000**	**197.7561**	**197.7561**	**0.0545**	**0.0000**	**199.1193**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**80.65**	**55.75**	**18.60**	**0.00**	**55.00**	**94.81**	**84.44**	**54.96**	**94.41**	**92.37**	**0.00**	**39.52**	**39.52**	**43.49**	**0.00**	**39.55**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	0.6283	0.4884
2	**12-1-2021**	**2-28-2022**	0.3081	0.2536
3	**3-1-2022**	**5-31-2022**	0.2370	0.2057
4	**6-1-2022**	**8-31-2022**	0.0944	0.0708
5	**9-1-2022**	**11-30-2022**	0.4166	0.1592
6	**12-1-2022**	**2-28-2023**	1.2261	0.3708
7	**3-1-2023**	**5-31-2023**	1.1938	0.3629
8	**6-1-2023**	**8-31-2023**	1.1938	0.3629
9	**9-1-2023**	**9-30-2023**	0.3893	0.1183

		Highest	1.2261	0.4884

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	11/16/2021	5	55	
2	Grading	Grading	10/22/2021	5/12/2022	5	145	
3	Trenching	Trenching	7/15/2022	12/21/2022	5	114	
4	Concrete	Building Construction	7/15/2022	8/4/2022	5	15	
5	Building Construction	Building Construction	11/8/2022	10/4/2023	5	237	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 16.31

Acres of Paving: 8.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	4	1.80	81	0.73
Demolition	Crushing/Proc. Equipment	1	2.90	85	0.78
Demolition	Excavators	4	5.10	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	4	6.50	97	0.37
Grading	Excavators	3	4.70	158	0.38
Grading	Graders	3	0.60	187	0.41
Grading	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Tractors/Loaders/Backhoes	4	4.70	97	0.37
Trenching	Pumps	2	1.80	84	0.74
Trenching	Tractors/Loaders/Backhoes	2	2.80	97	0.37

Concrete	Cranes	0	0.00	231	0.29
Concrete	Forklifts	0	0.00	89	0.20
Concrete	Generator Sets	0	0.00	84	0.74
Concrete	Pumps	1	15.00	84	0.74
Concrete	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Concrete	Welders	0	0.00	46	0.45
Building Construction	Cranes	4	10.00	231	0.29
Building Construction	Forklifts	12	8.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Pumps	2	1.40	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Building Construction	Welders	8	1.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	13	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	10	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Concrete	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	26	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0490	0.0000	0.0490	7.4200e-003	0.0000	7.4200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0474	0.4305	0.5656	8.6000e-004		0.0237	0.0237		0.0223	0.0223	0.0000	75.5339	75.5339	0.0194	0.0000	76.0181
Total	**0.0474**	**0.4305**	**0.5656**	**8.6000e-004**	**0.0490**	**0.0237**	**0.0727**	**7.4200e-003**	**0.0223**	**0.0297**	**0.0000**	**75.5339**	**75.5339**	**0.0194**	**0.0000**	**76.0181**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.0220	0.0000	0.0220	3.3400e-003	0.0000	3.3400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0148	0.3609	0.6227	8.6000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	75.5338	75.5338	0.0194	0.0000	76.0180
Total	**0.0148**	**0.3609**	**0.6227**	**8.6000e-004**	**0.0220**	**1.3500e-003**	**0.0234**	**3.3400e-003**	**1.3500e-003**	**4.6900e-003**	**0.0000**	**75.5338**	**75.5338**	**0.0194**	**0.0000**	**76.0180**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0213	0.0000	0.0213	2.8400e-003	0.0000	2.8400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0241	0.2444	0.2926	4.6000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	40.0918	40.0918	0.0130	0.0000	40.4159
Total	**0.0241**	**0.2444**	**0.2926**	**4.6000e-004**	**0.0213**	**0.0125**	**0.0337**	**2.8400e-003**	**0.0115**	**0.0143**	**0.0000**	**40.0918**	**40.0918**	**0.0130**	**0.0000**	**40.4159**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.5700e-003	0.0000	9.5700e-003	1.2800e-003	0.0000	1.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6500e-003	0.1935	0.3366	4.6000e-004		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	40.0917	40.0917	0.0130	0.0000	40.4159
Total	**7.6500e-003**	**0.1935**	**0.3366**	**4.6000e-004**	**9.5700e-003**	**7.5000e-004**	**0.0103**	**1.2800e-003**	**7.5000e-004**	**2.0300e-003**	**0.0000**	**40.0917**	**40.0917**	**0.0130**	**0.0000**	**40.4159**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0213	0.0000	0.0213	2.8400e-003	0.0000	2.8400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0394	0.3879	0.5350	8.4000e-004		0.0188	0.0188		0.0173	0.0173	0.0000	73.9114	73.9114	0.0239	0.0000	74.5090
Total	**0.0394**	**0.3879**	**0.5350**	**8.4000e-004**	**0.0213**	**0.0188**	**0.0401**	**2.8400e-003**	**0.0173**	**0.0202**	**0.0000**	**73.9114**	**73.9114**	**0.0239**	**0.0000**	**74.5090**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.5700e-003	0.0000	9.5700e-003	1.2800e-003	0.0000	1.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0141	0.3567	0.6204	8.4000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003	0.0000	73.9113	73.9113	0.0239	0.0000	74.5089
Total	**0.0141**	**0.3567**	**0.6204**	**8.4000e-004**	**9.5700e-003**	**1.3800e-003**	**0.0110**	**1.2800e-003**	**1.3800e-003**	**2.6600e-003**	**0.0000**	**73.9113**	**73.9113**	**0.0239**	**0.0000**	**74.5089**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Trenching - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0156	0.1430	0.1850	2.9000e-004		7.5900e-003	7.5900e-003		7.3000e-003	7.3000e-003	0.0000	25.4014	25.4014	4.2700e-003	0.0000	25.5081
Total	**0.0156**	**0.1430**	**0.1850**	**2.9000e-004**		**7.5900e-003**	**7.5900e-003**		**7.3000e-003**	**7.3000e-003**	**0.0000**	**25.4014**	**25.4014**	**4.2700e-003**	**0.0000**	**25.5081**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.8700e-003	0.1142	0.1975	2.9000e-004		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	25.4014	25.4014	4.2700e-003	0.0000	25.5081
Total	**5.8700e-003**	**0.1142**	**0.1975**	**2.9000e-004**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**25.4014**	**25.4014**	**4.2700e-003**	**0.0000**	**25.5081**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Concrete - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.9500e-003	0.0418	0.0525	9.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003	0.0000	7.9482	7.9482	4.1000e-004	0.0000	7.9584

Total	**4.9500e-003**	**0.0418**	**0.0525**	**9.0000e-005**		**2.1900e-003**	**2.1900e-003**		**2.1900e-003**	**2.1900e-003**	**0.0000**	**7.9482**	**7.9482**	**4.1000e-004**	**0.0000**	**7.9584**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7000e-003	0.0330	0.0570	9.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	7.9482	7.9482	4.1000e-004	0.0000	7.9584
Total	**1.7000e-003**	**0.0330**	**0.0570**	**9.0000e-005**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**7.9482**	**7.9482**	**4.1000e-004**	**0.0000**	**7.9584**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0708	0.7036	0.5130	1.0100e-003		0.0356	0.0356		0.0329	0.0329	0.0000	88.3808	88.3808	0.0268	0.0000	89.0505
Total	**0.0708**	**0.7036**	**0.5130**	**1.0100e-003**		**0.0356**	**0.0356**		**0.0329**	**0.0329**	**0.0000**	**88.3808**	**88.3808**	**0.0268**	**0.0000**	**89.0505**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.7600e-003	0.2056	0.3287	1.0100e-003		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	38.9520	38.9520	0.0108	0.0000	39.2219
Total	**9.7600e-003**	**0.2056**	**0.3287**	**1.0100e-003**		**1.5600e-003**	**1.5600e-003**		**1.5600e-003**	**1.5600e-003**	**0.0000**	**38.9520**	**38.9520**	**0.0108**	**0.0000**	**39.2219**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3323	3.2648	2.5633	5.1500e-003		0.1595	0.1595		0.1475	0.1475	0.0000	448.6977	448.6977	0.1357	0.0000	452.0899
Total	**0.3323**	**3.2648**	**2.5633**	**5.1500e-003**		**0.1595**	**0.1595**		**0.1475**	**0.1475**	**0.0000**	**448.6977**	**448.6977**	**0.1357**	**0.0000**	**452.0899**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0495	1.0439	1.6687	5.1500e-003		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003	0.0000	197.7561	197.7561	0.0545	0.0000	199.1193
Total	**0.0495**	**1.0439**	**1.6687**	**5.1500e-003**		**7.9100e-003**	**7.9100e-003**		**7.9100e-003**	**7.9100e-003**	**0.0000**	**197.7561**	**197.7561**	**0.0545**	**0.0000**	**199.1193**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

El Paseo Opt 2 (No Ed), San Jose - Construction Bldgs 1-3 Unmitigated

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	444.00	Space	0.00	184,395.00	0
Apartments Mid Rise	820.00	Dwelling Unit	4.42	939,657.00	2345
Strip Mall	159.00	1000sqft	4.42	159,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2018 Rate

Land Use - and uses based on PD/Construction worksheet from Opt 2 Bldgs 1-3

Construction Phase - Provided construction schedule from Opt 2 Bldgs 1-3

Off-road Equipment -

Off-road Equipment - Provided construction equip & hours for Opt 2 Bldgs 1-3

Off-road Equipment - Provided construction equip & hours for Opt 2 Bldgs 1-3

Off-road Equipment - Provided construction equip & hours for Opt 2 Bldgs 1-3

Off-road Equipment - Provided construction equip & hours for Opt 2 Bldgs 1-3

Off-road Equipment - Provided construction equip & hours for Opt 2 Bldgs 1-3

Off-road Equipment - Provided construction equip & hours for Opt 2 Bldgs 1-3

Off-road Equipment - Provided construction equip & hours for Opt 2 Bldgs 1-3

Trips and VMT - 0 Trips EMFAC2017, Bldg 1 - 850 cement truck round trips, Bldg 2 - 600 cement truck round trips, Bldg 3 - 825 cement truck round trips

Construction Off-road Equipment Mitigation - BMPs, Tier 4 interim engine mitigatoin, Electric cranes

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	307.00

tblConstructionPhase	NumDays	20.00	267.00
tblConstructionPhase	NumDays	20.00	250.00
tblConstructionPhase	NumDays	230.00	312.00
tblConstructionPhase	NumDays	230.00	410.00
tblConstructionPhase	NumDays	230.00	445.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	PhaseEndDate	4/2/2025	7/28/2025
tblConstructionPhase	PhaseEndDate	4/30/2025	6/24/2025
tblConstructionPhase	PhaseEndDate	5/28/2025	10/3/2025
tblConstructionPhase	PhaseEndDate	5/3/2023	6/24/2024
tblConstructionPhase	PhaseEndDate	3/20/2024	2/28/2025
tblConstructionPhase	PhaseEndDate	2/5/2025	6/16/2025
tblConstructionPhase	PhaseEndDate	3/5/2025	7/14/2022
tblConstructionPhase	PhaseStartDate	3/6/2025	5/24/2024
tblConstructionPhase	PhaseStartDate	4/3/2025	6/16/2024
tblConstructionPhase	PhaseStartDate	5/1/2025	10/21/2024
tblConstructionPhase	PhaseStartDate	6/16/2022	4/14/2023
tblConstructionPhase	PhaseStartDate	5/4/2023	8/7/2023
tblConstructionPhase	PhaseStartDate	3/21/2024	10/3/2023
tblConstructionPhase	PhaseStartDate	2/6/2025	6/16/2022
tblLandUse	LandUseSquareFeet	177,600.00	184,395.00
tblLandUse	LandUseSquareFeet	820,000.00	939,657.00
tblLandUse	LotAcreage	4.00	0.00
tblLandUse	LotAcreage	21.58	4.42
tblLandUse	LotAcreage	3.65	4.42
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes

tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	6.30
tblOffRoadEquipment	UsageHours	6.00	7.20
tblOffRoadEquipment	UsageHours	6.00	7.70
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	7.00	7.30
tblOffRoadEquipment	UsageHours	7.00	6.70
tblOffRoadEquipment	UsageHours	8.00	5.60
tblOffRoadEquipment	UsageHours	8.00	5.40
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	3.80
tblOffRoadEquipment	UsageHours	8.00	3.80

tblOffRoadEquipment	UsageHours	8.00	3.80
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.90
tblOffRoadEquipment	UsageHours	8.00	0.60
tblOffRoadEquipment	UsageHours	8.00	0.50
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	VendorTripNumber	144.00	0.00
tblTripsAndVMT	VendorTripNumber	144.00	0.00
tblTripsAndVMT	VendorTripNumber	144.00	0.00
tblTripsAndVMT	WorkerTripNumber	719.00	0.00
tblTripsAndVMT	WorkerTripNumber	719.00	0.00
tblTripsAndVMT	WorkerTripNumber	719.00	0.00
tblTripsAndVMT	WorkerTripNumber	144.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	144.00	0.00
tblTripsAndVMT	WorkerTripNumber	144.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	6.8500e-003	0.0696	0.0901	1.3000e-004	0.0000	3.7000e-003	3.7000e-003	0.0000	3.4100e-003	3.4100e-003	0.0000	11.5739	11.5739	3.7400e-003	0.0000	11.6675
2023	0.1248	1.2460	0.9766	1.9800e-003	0.0000	0.0611	0.0611	0.0000	0.0565	0.0565	0.0000	172.8499	172.8499	0.0519	0.0000	174.1478

2024	9.6766	2.8034	3.2484	5.8700e-003	0.0000	0.1197	0.1197	0.0000	0.1125	0.1125	0.0000	512.0924	512.0924	0.1322	0.0000	515.3983
2025	13.2376	1.6716	2.7212	4.4800e-003	0.0000	0.0575	0.0575	0.0000	0.0552	0.0552	0.0000	389.8804	389.8804	0.0865	0.0000	392.0415
Maximum	**13.2376**	**2.8034**	**3.2484**	**5.8700e-003**	**0.0000**	**0.1197**	**0.1197**	**0.0000**	**0.1125**	**0.1125**	**0.0000**	**512.0924**	**512.0924**	**0.1322**	**0.0000**	**515.3983**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	2.5100e-003	0.0577	0.0996	1.3000e-004	0.0000	2.2000e-004	2.2000e-004	0.0000	2.2000e-004	2.2000e-004	0.0000	11.5739	11.5739	3.7400e-003	0.0000	11.6675
2023	0.0190	0.3820	0.6380	1.9800e-003	0.0000	2.0900e-003	2.0900e-003	0.0000	2.0900e-003	2.0900e-003	0.0000	76.0441	76.0441	0.0206	0.0000	76.5592
2024	9.4756	1.8819	2.8970	5.8700e-003	0.0000	0.0397	0.0397	0.0000	0.0397	0.0397	0.0000	355.9540	355.9540	0.0817	0.0000	357.9974
2025	13.1492	1.9114	2.8494	4.4800e-003	0.0000	0.0513	0.0513	0.0000	0.0513	0.0513	0.0000	354.6717	354.6717	0.0751	0.0000	356.5481
Maximum	**13.1492**	**1.9114**	**2.8970**	**5.8700e-003**	**0.0000**	**0.0513**	**0.0513**	**0.0000**	**0.0513**	**0.0513**	**0.0000**	**355.9540**	**355.9540**	**0.0817**	**0.0000**	**357.9974**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.73**	**26.90**	**7.85**	**0.00**	**0.00**	**61.46**	**61.46**	**0.00**	**59.03**	**59.03**	**0.00**	**26.52**	**26.52**	**33.97**	**0.00**	**26.57**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**6-16-2022**	**9-15-2022**	0.0755	0.0594
4	**3-16-2023**	**6-15-2023**	0.2035	0.0603
5	**6-16-2023**	**9-15-2023**	0.3896	0.1146
6	**9-16-2023**	**12-15-2023**	0.6611	0.1922
7	**12-16-2023**	**3-15-2024**	0.6524	0.2025
8	**3-16-2024**	**6-15-2024**	1.0961	0.6623
9	**6-16-2024**	**9-15-2024**	4.2382	4.0589

10	**9-16-2024**	**12-15-2024**	5.4990	5.3737
11	**12-16-2024**	**3-15-2025**	6.1900	6.1500
12	**3-16-2025**	**6-15-2025**	6.1683	6.2358
13	**6-16-2025**	**9-15-2025**	3.2150	3.3085
14	**9-16-2025**	**9-30-2025**	0.3558	0.3663
		Highest	6.1900	6.2358

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Bldg 1 Paving	Paving	6/16/2022	7/14/2022	5	21	
2	Bldg 1 Building Construction	Building Construction	4/14/2023	6/24/2024	5	312	
3	Bldg 2 Building Construction	Building Construction	8/7/2023	2/28/2025	5	410	
4	Bldg 3 Building Construction	Building Construction	10/3/2023	6/16/2025	5	445	
5	Bldg 2 Architectural Coating	Architectural Coating	5/24/2024	7/28/2025	5	307	
6	Bldg 1 Architectural Coating	Architectural Coating	6/16/2024	6/24/2025	5	267	
7	Bldg 3 Architectural Coating	Architectural Coating	10/21/2024	10/3/2025	5	250	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 1,902,805; Residential Outdoor: 634,268; Non-Residential Indoor: 238,500; Non-Residential Outdoor: 79,500; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Bldg 1 Building Construction	Cranes	1	10.00	231	0.29
Bldg 1 Building Construction	Forklifts	3	8.00	89	0.20
Bldg 1 Building Construction	Generator Sets	0	0.00	84	0.74

Bldg 1 Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Bldg 1 Building Construction	Welders	1	0.90	46	0.45
Bldg 2 Building Construction	Cranes	1	7.30	231	0.29
Bldg 2 Building Construction	Forklifts	3	5.60	89	0.20
Bldg 2 Building Construction	Generator Sets	0	0.00	84	0.74
Bldg 2 Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Bldg 2 Building Construction	Welders	1	0.60	46	0.45
Bldg 3 Building Construction	Cranes	1	6.70	231	0.29
Bldg 3 Building Construction	Forklifts	3	5.40	89	0.20
Bldg 3 Building Construction	Generator Sets	0	0.00	84	0.74
Bldg 3 Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Bldg 3 Building Construction	Welders	1	0.50	46	0.45
Bldg 2 Architectural Coating	Air Compressors	2	6.30	78	0.48
Bldg 1 Paving	Pavers	1	3.80	130	0.42
Bldg 1 Paving	Paving Equipment	1	3.80	132	0.36
Bldg 1 Paving	Rollers	2	3.80	80	0.38
Bldg 1 Architectural Coating	Air Compressors	2	7.20	78	0.48
Bldg 3 Architectural Coating	Air Compressors	2	7.70	78	0.48
Bldg 1 Paving	Tractors/Loaders/Backhoes	2	7.60	97	0.37
Bldg 1 Building Construction	Pumps	1	1.20	84	0.74
Bldg 2 Building Construction	Pumps	1	0.80	84	0.74
Bldg 3 Building Construction	Pumps	1	0.50	84	0.74
Bldg 2 Architectural Coating	Aerial Lifts	6	6.30	63	0.31
Bldg 1 Architectural Coating	Aerial Lifts	6	7.20	63	0.31
Bldg 3 Architectural Coating	Aerial Lifts	6	7.70	63	0.31

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Bldg 1 Building Construction	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Bldg 2 Building Construction	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 3 Building Construction	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 2 Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 1 Paving	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 1 Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 3 Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Bldg 1 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8500e-003	0.0696	0.0901	1.3000e-004		3.7000e-003	3.7000e-003		3.4100e-003	3.4100e-003	0.0000	11.5739	11.5739	3.7400e-003	0.0000	11.6675
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.8500e-003**	**0.0696**	**0.0901**	**1.3000e-004**		**3.7000e-003**	**3.7000e-003**		**3.4100e-003**	**3.4100e-003**	**0.0000**	**11.5739**	**11.5739**	**3.7400e-003**	**0.0000**	**11.6675**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.5100e-003	0.0577	0.0996	1.3000e-004		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	11.5739	11.5739	3.7400e-003	0.0000	11.6675
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.5100e-003**	**0.0577**	**0.0996**	**1.3000e-004**		**2.2000e-004**	**2.2000e-004**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**11.5739**	**11.5739**	**3.7400e-003**	**0.0000**	**11.6675**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Bldg 1 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0767	0.7646	0.6022	1.2200e-003		0.0375	0.0375		0.0347	0.0347	0.0000	106.2544	106.2544	0.0318	0.0000	107.0482
Total	**0.0767**	**0.7646**	**0.6022**	**1.2200e-003**		**0.0375**	**0.0375**		**0.0347**	**0.0347**	**0.0000**	**106.2544**	**106.2544**	**0.0318**	**0.0000**	**107.0482**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0118	0.2376	0.3963	1.2200e-003		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	47.3211	47.3211	0.0127	0.0000	47.6385
Total	**0.0118**	**0.2376**	**0.3963**	**1.2200e-003**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**47.3211**	**47.3211**	**0.0127**	**0.0000**	**47.6385**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Bldg 1 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	0.0485	0.4771	0.4020	8.2000e-004		0.0226	0.0226		0.0209	0.0209	0.0000	71.9779	71.9779	0.0215	0.0000	72.5152
Total	**0.0485**	**0.4771**	**0.4020**	**8.2000e-004**		**0.0226**	**0.0226**		**0.0209**	**0.0209**	**0.0000**	**71.9779**	**71.9779**	**0.0215**	**0.0000**	**72.5152**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.9800e-003	0.1609	0.2685	8.2000e-004		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004	0.0000	32.0562	32.0562	8.5800e-003	0.0000	32.2707
Total	**7.9800e-003**	**0.1609**	**0.2685**	**8.2000e-004**		**8.9000e-004**	**8.9000e-004**		**8.9000e-004**	**8.9000e-004**	**0.0000**	**32.0562**	**32.0562**	**8.5800e-003**	**0.0000**	**32.2707**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Bldg 2 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0309	0.3086	0.2403	4.9000e-004		0.0151	0.0151		0.0140	0.0140	0.0000	42.8003	42.8003	0.0129	0.0000	43.1218
Total	**0.0309**	**0.3086**	**0.2403**	**4.9000e-004**		**0.0151**	**0.0151**		**0.0140**	**0.0140**	**0.0000**	**42.8003**	**42.8003**	**0.0129**	**0.0000**	**43.1218**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.6100e-003	0.0929	0.1553	4.9000e-004		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	18.5141	18.5141	5.0100e-003	0.0000	18.6392
Total	**4.6100e-003**	**0.0929**	**0.1553**	**4.9000e-004**		**5.1000e-004**	**5.1000e-004**		**5.1000e-004**	**5.1000e-004**	**0.0000**	**18.5141**	**18.5141**	**5.0100e-003**	**0.0000**	**18.6392**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Bldg 2 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0719	0.7093	0.5906	1.2200e-003		0.0335	0.0335		0.0310	0.0310	0.0000	106.7955	106.7955	0.0321	0.0000	107.5971
Total	**0.0719**	**0.7093**	**0.5906**	**1.2200e-003**		**0.0335**	**0.0335**		**0.0310**	**0.0310**	**0.0000**	**106.7955**	**106.7955**	**0.0321**	**0.0000**	**107.5971**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0115	0.2319	0.3874	1.2200e-003		1.2600e-003	1.2600e-003		1.2600e-003	1.2600e-003	0.0000	46.1970	46.1970	0.0125	0.0000	46.5085
Total	**0.0115**	**0.2319**	**0.3874**	**1.2200e-003**		**1.2600e-003**	**1.2600e-003**		**1.2600e-003**	**1.2600e-003**	**0.0000**	**46.1970**	**46.1970**	**0.0125**	**0.0000**	**46.5085**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Bldg 2 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1065	0.0959	2.0000e-004		4.9000e-003	4.9000e-003		4.5300e-003	4.5300e-003	0.0000	17.5279	17.5279	5.2600e-003	0.0000	17.6592
Total	**0.0110**	**0.1065**	**0.0959**	**2.0000e-004**		**4.9000e-003**	**4.9000e-003**		**4.5300e-003**	**4.5300e-003**	**0.0000**	**17.5279**	**17.5279**	**5.2600e-003**	**0.0000**	**17.6592**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	1.8900e-003	0.0381	0.0636	2.0000e-004		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	7.5820	7.5820	2.0400e-003	0.0000	7.6329
Total	**1.8900e-003**	**0.0381**	**0.0636**	**2.0000e-004**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**	**0.0000**	**7.5820**	**7.5820**	**2.0400e-003**	**0.0000**	**7.6329**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Bldg 3 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0172	0.1728	0.1342	2.7000e-004		8.4900e-003	8.4900e-003		7.8400e-003	7.8400e-003	0.0000	23.7953	23.7953	7.3000e-003	0.0000	23.9778
Total	**0.0172**	**0.1728**	**0.1342**	**2.7000e-004**		**8.4900e-003**	**8.4900e-003**		**7.8400e-003**	**7.8400e-003**	**0.0000**	**23.7953**	**23.7953**	**7.3000e-003**	**0.0000**	**23.9778**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.5700e-003	0.0516	0.0864	2.7000e-004		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	10.2089	10.2089	2.9100e-003	0.0000	10.2816
Total	**2.5700e-003**	**0.0516**	**0.0864**	**2.7000e-004**		**2.7000e-004**	**2.7000e-004**		**2.7000e-004**	**2.7000e-004**	**0.0000**	**10.2089**	**10.2089**	**2.9100e-003**	**0.0000**	**10.2816**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Bldg 3 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0658	0.6513	0.5410	1.1100e-003		0.0309	0.0309		0.0285	0.0285	0.0000	97.4106	97.4106	0.0299	0.0000	98.1574
Total	**0.0658**	**0.6513**	**0.5410**	**1.1100e-003**		**0.0309**	**0.0309**		**0.0285**	**0.0285**	**0.0000**	**97.4106**	**97.4106**	**0.0299**	**0.0000**	**98.1574**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0105	0.2110	0.3536	1.1100e-003		1.1200e-003	1.1200e-003		1.1200e-003	1.1200e-003	0.0000	41.7928	41.7928	0.0119	0.0000	42.0898
Total	**0.0105**	**0.2110**	**0.3536**	**1.1100e-003**		**1.1200e-003**	**1.1200e-003**		**1.1200e-003**	**1.1200e-003**	**0.0000**	**41.7928**	**41.7928**	**0.0119**	**0.0000**	**42.0898**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Bldg 3 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0279	0.2705	0.2431	5.1000e-004		0.0125	0.0125		0.0116	0.0116	0.0000	44.2446	44.2446	0.0136	0.0000	44.5835
Total	**0.0279**	**0.2705**	**0.2431**	**5.1000e-004**		**0.0125**	**0.0125**		**0.0116**	**0.0116**	**0.0000**	**44.2446**	**44.2446**	**0.0136**	**0.0000**	**44.5835**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7700e-003	0.0959	0.1606	5.1000e-004		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	18.9822	18.9822	5.3800e-003	0.0000	19.1168
Total	**4.7700e-003**	**0.0959**	**0.1606**	**5.1000e-004**		**5.1000e-004**	**5.1000e-004**		**5.1000e-004**	**5.1000e-004**	**0.0000**	**18.9822**	**18.9822**	**5.3800e-003**	**0.0000**	**19.1168**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Bldg 2 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.8508					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0428	0.3975	0.7058	1.1200e-003		0.0135	0.0135		0.0132	0.0132	0.0000	97.1066	97.1066	0.0201	0.0000	97.6089
Total	**3.8936**	**0.3975**	**0.7058**	**1.1200e-003**		**0.0135**	**0.0135**		**0.0132**	**0.0132**	**0.0000**	**97.1066**	**97.1066**	**0.0201**	**0.0000**	**97.6089**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.8508					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0244	0.5261	0.7770	1.1200e-003		0.0150	0.0150		0.0150	0.0150	0.0000	97.1065	97.1065	0.0201	0.0000	97.6088
Total	**3.8751**	**0.5261**	**0.7770**	**1.1200e-003**		**0.0150**	**0.0150**		**0.0150**	**0.0150**	**0.0000**	**97.1065**	**97.1065**	**0.0201**	**0.0000**	**97.6088**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Bldg 2 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.6314					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0386	0.3613	0.6649	1.0500e-003		0.0112	0.0112		0.0109	0.0109	0.0000	91.5752	91.5752	0.0189	0.0000	92.0471
Total	**3.6701**	**0.3613**	**0.6649**	**1.0500e-003**		**0.0112**	**0.0112**		**0.0109**	**0.0109**	**0.0000**	**91.5752**	**91.5752**	**0.0189**	**0.0000**	**92.0471**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.6314					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0230	0.4961	0.7327	1.0500e-003		0.0141	0.0141		0.0141	0.0141	0.0000	91.5751	91.5751	0.0189	0.0000	92.0470
Total	**3.6544**	**0.4961**	**0.7327**	**1.0500e-003**		**0.0141**	**0.0141**		**0.0141**	**0.0141**	**0.0000**	**91.5751**	**91.5751**	**0.0189**	**0.0000**	**92.0470**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Bldg 1 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.9793					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0440	0.4083	0.7250	1.1500e-003		0.0139	0.0139		0.0136	0.0136	0.0000	99.7406	99.7406	0.0206	0.0000	100.2565
Total	**4.0233**	**0.4083**	**0.7250**	**1.1500e-003**		**0.0139**	**0.0139**		**0.0136**	**0.0136**	**0.0000**	**99.7406**	**99.7406**	**0.0206**	**0.0000**	**100.2565**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.9793					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0250	0.5403	0.7980	1.1500e-003		0.0154	0.0154		0.0154	0.0154	0.0000	99.7405	99.7405	0.0206	0.0000	100.2564
Total	**4.0043**	**0.5403**	**0.7980**	**1.1500e-003**		**0.0154**	**0.0154**		**0.0154**	**0.0154**	**0.0000**	**99.7405**	**99.7405**	**0.0206**	**0.0000**	**100.2564**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Bldg 1 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Archit. Coating	3.5029					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0371	0.3464	0.6375	1.0100e-003		0.0107	0.0107		0.0105	0.0105	0.0000	87.7998	87.7998	0.0181	0.0000	88.2523
Total	**3.5399**	**0.3464**	**0.6375**	**1.0100e-003**		**0.0107**	**0.0107**		**0.0105**	**0.0105**	**0.0000**	**87.7998**	**87.7998**	**0.0181**	**0.0000**	**88.2523**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.5029					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0220	0.4757	0.7025	1.0100e-003		0.0135	0.0135		0.0135	0.0135	0.0000	87.7997	87.7997	0.0181	0.0000	88.2522

Total	**3.5249**	**0.4757**	**0.7025**	**1.0100e-003**		**0.0135**	**0.0135**		**0.0135**	**0.0135**	**0.0000**	**87.7997**	**87.7997**	**0.0181**	**0.0000**	**88.2522**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.8 Bldg 3 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.5563					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0172	0.1599	0.2839	4.5000e-004		5.4300e-003	5.4300e-003		5.3200e-003	5.3200e-003	0.0000	39.0612	39.0612	8.0800e-003	0.0000	39.2632
Total	**1.5735**	**0.1599**	**0.2839**	**4.5000e-004**		**5.4300e-003**	**5.4300e-003**		**5.3200e-003**	**5.3200e-003**	**0.0000**	**39.0612**	**39.0612**	**8.0800e-003**	**0.0000**	**39.2632**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.5563					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8100e-003	0.2116	0.3125	4.5000e-004		6.0200e-003	6.0200e-003		6.0200e-003	6.0200e-003	0.0000	39.0611	39.0611	8.0800e-003	0.0000	39.2632
Total	**1.5661**	**0.2116**	**0.3125**	**4.5000e-004**		**6.0200e-003**	**6.0200e-003**		**6.0200e-003**	**6.0200e-003**	**0.0000**	**39.0611**	**39.0611**	**8.0800e-003**	**0.0000**	**39.2632**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.8 Bldg 3 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.9259					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0628	0.5869	1.0798	1.7100e-003		0.0182	0.0182		0.0177	0.0177	0.0000	148.7329	148.7329	0.0307	0.0000	149.4994
Total	**5.9886**	**0.5869**	**1.0798**	**1.7100e-003**		**0.0182**	**0.0182**		**0.0177**	**0.0177**	**0.0000**	**148.7329**	**148.7329**	**0.0307**	**0.0000**	**149.4994**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.9259					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0373	0.8058	1.1900	1.7100e-003		0.0229	0.0229		0.0229	0.0229	0.0000	148.7327	148.7327	0.0307	0.0000	149.4992
Total	**5.9632**	**0.8058**	**1.1900**	**1.7100e-003**		**0.0229**	**0.0229**		**0.0229**	**0.0229**	**0.0000**	**148.7327**	**148.7327**	**0.0307**	**0.0000**	**149.4992**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

1777 Saratoga Ave, San Jose - Construction - Santa Clara County, Annual

1777 Saratoga Ave, San Jose - Construction Unmitigated

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	331.00	Space	0.00	182,396.00	0
Apartments Mid Rise	280.00	Dwelling Unit	1.82	350,000.00	801
Strip Mall	6.00	1000sqft	0.00	6,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2018 Rate

Land Use - Based on PD/Constr. - 1777 SaratogaResidential = 280 (350000) retail = 6,000 Parking = 331 (182396)

Construction Phase - Based on provided 1777 Saratoga Construction worksheet

Off-road Equipment - Based on provided 1777 Saratoga Construction worksheet

Off-road Equipment - Based on provided 1777 Saratoga Construction worksheet

Off-road Equipment - Based on provided 1777 Saratoga Construction worksheet

Off-road Equipment - Based on provided 1777 Saratoga Construction worksheet

Off-road Equipment - Based on provided 1777 Saratoga Construction worksheet

Off-road Equipment - Based on provided 1777 Saratoga Construction worksheet

Trips and VMT - 0 Trips EMFAC2017, pavement demo = 900 tons, building const = 1,200 cement truck round trips, paving = 50cy asphalt

Demolition - Existing building demo = 17,000sf / 575tons hauling

Grading - Grading = 64,200cy export

Construction Off-road Equipment Mitigation - BMPs, Tier 4 interim engine mitigation, electric cranes

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	55.00
tblConstructionPhase	NumDays	4.00	67.00
tblConstructionPhase	NumDays	200.00	453.00
tblConstructionPhase	NumDays	10.00	217.00
tblConstructionPhase	NumDays	10.00	117.00
tblGrading	MaterialExported	0.00	64,200.00
tblLandUse	LandUseSquareFeet	132,400.00	182,396.00
tblLandUse	LandUseSquareFeet	280,000.00	350,000.00
tblLandUse	LotAcreage	2.98	0.00
tblLandUse	LotAcreage	7.37	1.82
tblLandUse	LotAcreage	0.14	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	0.00

tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	1.10
tblOffRoadEquipment	UsageHours	6.00	3.00
tblOffRoadEquipment	UsageHours	6.00	2.10
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	7.20
tblOffRoadEquipment	UsageHours	6.00	0.70
tblOffRoadEquipment	UsageHours	8.00	0.70
tblOffRoadEquipment	UsageHours	7.00	0.80
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	3.00
tblOffRoadEquipment	UsageHours	8.00	5.80
tblOffRoadEquipment	UsageHours	7.00	7.20
tblOffRoadEquipment	UsageHours	8.00	2.70
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	HaulingTripNumber	77.00	0.00
tblTripsAndVMT	HaulingTripNumber	8,025.00	0.00
tblTripsAndVMT	VendorTripNumber	61.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	28.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00
tblTripsAndVMT	WorkerTripNumber	280.00	0.00
tblTripsAndVMT	WorkerTripNumber	56.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0682	0.7321	0.6867	1.2800e-003	0.0600	0.0330	0.0930	7.0000e-003	0.0305	0.0375	0.0000	112.3784	112.3784	0.0353	0.0000	113.2600
2022	0.0802	0.8597	0.7527	1.5000e-003	0.0516	0.0384	0.0900	5.7300e-003	0.0354	0.0411	0.0000	131.4921	131.4921	0.0425	0.0000	132.5553
2023	0.5546	0.7926	0.7666	1.3800e-003	0.0000	0.0373	0.0373	0.0000	0.0343	0.0343	0.0000	121.2749	121.2749	0.0392	0.0000	122.2554
2024	2.0917	0.4205	0.5988	9.8000e-004	0.0000	0.0156	0.0156	0.0000	0.0144	0.0144	0.0000	86.2708	86.2708	0.0279	0.0000	86.9684
Maximum	**2.0917**	**0.8597**	**0.7666**	**1.5000e-003**	**0.0600**	**0.0384**	**0.0930**	**7.0000e-003**	**0.0354**	**0.0411**	**0.0000**	**131.4921**	**131.4921**	**0.0425**	**0.0000**	**132.5553**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0214	0.4861	0.8700	1.2800e-003	0.0270	2.0800e-003	0.0291	3.1500e-003	2.0800e-003	5.2300e-003	0.0000	112.3782	112.3782	0.0353	0.0000	113.2599
2022	0.0230	0.4721	0.8494	1.5000e-003	0.0232	2.0600e-003	0.0253	2.5800e-003	2.0600e-003	4.6300e-003	0.0000	110.3896	110.3896	0.0357	0.0000	111.2822
2023	0.4972	0.3698	0.6178	1.3800e-003	0.0000	3.5000e-003	3.5000e-003	0.0000	3.5000e-003	3.5000e-003	0.0000	71.8469	71.8469	0.0232	0.0000	72.4278
2024	2.0728	0.4061	0.6092	9.8000e-004	0.0000	0.0106	0.0106	0.0000	0.0106	0.0106	0.0000	70.6823	70.6823	0.0229	0.0000	71.2538
Maximum	**2.0728**	**0.4861**	**0.8700**	**1.5000e-003**	**0.0270**	**0.0106**	**0.0291**	**3.1500e-003**	**0.0106**	**0.0106**	**0.0000**	**112.3782**	**112.3782**	**0.0357**	**0.0000**	**113.2599**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

Percent Reduction	**6.45**	**38.17**	**-5.05**	**0.00**	**55.00**	**85.31**	**70.98**	**54.99**	**84.05**	**81.15**	**0.00**	**19.08**	**19.08**	**19.22**	**0.00**	**19.08**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	0.4158	0.2957
2	**12-1-2021**	**2-28-2022**	0.8883	0.5329
4	**6-1-2022**	**8-31-2022**	0.1190	0.0568
5	**9-1-2022**	**11-30-2022**	0.2313	0.0846
6	**12-1-2022**	**2-28-2023**	0.2130	0.0813
7	**3-1-2023**	**5-31-2023**	0.2109	0.0831
8	**6-1-2023**	**8-31-2023**	0.2109	0.0831
9	**9-1-2023**	**11-30-2023**	0.4588	0.3447
10	**12-1-2023**	**2-29-2024**	1.0350	0.9581
11	**3-1-2024**	**5-31-2024**	0.9745	0.9479
12	**6-1-2024**	**8-31-2024**	0.8273	0.8682
13	**9-1-2024**	**9-30-2024**	0.0179	0.0188
		Highest	1.0350	0.9581

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	11/16/2021	5	55	
2	Grading	Grading	11/18/2021	2/18/2022	5	67	
3	Trenching	Trenching	6/17/2022	9/7/2022	5	59	
4	Building Construction	Building Construction	7/29/2022	4/23/2024	5	453	
5	Architectural Coating	Architectural Coating	11/3/2023	9/2/2024	5	217	
6	Paving	Paving	1/4/2024	6/14/2024	5	117	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90.45

Acres of Paving: 0

Residential Indoor: 708,750; Residential Outdoor: 236,250; Non-Residential Indoor: 9,000; Non-Residential Outdoor: 3,000; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	2	1.10	81	0.73
Demolition	Excavators	3	4.40	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	5.80	97	0.37
Grading	Bore/Drill Rigs	1	6.60	221	0.50
Grading	Excavators	3	7.20	158	0.38
Grading	Graders	3	7.20	187	0.41
Grading	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Tractors/Loaders/Backhoes	4	7.20	97	0.37
Trenching	Tractors/Loaders/Backhoes	2	2.70	97	0.37
Building Construction	Cranes	2	3.00	231	0.29
Building Construction	Forklifts	5	2.10	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	3.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Architectural Coating	Aerial Lifts	4	5.90	63	0.31
Architectural Coating	Air Compressors	0	0.00	78	0.48
Paving	Cement and Mortar Mixers	0	0.00	9	0.56
Paving	Pavers	1	0.70	130	0.42
Paving	Paving Equipment	2	0.70	132	0.36
Paving	Rollers	1	0.80	80	0.38
Paving	Tractors/Loaders/Backhoes	1	2.70	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	11	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	2	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.3700e-003	0.0000	8.3700e-003	1.2700e-003	0.0000	1.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0245	0.2341	0.3114	4.7000e-004		0.0127	0.0127		0.0118	0.0118	0.0000	40.9828	40.9828	0.0122	0.0000	41.2872
Total	**0.0245**	**0.2341**	**0.3114**	**4.7000e-004**	**8.3700e-003**	**0.0127**	**0.0211**	**1.2700e-003**	**0.0118**	**0.0131**	**0.0000**	**40.9828**	**40.9828**	**0.0122**	**0.0000**	**41.2872**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.7700e-003	0.0000	3.7700e-003	5.7000e-004	0.0000	5.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9200e-003	0.2012	0.3471	4.7000e-004		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	40.9828	40.9828	0.0122	0.0000	41.2872
Total	**7.9200e-003**	**0.2012**	**0.3471**	**4.7000e-004**	**3.7700e-003**	**7.5000e-004**	**4.5200e-003**	**5.7000e-004**	**7.5000e-004**	**1.3200e-003**	**0.0000**	**40.9828**	**40.9828**	**0.0122**	**0.0000**	**41.2872**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0516	0.0000	0.0516	5.7300e-003	0.0000	5.7300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0437	0.4981	0.3753	8.1000e-004		0.0203	0.0203		0.0187	0.0187	0.0000	71.3955	71.3955	0.0231	0.0000	71.9728
Total	**0.0437**	**0.4981**	**0.3753**	**8.1000e-004**	**0.0516**	**0.0203**	**0.0719**	**5.7300e-003**	**0.0187**	**0.0244**	**0.0000**	**71.3955**	**71.3955**	**0.0231**	**0.0000**	**71.9728**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0232	0.0000	0.0232	2.5800e-003	0.0000	2.5800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0135	0.2849	0.5229	8.1000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	71.3955	71.3955	0.0231	0.0000	71.9727
Total	**0.0135**	**0.2849**	**0.5229**	**8.1000e-004**	**0.0232**	**1.3300e-003**	**0.0246**	**2.5800e-003**	**1.3300e-003**	**3.9100e-003**	**0.0000**	**71.3955**	**71.3955**	**0.0231**	**0.0000**	**71.9727**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0516	0.0000	0.0516	5.7300e-003	0.0000	5.7300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0428	0.4707	0.4056	8.9000e-004		0.0187	0.0187		0.0172	0.0172	0.0000	78.1029	78.1029	0.0253	0.0000	78.7344
Total	**0.0428**	**0.4707**	**0.4056**	**8.9000e-004**	**0.0516**	**0.0187**	**0.0703**	**5.7300e-003**	**0.0172**	**0.0229**	**0.0000**	**78.1029**	**78.1029**	**0.0253**	**0.0000**	**78.7344**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.0232	0.0000	0.0232	2.5800e-003	0.0000	2.5800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0148	0.3116	0.5720	8.9000e-004		1.4600e-003	1.4600e-003		1.4600e-003	1.4600e-003	0.0000	78.1028	78.1028	0.0253	0.0000	78.7343
Total	**0.0148**	**0.3116**	**0.5720**	**8.9000e-004**	**0.0232**	**1.4600e-003**	**0.0247**	**2.5800e-003**	**1.4600e-003**	**4.0400e-003**	**0.0000**	**78.1028**	**78.1028**	**0.0253**	**0.0000**	**78.7343**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Trenching - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2800e-003	0.0334	0.0446	6.0000e-005		1.7900e-003	1.7900e-003		1.6500e-003	1.6500e-003	0.0000	5.4417	5.4417	1.7600e-003	0.0000	5.4857
Total	**3.2800e-003**	**0.0334**	**0.0446**	**6.0000e-005**		**1.7900e-003**	**1.7900e-003**		**1.6500e-003**	**1.6500e-003**	**0.0000**	**5.4417**	**5.4417**	**1.7600e-003**	**0.0000**	**5.4857**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3900e-003	0.0270	0.0466	6.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	5.4417	5.4417	1.7600e-003	0.0000	5.4857
Total	**1.3900e-003**	**0.0270**	**0.0466**	**6.0000e-005**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**	**0.0000**	**5.4417**	**5.4417**	**1.7600e-003**	**0.0000**	**5.4857**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0341	0.3556	0.3025	5.5000e-004		0.0180	0.0180		0.0165	0.0165	0.0000	47.9475	47.9475	0.0155	0.0000	48.3352
Total	**0.0341**	**0.3556**	**0.3025**	**5.5000e-004**		**0.0180**	**0.0180**		**0.0165**	**0.0165**	**0.0000**	**47.9475**	**47.9475**	**0.0155**	**0.0000**	**48.3352**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8600e-003	0.1335	0.2309	5.5000e-004		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	26.8451	26.8451	8.6800e-003	0.0000	27.0622
Total	**6.8600e-003**	**0.1335**	**0.2309**	**5.5000e-004**		**5.0000e-004**	**5.0000e-004**		**5.0000e-004**	**5.0000e-004**	**0.0000**	**26.8451**	**26.8451**	**8.6800e-003**	**0.0000**	**27.0622**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0739	0.7604	0.7005	1.2800e-003		0.0367	0.0367		0.0338	0.0338	0.0000	112.3532	112.3532	0.0363	0.0000	113.2616
Total	**0.0739**	**0.7604**	**0.7005**	**1.2800e-003**		**0.0367**	**0.0367**		**0.0338**	**0.0338**	**0.0000**	**112.3532**	**112.3532**	**0.0363**	**0.0000**	**113.2616**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0161	0.3127	0.5407	1.2800e-003		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003	0.0000	62.9253	62.9253	0.0204	0.0000	63.4341
Total	**0.0161**	**0.3127**	**0.5407**	**1.2800e-003**		**1.1700e-003**	**1.1700e-003**		**1.1700e-003**	**1.1700e-003**	**0.0000**	**62.9253**	**62.9253**	**0.0204**	**0.0000**	**63.4341**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0219	0.2221	0.2190	4.0000e-004		0.0103	0.0103		9.4700e-003	9.4700e-003	0.0000	35.4421	35.4421	0.0115	0.0000	35.7287

Total	**0.0219**	**0.2221**	**0.2190**	**4.0000e-004**		**0.0103**	**0.0103**		**9.4700e-003**	**9.4700e-003**	**0.0000**	**35.4421**	**35.4421**	**0.0115**	**0.0000**	**35.7287**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.0700e-003	0.0986	0.1705	4.0000e-004		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	19.8536	19.8536	6.4200e-003	0.0000	20.0142
Total	**5.0700e-003**	**0.0986**	**0.1705**	**4.0000e-004**		**3.7000e-004**	**3.7000e-004**		**3.7000e-004**	**3.7000e-004**	**0.0000**	**19.8536**	**19.8536**	**6.4200e-003**	**0.0000**	**20.0142**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4786					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0900e-003	0.0323	0.0660	1.0000e-004		5.6000e-004	5.6000e-004		5.1000e-004	5.1000e-004	0.0000	8.9217	8.9217	2.8900e-003	0.0000	8.9938
Total	**0.4807**	**0.0323**	**0.0660**	**1.0000e-004**		**5.6000e-004**	**5.6000e-004**		**5.1000e-004**	**5.1000e-004**	**0.0000**	**8.9217**	**8.9217**	**2.8900e-003**	**0.0000**	**8.9938**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4786					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5000e-003	0.0571	0.0771	1.0000e-004		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003	0.0000	8.9216	8.9216	2.8900e-003	0.0000	8.9938
Total	**0.4811**	**0.0571**	**0.0771**	**1.0000e-004**		**2.3300e-003**	**2.3300e-003**		**2.3300e-003**	**2.3300e-003**	**0.0000**	**8.9216**	**8.9216**	**2.8900e-003**	**0.0000**	**8.9938**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.0545					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.9800e-003	0.1366	0.2837	4.4000e-004		2.3700e-003	2.3700e-003		2.1800e-003	2.1800e-003	0.0000	38.2978	38.2978	0.0124	0.0000	38.6075
Total	**2.0635**	**0.1366**	**0.2837**	**4.4000e-004**		**2.3700e-003**	**2.3700e-003**		**2.1800e-003**	**2.1800e-003**	**0.0000**	**38.2978**	**38.2978**	**0.0124**	**0.0000**	**38.6075**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.0545					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0107	0.2450	0.3309	4.4000e-004		0.0100	0.0100		0.0100	0.0100	0.0000	38.2978	38.2978	0.0124	0.0000	38.6074
Total	**2.0652**	**0.2450**	**0.3309**	**4.4000e-004**		**0.0100**	**0.0100**		**0.0100**	**0.0100**	**0.0000**	**38.2978**	**38.2978**	**0.0124**	**0.0000**	**38.6074**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	6.3200e-003	0.0617	0.0961	1.4000e-004		2.9400e-003	2.9400e-003		2.7100e-003	2.7100e-003	0.0000	12.5309	12.5309	4.0500e-003	0.0000	12.6322
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.3200e-003**	**0.0617**	**0.0961**	**1.4000e-004**		**2.9400e-003**	**2.9400e-003**		**2.7100e-003**	**2.7100e-003**	**0.0000**	**12.5309**	**12.5309**	**4.0500e-003**	**0.0000**	**12.6322**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.5300e-003	0.0625	0.1078	1.4000e-004		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	12.5309	12.5309	4.0500e-003	0.0000	12.6322
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**2.5300e-003**	**0.0625**	**0.1078**	**1.4000e-004**		**2.3000e-004**	**2.3000e-004**		**2.3000e-004**	**2.3000e-004**	**0.0000**	**12.5309**	**12.5309**	**4.0500e-003**	**0.0000**	**12.6322**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

El Paseo Opt 1 (Ed), San Jose - Construction Podium Mitigated

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	850.00	Space	8.85	350,000.00	0
Parking Lot	260.00	Space	0.00	104,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2018 Rate

Land Use - Land uses based on provided PD/Construction worksheet

Construction Phase - Provided construciton schedule

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Trips and VMT - 0 Trips EMFAC2017, pavement demo = 4,500tons, building const = 3,600 cement truck round trips

Demolition - existing building demo = 99,535sf

Grading - grading = 155,000cy export

Construction Off-road Equipment Mitigation - Enhanced BMPs, Tier 4 final engine mitigation, electric cranes, electric portable equip

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	61.00
tblConstructionPhase	NumDays	20.00	116.00
tblConstructionPhase	NumDays	230.00	15.00

tblConstructionPhase	NumDays	230.00	261.00
tblGrading	MaterialExported	0.00	155,000.00
tblLandUse	LandUseSquareFeet	340,000.00	350,000.00
tblLandUse	LotAcreage	7.65	8.85
tblLandUse	LotAcreage	2.34	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	8.00
tblOffRoadEquipment	UsageHours	8.00	1.80
tblOffRoadEquipment	UsageHours	8.00	5.10
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	6.50
tblOffRoadEquipment	UsageHours	8.00	0.80
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	6.50
tblOffRoadEquipment	UsageHours	7.00	0.00

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	HaulingTripNumber	453.00	0.00
tblTripsAndVMT	HaulingTripNumber	19,375.00	0.00
tblTripsAndVMT	VendorTripNumber	74.00	0.00
tblTripsAndVMT	VendorTripNumber	74.00	0.00
tblTripsAndVMT	WorkerTripNumber	33.00	0.00
tblTripsAndVMT	WorkerTripNumber	25.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	191.00	0.00
tblTripsAndVMT	WorkerTripNumber	191.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0868	0.8232	1.0429	1.6100e-003	0.0670	0.0440	0.1109	9.7400e-003	0.0410	0.0507	0.0000	140.5544	140.5544	0.0398	0.0000	141.5505
2022	0.2502	2.4368	2.1902	3.9200e-003	0.0180	0.1253	0.1433	2.3200e-003	0.1163	0.1186	0.0000	341.3490	341.3490	0.0988	0.0000	343.8192

2023	0.2143	2.0802	1.7134	3.3000e-003	0.0000	0.1035	0.1035	0.0000	0.0958	0.0958	0.0000	286.8021	286.8021	0.0862	0.0000	288.9577
Maximum	**0.2502**	**2.4368**	**2.1902**	**3.9200e-003**	**0.0670**	**0.1253**	**0.1433**	**9.7400e-003**	**0.1163**	**0.1186**	**0.0000**	**341.3490**	**341.3490**	**0.0988**	**0.0000**	**343.8192**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0174	0.0754	1.0577	1.6100e-003	0.0261	2.3200e-003	0.0284	1.9000e-003	2.3200e-003	4.2200e-003	0.0000	125.7956	125.7956	0.0390	0.0000	126.7703
2022	0.0287	0.1242	1.7478	3.9200e-003	7.0200e-003	3.8200e-003	0.0108	4.5000e-004	3.8200e-003	4.2700e-003	0.0000	210.6006	210.6006	0.0588	0.0000	212.0702
2023	0.0177	0.0767	1.0909	3.3000e-003	0.0000	2.3600e-003	2.3600e-003	0.0000	2.3600e-003	2.3600e-003	0.0000	128.3558	128.3558	0.0379	0.0000	129.3025
Maximum	**0.0287**	**0.1242**	**1.7478**	**3.9200e-003**	**0.0261**	**3.8200e-003**	**0.0284**	**1.9000e-003**	**3.8200e-003**	**4.2700e-003**	**0.0000**	**210.6006**	**210.6006**	**0.0588**	**0.0000**	**212.0702**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**88.43**	**94.83**	**21.23**	**0.00**	**61.00**	**96.88**	**88.36**	**80.51**	**96.64**	**95.91**	**0.00**	**39.54**	**39.54**	**39.68**	**0.00**	**39.54**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	0.7429	0.0743
2	**12-1-2021**	**2-28-2022**	0.4240	0.0519
3	**3-1-2022**	**5-31-2022**	0.1385	0.0179
4	**6-1-2022**	**8-31-2022**	0.7224	0.0400
5	**9-1-2022**	**11-30-2022**	1.1729	0.0465
6	**12-1-2022**	**2-28-2023**	1.0645	0.0424
7	**3-1-2023**	**5-31-2023**	1.0544	0.0434
8	**6-1-2023**	**8-31-2023**	0.5616	0.0231
		Highest	1.1729	0.0743

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	11/24/2021	5	61	
2	Grading	Grading	10/21/2021	3/31/2022	5	116	
3	Trenching	Trenching	6/2/2022	9/22/2022	5	81	
4	Concrete	Building Construction	6/2/2022	6/22/2022	5	15	
5	Building Construction	Building Construction	7/20/2022	7/19/2023	5	261	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 17.4

Acres of Paving: 8.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	4	1.80	81	0.73
Demolition	Crushing/Proc. Equipment	1	2.90	85	0.78
Demolition	Excavators	4	5.10	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	4	6.60	97	0.37
Grading	Excavators	3	6.50	158	0.38
Grading	Graders	3	0.80	187	0.41
Grading	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Tractors/Loaders/Backhoes	4	6.50	97	0.37
Trenching	Pumps	2	2.70	84	0.74
Trenching	Tractors/Loaders/Backhoes	2	4.30	97	0.37
Concrete	Cranes	0	0.00	231	0.29
Concrete	Forklifts	0	0.00	89	0.20

Concrete	Generator Sets	0	0.00	84	0.74
Concrete	Pumps	1	15.00	84	0.74
Concrete	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Concrete	Welders	0	0.00	46	0.45
Building Construction	Cranes	4	8.00	231	0.29
Building Construction	Forklifts	12	8.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Pumps	2	1.30	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Building Construction	Welders	8	1.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	13	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	10	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Concrete	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	26	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0490	0.0000	0.0490	7.4200e-003	0.0000	7.4200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0529	0.4803	0.6308	9.6000e-004		0.0264	0.0264		0.0249	0.0249	0.0000	84.1903	84.1903	0.0216	0.0000	84.7306
Total	**0.0529**	**0.4803**	**0.6308**	**9.6000e-004**	**0.0490**	**0.0264**	**0.0754**	**7.4200e-003**	**0.0249**	**0.0323**	**0.0000**	**84.1903**	**84.1903**	**0.0216**	**0.0000**	**84.7306**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.0191	0.0000	0.0191	1.4500e-003	0.0000	1.4500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5400e-003	0.0413	0.5883	9.6000e-004		1.2700e-003	1.2700e-003		1.2700e-003	1.2700e-003	0.0000	69.4315	69.4315	0.0208	0.0000	69.9505
Total	**9.5400e-003**	**0.0413**	**0.5883**	**9.6000e-004**	**0.0191**	**1.2700e-003**	**0.0204**	**1.4500e-003**	**1.2700e-003**	**2.7200e-003**	**0.0000**	**69.4315**	**69.4315**	**0.0208**	**0.0000**	**69.9505**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0180	0.0000	0.0180	2.3200e-003	0.0000	2.3200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0339	0.3429	0.4121	6.4000e-004		0.0175	0.0175		0.0161	0.0161	0.0000	56.3642	56.3642	0.0182	0.0000	56.8199
Total	**0.0339**	**0.3429**	**0.4121**	**6.4000e-004**	**0.0180**	**0.0175**	**0.0355**	**2.3200e-003**	**0.0161**	**0.0185**	**0.0000**	**56.3642**	**56.3642**	**0.0182**	**0.0000**	**56.8199**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.0200e-003	0.0000	7.0200e-003	4.5000e-004	0.0000	4.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.8700e-003	0.0341	0.4694	6.4000e-004		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	56.3641	56.3641	0.0182	0.0000	56.8198
Total	**7.8700e-003**	**0.0341**	**0.4694**	**6.4000e-004**	**7.0200e-003**	**1.0500e-003**	**8.0700e-003**	**4.5000e-004**	**1.0500e-003**	**1.5000e-003**	**0.0000**	**56.3641**	**56.3641**	**0.0182**	**0.0000**	**56.8198**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0180	0.0000	0.0180	2.3200e-003	0.0000	2.3200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0369	0.3633	0.5032	7.9000e-004		0.0177	0.0177		0.0163	0.0163	0.0000	69.3872	69.3872	0.0224	0.0000	69.9483
Total	**0.0369**	**0.3633**	**0.5032**	**7.9000e-004**	**0.0180**	**0.0177**	**0.0357**	**2.3200e-003**	**0.0163**	**0.0186**	**0.0000**	**69.3872**	**69.3872**	**0.0224**	**0.0000**	**69.9483**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.0200e-003	0.0000	7.0200e-003	4.5000e-004	0.0000	4.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6800e-003	0.0420	0.5777	7.9000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	69.3871	69.3871	0.0224	0.0000	69.9482
Total	**9.6800e-003**	**0.0420**	**0.5777**	**7.9000e-004**	**7.0200e-003**	**1.2900e-003**	**8.3100e-003**	**4.5000e-004**	**1.2900e-003**	**1.7400e-003**	**0.0000**	**69.3871**	**69.3871**	**0.0224**	**0.0000**	**69.9482**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Trenching - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0168	0.1541	0.1995	3.2000e-004		8.1800e-003	8.1800e-003		7.8700e-003	7.8700e-003	0.0000	27.3493	27.3493	4.6400e-003	0.0000	27.4652
Total	**0.0168**	**0.1541**	**0.1995**	**3.2000e-004**		**8.1800e-003**	**8.1800e-003**		**7.8700e-003**	**7.8700e-003**	**0.0000**	**27.3493**	**27.3493**	**4.6400e-003**	**0.0000**	**27.4652**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4500e-003	0.0150	0.2129	3.2000e-004		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	27.3492	27.3492	4.6400e-003	0.0000	27.4651
Total	**3.4500e-003**	**0.0150**	**0.2129**	**3.2000e-004**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**27.3492**	**27.3492**	**4.6400e-003**	**0.0000**	**27.4651**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Concrete - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.9500e-003	0.0418	0.0525	9.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003	0.0000	7.9482	7.9482	4.1000e-004	0.0000	7.9584

Total	**4.9500e-003**	**0.0418**	**0.0525**	**9.0000e-005**		**2.1900e-003**	**2.1900e-003**		**2.1900e-003**	**2.1900e-003**	**0.0000**	**7.9482**	**7.9482**	**4.1000e-004**	**0.0000**	**7.9584**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.3000e-004	4.0100e-003	0.0570	9.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	7.9482	7.9482	4.1000e-004	0.0000	7.9584
Total	**9.3000e-004**	**4.0100e-003**	**0.0570**	**9.0000e-005**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**7.9482**	**7.9482**	**4.1000e-004**	**0.0000**	**7.9584**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1915	1.8776	1.4351	2.7200e-003		0.0972	0.0972		0.0900	0.0900	0.0000	236.6642	236.6642	0.0713	0.0000	238.4474
Total	**0.1915**	**1.8776**	**1.4351**	**2.7200e-003**		**0.0972**	**0.0972**		**0.0900**	**0.0900**	**0.0000**	**236.6642**	**236.6642**	**0.0713**	**0.0000**	**238.4474**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0146	0.0633	0.9002	2.7200e-003		1.9500e-003	1.9500e-003		1.9500e-003	1.9500e-003	0.0000	105.9160	105.9160	0.0313	0.0000	106.6986
Total	**0.0146**	**0.0633**	**0.9002**	**2.7200e-003**		**1.9500e-003**	**1.9500e-003**		**1.9500e-003**	**1.9500e-003**	**0.0000**	**105.9160**	**105.9160**	**0.0313**	**0.0000**	**106.6986**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2143	2.0802	1.7134	3.3000e-003		0.1035	0.1035		0.0958	0.0958	0.0000	286.8021	286.8021	0.0862	0.0000	288.9577
Total	**0.2143**	**2.0802**	**1.7134**	**3.3000e-003**		**0.1035**	**0.1035**		**0.0958**	**0.0958**	**0.0000**	**286.8021**	**286.8021**	**0.0862**	**0.0000**	**288.9577**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0177	0.0767	1.0909	3.3000e-003		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	128.3558	128.3558	0.0379	0.0000	129.3025
Total	**0.0177**	**0.0767**	**1.0909**	**3.3000e-003**		**2.3600e-003**	**2.3600e-003**		**2.3600e-003**	**2.3600e-003**	**0.0000**	**128.3558**	**128.3558**	**0.0379**	**0.0000**	**129.3025**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

El Paseo Opt 1 (Ed), San Jose - Construction Bldgs 1-4 - Santa Clara County, Annual

El Paseo Opt 1 (Ed), San Jose - Construction Bldgs 1-4 Mitigated

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	450.00	1000sqft	4.42	450,000.00	0
Apartments Mid Rise	450.00	Dwelling Unit	4.42	430,000.00	1287
Apartments Mid Rise	200.00	Dwelling Unit	0.00	140,000.00	572
Strip Mall	60.00	1000sqft	0.00	60,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2018 Rate

Land Use - Land uses based on PD/Construction worksheet from Opt 1 Bldgs 1-4

Construction Phase - Provided construction schedule from Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Off-road Equipment - Provided construction equip & hours for Opt 1 Bldgs 1-4

Trips and VMT - 0 Trips EMFAC2017, Bldg 1 & 2 - 400 cement truck round trips each, Bldg 3 & 4 - 250 cement truck round trips each

Demolition -

Grading -

Architectural Coating - At least 90% of paints have to be super-compliant VOC = effectively 19gm/L interior and 24g/L exterior

Construction Off-road Equipment Mitigation - Enhanced BMPs, Tier 4 final engine mitigation, electric cranes, portable equip, and aerieal lifts

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	24.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	24.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	24.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	24.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	19.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	19.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	19.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	19.00
tblArchitecturalCoating	EF_Parking	150.00	24.00
tblArchitecturalCoating	EF_Parking	150.00	24.00
tblArchitecturalCoating	EF_Parking	150.00	24.00
tblArchitecturalCoating	EF_Parking	150.00	24.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	24.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	24.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	24.00

tblArchitecturalCoating	EF_Residential_Exterior	150.00	24.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	19.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	19.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	19.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	19.00
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	24.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	330.00
tblConstructionPhase	NumDays	20.00	265.00

tblConstructionPhase	NumDays	20.00	264.00
tblConstructionPhase	NumDays	20.00	264.00
tblConstructionPhase	NumDays	230.00	409.00
tblConstructionPhase	NumDays	230.00	385.00
tblConstructionPhase	NumDays	230.00	400.00
tblConstructionPhase	NumDays	230.00	440.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	20.00	24.00
tblConstructionPhase	NumDays	20.00	24.00
tblLandUse	LandUseSquareFeet	200,000.00	140,000.00
tblLandUse	LandUseSquareFeet	450,000.00	430,000.00
tblLandUse	LotAcreage	10.33	4.42
tblLandUse	LotAcreage	5.26	0.00
tblLandUse	LotAcreage	11.84	4.42
tblLandUse	LotAcreage	1.38	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	6.40
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.40
tblOffRoadEquipment	UsageHours	7.00	8.60
tblOffRoadEquipment	UsageHours	7.00	8.30
tblOffRoadEquipment	UsageHours	7.00	7.50
tblOffRoadEquipment	UsageHours	8.00	6.70
tblOffRoadEquipment	UsageHours	8.00	6.90
tblOffRoadEquipment	UsageHours	8.00	6.60
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	3.40
tblOffRoadEquipment	UsageHours	8.00	2.20
tblOffRoadEquipment	UsageHours	8.00	3.70
tblOffRoadEquipment	UsageHours	8.00	3.70
tblOffRoadEquipment	UsageHours	8.00	3.40
tblOffRoadEquipment	UsageHours	8.00	2.20
tblOffRoadEquipment	UsageHours	8.00	3.70
tblOffRoadEquipment	UsageHours	8.00	3.70

tblOffRoadEquipment	UsageHours	8.00	3.40
tblOffRoadEquipment	UsageHours	8.00	2.20
tblOffRoadEquipment	UsageHours	8.00	3.70
tblOffRoadEquipment	UsageHours	8.00	3.70
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.60
tblOffRoadEquipment	UsageHours	8.00	0.70
tblOffRoadEquipment	UsageHours	8.00	0.70
tblOffRoadEquipment	UsageHours	8.00	0.60
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	VendorTripNumber	153.00	0.00
tblTripsAndVMT	VendorTripNumber	153.00	0.00
tblTripsAndVMT	VendorTripNumber	153.00	0.00
tblTripsAndVMT	VendorTripNumber	153.00	0.00
tblTripsAndVMT	WorkerTripNumber	676.00	0.00
tblTripsAndVMT	WorkerTripNumber	135.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	676.00	0.00
tblTripsAndVMT	WorkerTripNumber	676.00	0.00
tblTripsAndVMT	WorkerTripNumber	676.00	0.00
tblTripsAndVMT	WorkerTripNumber	135.00	0.00
tblTripsAndVMT	WorkerTripNumber	135.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	135.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.4486	2.8012	2.3014	4.5700e-003	0.0000	0.1360	0.1360	0.0000	0.1260	0.1260	0.0000	399.3992	399.3992	0.1183	0.0000	402.3562
2024	4.2373	5.2349	6.9521	0.0119	0.0000	0.2130	0.2130	0.0000	0.2017	0.2017	0.0000	1,039.5609	1,039.5609	0.2551	0.0000	1,045.9379
2025	1.0287	0.7868	1.3563	2.1700e-003	0.0000	0.0265	0.0265	0.0000	0.0255	0.0255	0.0000	189.2714	189.2714	0.0419	0.0000	190.3199
Maximum	**4.2373**	**5.2349**	**6.9521**	**0.0119**	**0.0000**	**0.2130**	**0.2130**	**0.0000**	**0.2017**	**0.2017**	**0.0000**	**1,039.5609**	**1,039.5609**	**0.2551**	**0.0000**	**1,045.9379**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1889	0.0920	1.3098	4.5700e-003	0.0000	2.8300e-003	2.8300e-003	0.0000	2.8300e-003	2.8300e-003	0.0000	155.2759	155.2759	0.0440	0.0000	156.3747
2024	3.7170	0.1137	1.6175	0.0119	0.0000	3.5000e-003	3.5000e-003	0.0000	3.5000e-003	3.5000e-003	0.0000	190.8578	190.8578	0.0558	0.0000	192.2529
2025	0.9478	0.0111	0.1581	2.1700e-003	0.0000	3.4000e-004	3.4000e-004	0.0000	3.4000e-004	3.4000e-004	0.0000	18.4864	18.4864	5.7800e-003	0.0000	18.6309
Maximum	**3.7170**	**0.1137**	**1.6175**	**0.0119**	**0.0000**	**3.5000e-003**	**3.5000e-003**	**0.0000**	**3.5000e-003**	**3.5000e-003**	**0.0000**	**190.8578**	**190.8578**	**0.0558**	**0.0000**	**192.2529**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

Percent Reduction	**15.06**	**97.54**	**70.92**	**0.00**	**0.00**	**98.22**	**98.22**	**0.00**	**98.11**	**98.11**	**0.00**	**77.61**	**77.61**	**74.59**	**0.00**	**77.59**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-4-2023**	**4-3-2023**	0.3298	0.0128
2	**4-4-2023**	**7-3-2023**	0.7364	0.0284
3	**7-4-2023**	**10-3-2023**	0.9614	0.0369
4	**10-4-2023**	**1-3-2024**	1.2877	0.2182
5	**1-4-2024**	**4-3-2024**	2.0205	0.6512
6	**4-4-2024**	**7-3-2024**	2.7341	1.0427
7	**7-4-2024**	**10-3-2024**	2.7099	1.1698
8	**10-4-2024**	**1-3-2025**	2.0045	0.9812
9	**1-4-2025**	**4-3-2025**	1.0904	0.5494
10	**4-4-2025**	**7-3-2025**	0.4143	0.2365
11	**7-4-2025**	**9-30-2025**	0.2504	0.1430
		Highest	2.7341	1.1698

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Bldg 1 Building Construction	Building Construction	1/4/2023	7/29/2024	5	409	
2	Bldg 2 Building Construction	Building Construction	3/3/2023	8/22/2024	5	385	
3	Bldg 3 Building Construction	Building Construction	4/25/2023	11/4/2024	5	400	
4	Bldg 4 Building Construction	Building Construction	6/10/2023	2/14/2025	5	440	
5	Bldg 1 Architectural Coating	Architectural Coating	11/9/2023	11/13/2024	5	265	
6	Bldg 2 Architectural Coating	Architectural Coating	1/10/2024	1/13/2025	5	264	
7	Bldg 1 Paving	Paving	3/6/2024	4/8/2024	5	24	
8	Bldg 3 Architectural Coating	Architectural Coating	3/24/2024	3/27/2025	5	264	
9	Bldg 2 Paving	Paving	5/1/2024	6/3/2024	5	24	

10	Bldg 4 Architectural Coating	Architectural Coating	5/23/2024	8/27/2025	5	330	
11	Bldg 3 Paving	Paving	7/10/2024	8/14/2024	5	26	
12	Bldg 4 Paving	Paving	1/9/2025	3/5/2025	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 1,154,250; Residential Outdoor: 384,750; Non-Residential Indoor: 765,000; Non-Residential Outdoor: 255,000;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Bldg 1 Building Construction	Cranes	1	8.40	231	0.29
Bldg 1 Building Construction	Forklifts	3	6.70	89	0.20
Bldg 1 Building Construction	Generator Sets	0	0.00	84	0.74
Bldg 1 Building Construction	Pumps	1	0.90	84	0.74
Bldg 1 Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Bldg 1 Building Construction	Welders	1	0.60	46	0.45
Bldg 2 Building Construction	Cranes	1	8.60	231	0.29
Bldg 2 Building Construction	Forklifts	3	6.90	89	0.20
Bldg 2 Building Construction	Generator Sets	0	0.00	84	0.74
Bldg 2 Building Construction	Pumps	1	0.90	84	0.74
Bldg 2 Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Bldg 2 Building Construction	Welders	1	0.70	46	0.45
Bldg 3 Building Construction	Cranes	1	8.30	231	0.29
Bldg 3 Building Construction	Forklifts	3	6.60	89	0.20
Bldg 3 Building Construction	Generator Sets	0	0.00	84	0.74
Bldg 3 Building Construction	Pumps	1	0.70	84	0.74
Bldg 3 Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Bldg 3 Building Construction	Welders	1	0.70	46	0.45
Bldg 4 Building Construction	Cranes	1	7.50	231	0.29

Bldg 4 Building Construction	Forklifts	3	6.00	89	0.20
Bldg 4 Building Construction	Generator Sets	0	0.00	84	0.74
Bldg 4 Building Construction	Pumps	1	0.60	84	0.74
Bldg 4 Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Bldg 4 Building Construction	Welders	1	0.60	46	0.45
Bldg 1 Architectural Coating	Aerial Lifts	6	8.00	63	0.31
Bldg 1 Architectural Coating	Air Compressors	2	8.00	78	0.48
Bldg 2 Architectural Coating	Aerial Lifts	6	8.00	63	0.31
Bldg 2 Architectural Coating	Air Compressors	2	8.00	78	0.48
Bldg 1 Paving	Pavers	1	3.70	130	0.42
Bldg 1 Paving	Paving Equipment	1	3.70	132	0.36
Bldg 1 Paving	Rollers	2	3.70	80	0.38
Bldg 1 Paving	Tractors/Loaders/Backhoes	2	7.30	97	0.37
Bldg 3 Architectural Coating	Aerial Lifts	6	8.00	63	0.31
Bldg 3 Architectural Coating	Air Compressors	2	8.00	78	0.48
Bldg 2 Paving	Pavers	1	3.70	130	0.42
Bldg 2 Paving	Paving Equipment	1	3.70	132	0.36
Bldg 2 Paving	Rollers	2	3.70	80	0.38
Bldg 2 Paving	Tractors/Loaders/Backhoes	2	7.30	97	0.37
Bldg 4 Architectural Coating	Aerial Lifts	6	6.40	63	0.31
Bldg 4 Architectural Coating	Air Compressors	2	6.40	78	0.48
Bldg 3 Paving	Pavers	1	3.40	130	0.42
Bldg 3 Paving	Paving Equipment	1	3.40	132	0.36
Bldg 3 Paving	Rollers	2	3.40	80	0.38
Bldg 3 Paving	Tractors/Loaders/Backhoes	2	6.80	97	0.37
Bldg 4 Paving	Pavers	1	2.20	130	0.42
Bldg 4 Paving	Paving Equipment	1	2.20	132	0.36
Bldg 4 Paving	Rollers	2	2.20	80	0.38
Bldg 4 Paving	Tractors/Loaders/Backhoes	2	4.40	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Bldg 1 Building Construction	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 2 Building Construction	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 3 Building Construction	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 4 Building Construction	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 1 Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 2 Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 1 Paving	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 3 Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 2 Paving	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 4 Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 3 Paving	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 4 Paving	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Bldg 1 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	0.0881	0.8816	0.6898	1.4000e-003		0.0433	0.0433		0.0400	0.0400	0.0000	122.2158	122.2158	0.0369	0.0000	123.1373
Total	**0.0881**	**0.8816**	**0.6898**	**1.4000e-003**		**0.0433**	**0.0433**		**0.0400**	**0.0400**	**0.0000**	**122.2158**	**122.2158**	**0.0369**	**0.0000**	**123.1373**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.0600e-003	0.0306	0.4354	1.4000e-003		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	51.7280	51.7280	0.0145	0.0000	52.0893
Total	**7.0600e-003**	**0.0306**	**0.4354**	**1.4000e-003**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**51.7280**	**51.7280**	**0.0145**	**0.0000**	**52.0893**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Bldg 1 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0481	0.4751	0.3978	8.2000e-004		0.0225	0.0225		0.0208	0.0208	0.0000	71.5285	71.5285	0.0216	0.0000	72.0675
Total	**0.0481**	**0.4751**	**0.3978**	**8.2000e-004**		**0.0225**	**0.0225**		**0.0208**	**0.0208**	**0.0000**	**71.5285**	**71.5285**	**0.0216**	**0.0000**	**72.0675**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.1300e-003	0.0179	0.2548	8.2000e-004		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	30.2749	30.2749	8.4500e-003	0.0000	30.4862
Total	**4.1300e-003**	**0.0179**	**0.2548**	**8.2000e-004**		**5.5000e-004**	**5.5000e-004**		**5.5000e-004**	**5.5000e-004**	**0.0000**	**30.2749**	**30.2749**	**8.4500e-003**	**0.0000**	**30.4862**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Bldg 2 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0758	0.7580	0.5940	1.2000e-003		0.0372	0.0372		0.0344	0.0344	0.0000	105.0308	105.0308	0.0317	0.0000	105.8229
Total	**0.0758**	**0.7580**	**0.5940**	**1.2000e-003**		**0.0372**	**0.0372**		**0.0344**	**0.0344**	**0.0000**	**105.0308**	**105.0308**	**0.0317**	**0.0000**	**105.8229**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.0600e-003	0.0263	0.3739	1.2000e-003		8.1000e-004	8.1000e-004		8.1000e-004	8.1000e-004	0.0000	44.3949	44.3949	0.0125	0.0000	44.7062
Total	**6.0600e-003**	**0.0263**	**0.3739**	**1.2000e-003**		**8.1000e-004**	**8.1000e-004**		**8.1000e-004**	**8.1000e-004**	**0.0000**	**44.3949**	**44.3949**	**0.0125**	**0.0000**	**44.7062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Bldg 2 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0554	0.5462	0.4580	9.4000e-004		0.0259	0.0259		0.0239	0.0239	0.0000	82.1759	82.1759	0.0248	0.0000	82.7951
Total	**0.0554**	**0.5462**	**0.4580**	**9.4000e-004**		**0.0259**	**0.0259**		**0.0239**	**0.0239**	**0.0000**	**82.1759**	**82.1759**	**0.0248**	**0.0000**	**82.7951**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	4.7400e-003	0.0206	0.2925	9.4000e-004		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004	0.0000	34.7349	34.7349	9.7300e-003	0.0000	34.9782
Total	**4.7400e-003**	**0.0206**	**0.2925**	**9.4000e-004**		**6.3000e-004**	**6.3000e-004**		**6.3000e-004**	**6.3000e-004**	**0.0000**	**34.7349**	**34.7349**	**9.7300e-003**	**0.0000**	**34.9782**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Bldg 3 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0599	0.5996	0.4662	9.5000e-004		0.0294	0.0294		0.0272	0.0272	0.0000	82.7212	82.7212	0.0252	0.0000	83.3514
Total	**0.0599**	**0.5996**	**0.4662**	**9.5000e-004**		**0.0294**	**0.0294**		**0.0272**	**0.0272**	**0.0000**	**82.7212**	**82.7212**	**0.0252**	**0.0000**	**83.3514**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.6900e-003	0.0203	0.2891	9.5000e-004		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004	0.0000	34.1734	34.1734	9.8200e-003	0.0000	34.4190
Total	**4.6900e-003**	**0.0203**	**0.2891**	**9.5000e-004**		**6.3000e-004**	**6.3000e-004**		**6.3000e-004**	**6.3000e-004**	**0.0000**	**34.1734**	**34.1734**	**9.8200e-003**	**0.0000**	**34.4190**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Bldg 3 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0690	0.6817	0.5671	1.1700e-003		0.0323	0.0323		0.0298	0.0298	0.0000	102.1294	102.1294	0.0311	0.0000	102.9069
Total	**0.0690**	**0.6817**	**0.5671**	**1.1700e-003**		**0.0323**	**0.0323**		**0.0298**	**0.0298**	**0.0000**	**102.1294**	**102.1294**	**0.0311**	**0.0000**	**102.9069**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.7900e-003	0.0251	0.3569	1.1700e-003		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004	0.0000	42.1918	42.1918	0.0121	0.0000	42.4948
Total	**5.7900e-003**	**0.0251**	**0.3569**	**1.1700e-003**		**7.7000e-004**	**7.7000e-004**		**7.7000e-004**	**7.7000e-004**	**0.0000**	**42.1918**	**42.1918**	**0.0121**	**0.0000**	**42.4948**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Bldg 4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0438	0.4386	0.3408	6.9000e-004		0.0215	0.0215		0.0199	0.0199	0.0000	60.4600	60.4600	0.0185	0.0000	60.9220
Total	**0.0438**	**0.4386**	**0.3408**	**6.9000e-004**		**0.0215**	**0.0215**		**0.0199**	**0.0199**	**0.0000**	**60.4600**	**60.4600**	**0.0185**	**0.0000**	**60.9220**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4300e-003	0.0149	0.2115	6.9000e-004		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	24.9796	24.9796	7.2300e-003	0.0000	25.1602
Total	**3.4300e-003**	**0.0149**	**0.2115**	**6.9000e-004**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**24.9796**	**24.9796**	**7.2300e-003**	**0.0000**	**25.1602**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Bldg 4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0738	0.7297	0.6067	1.2500e-003		0.0346	0.0346		0.0319	0.0319	0.0000	109.2436	109.2436	0.0334	0.0000	110.0778

Total	**0.0738**	**0.7297**	**0.6067**	**1.2500e-003**		**0.0346**	**0.0346**		**0.0319**	**0.0319**	**0.0000**	**109.2436**	**109.2436**	**0.0334**	**0.0000**	**110.0778**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.2000e-003	0.0269	0.3822	1.2500e-003		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	45.1355	45.1355	0.0131	0.0000	45.4616
Total	**6.2000e-003**	**0.0269**	**0.3822**	**1.2500e-003**		**8.3000e-004**	**8.3000e-004**		**8.3000e-004**	**8.3000e-004**	**0.0000**	**45.1355**	**45.1355**	**0.0131**	**0.0000**	**45.4616**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Bldg 4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.6900e-003	0.0841	0.0756	1.6000e-004		3.8900e-003	3.8900e-003		3.5900e-003	3.5900e-003	0.0000	13.7600	13.7600	4.2000e-003	0.0000	13.8649
Total	**8.6900e-003**	**0.0841**	**0.0756**	**1.6000e-004**		**3.8900e-003**	**3.8900e-003**		**3.5900e-003**	**3.5900e-003**	**0.0000**	**13.7600**	**13.7600**	**4.2000e-003**	**0.0000**	**13.8649**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.8000e-004	3.3800e-003	0.0481	1.6000e-004		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	5.6850	5.6850	1.6400e-003	0.0000	5.7260
Total	**7.8000e-004**	**3.3800e-003**	**0.0481**	**1.6000e-004**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**	**0.0000**	**5.6850**	**5.6850**	**1.6400e-003**	**0.0000**	**5.7260**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Bldg 1 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1677					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1235	0.2106	3.3000e-004		4.5200e-003	4.5200e-003		4.4300e-003	4.4300e-003	0.0000	28.9715	28.9715	6.0500e-003	0.0000	29.1227
Total	**0.1810**	**0.1235**	**0.2106**	**3.3000e-004**		**4.5200e-003**	**4.5200e-003**		**4.4300e-003**	**4.4300e-003**	**0.0000**	**28.9715**	**28.9715**	**6.0500e-003**	**0.0000**	**29.1227**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1677					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	3.3000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1677**	**0.0000**	**0.0000**	**3.3000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Bldg 1 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Archit. Coating	1.0333					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0786	0.7305	1.2977	2.0500e-003		0.0248	0.0248		0.0243	0.0243	0.0000	178.5269	178.5269	0.0370	0.0000	179.4520
Total	**1.1119**	**0.7305**	**1.2977**	**2.0500e-003**		**0.0248**	**0.0248**		**0.0243**	**0.0243**	**0.0000**	**178.5269**	**178.5269**	**0.0370**	**0.0000**	**179.4520**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0333					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	2.0500e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**1.0333**	**0.0000**	**0.0000**	**2.0500e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Bldg 2 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0879	0.8170	1.4514	2.3000e-003		0.0277	0.0277		0.0271	0.0271	0.0000	199.6682	199.6682	0.0414	0.0000	200.7029
Total	**1.2479**	**0.8170**	**1.4514**	**2.3000e-003**		**0.0277**	**0.0277**		**0.0271**	**0.0271**	**0.0000**	**199.6682**	**199.6682**	**0.0414**	**0.0000**	**200.7029**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	2.3000e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.1600**	**0.0000**	**0.0000**	**2.3000e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Bldg 2 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0409					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9700e-003	0.0278	0.0512	8.0000e-005		8.6000e-004	8.6000e-004		8.4000e-004	8.4000e-004	0.0000	7.0471	7.0471	1.4600e-003	0.0000	7.0835
Total	**0.0439**	**0.0278**	**0.0512**	**8.0000e-005**		**8.6000e-004**	**8.6000e-004**		**8.4000e-004**	**8.4000e-004**	**0.0000**	**7.0471**	**7.0471**	**1.4600e-003**	**0.0000**	**7.0835**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0409					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	8.0000e-005		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0409**	**0.0000**	**0.0000**	**8.0000e-005**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.8 Bldg 1 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7000e-003	0.0666	0.0998	1.5000e-004		3.2000e-003	3.2000e-003		2.9500e-003	2.9500e-003	0.0000	12.8323	12.8323	4.1500e-003	0.0000	12.9360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7000e-003**	**0.0666**	**0.0998**	**1.5000e-004**		**3.2000e-003**	**3.2000e-003**		**2.9500e-003**	**2.9500e-003**	**0.0000**	**12.8323**	**12.8323**	**4.1500e-003**	**0.0000**	**12.9360**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	1.7900e-003	7.7500e-003	0.1103	1.5000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	12.8322	12.8322	4.1500e-003	0.0000	12.9360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.7900e-003**	**7.7500e-003**	**0.1103**	**1.5000e-004**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**12.8322**	**12.8322**	**4.1500e-003**	**0.0000**	**12.9360**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.9 Bldg 3 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9189					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0697	0.6472	1.1498	1.8200e-003		0.0219	0.0219		0.0215	0.0215	0.0000	158.1685	158.1685	0.0328	0.0000	158.9882
Total	**0.9886**	**0.6472**	**1.1498**	**1.8200e-003**		**0.0219**	**0.0219**		**0.0215**	**0.0215**	**0.0000**	**158.1685**	**158.1685**	**0.0328**	**0.0000**	**158.9882**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9189					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	1.8200e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.9189**	**0.0000**	**0.0000**	**1.8200e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.9 Bldg 3 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2820					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0205	0.1915	0.3525	5.6000e-004		5.9100e-003	5.9100e-003		5.7800e-003	5.7800e-003	0.0000	48.5468	48.5468	0.0100	0.0000	48.7974
Total	**0.3025**	**0.1915**	**0.3525**	**5.6000e-004**		**5.9100e-003**	**5.9100e-003**		**5.7800e-003**	**5.7800e-003**	**0.0000**	**48.5468**	**48.5468**	**0.0100**	**0.0000**	**48.7974**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2820					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	5.6000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2820**	**0.0000**	**0.0000**	**5.6000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.10 Bldg 2 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7000e-003	0.0666	0.0998	1.5000e-004		3.2000e-003	3.2000e-003		2.9500e-003	2.9500e-003	0.0000	12.8323	12.8323	4.1500e-003	0.0000	12.9360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7000e-003**	**0.0666**	**0.0998**	**1.5000e-004**		**3.2000e-003**	**3.2000e-003**		**2.9500e-003**	**2.9500e-003**	**0.0000**	**12.8323**	**12.8323**	**4.1500e-003**	**0.0000**	**12.9360**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7900e-003	7.7500e-003	0.1103	1.5000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	12.8322	12.8322	4.1500e-003	0.0000	12.9360
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.7900e-003**	**7.7500e-003**	**0.1103**	**1.5000e-004**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**12.8322**	**12.8322**	**4.1500e-003**	**0.0000**	**12.9360**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.11 Bldg 4 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5786					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0439	0.4075	0.7240	1.1500e-003		0.0138	0.0138		0.0135	0.0135	0.0000	99.5992	99.5992	0.0207	0.0000	100.1153
Total	**0.6225**	**0.4075**	**0.7240**	**1.1500e-003**		**0.0138**	**0.0138**		**0.0135**	**0.0135**	**0.0000**	**99.5992**	**99.5992**	**0.0207**	**0.0000**	**100.1153**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5786					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	1.1500e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.5786**	**0.0000**	**0.0000**	**1.1500e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.11 Bldg 4 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6223					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0451	0.4225	0.7777	1.2300e-003		0.0131	0.0131		0.0128	0.0128	0.0000	107.1161	107.1161	0.0221	0.0000	107.6692
Total	**0.6674**	**0.4225**	**0.7777**	**1.2300e-003**		**0.0131**	**0.0131**		**0.0128**	**0.0128**	**0.0000**	**107.1161**	**107.1161**	**0.0221**	**0.0000**	**107.6692**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6223					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	1.2300e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.6223**	**0.0000**	**0.0000**	**1.2300e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.12 Bldg 3 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7200e-003	0.0667	0.1000	1.5000e-004		3.2100e-003	3.2100e-003		2.9500e-003	2.9500e-003	0.0000	12.8562	12.8562	4.1600e-003	0.0000	12.9602
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7200e-003**	**0.0667**	**0.1000**	**1.5000e-004**		**3.2100e-003**	**3.2100e-003**		**2.9500e-003**	**2.9500e-003**	**0.0000**	**12.8562**	**12.8562**	**4.1600e-003**	**0.0000**	**12.9602**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7900e-003	7.7600e-003	0.1105	1.5000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	12.8562	12.8562	4.1600e-003	0.0000	12.9602
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.7900e-003**	**7.7600e-003**	**0.1105**	**1.5000e-004**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**12.8562**	**12.8562**	**4.1600e-003**	**0.0000**	**12.9602**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.13 Bldg 4 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	6.1800e-003	0.0609	0.0993	1.5000e-004		2.7400e-003	2.7400e-003		2.5200e-003	2.5200e-003	0.0000	12.8014	12.8014	4.1400e-003	0.0000	12.9049
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.1800e-003**	**0.0609**	**0.0993**	**1.5000e-004**		**2.7400e-003**	**2.7400e-003**		**2.5200e-003**	**2.5200e-003**	**0.0000**	**12.8014**	**12.8014**	**4.1400e-003**	**0.0000**	**12.9049**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7800e-003	7.7300e-003	0.1100	1.5000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	12.8014	12.8014	4.1400e-003	0.0000	12.9049
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**1.7800e-003**	**7.7300e-003**	**0.1100**	**1.5000e-004**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**12.8014**	**12.8014**	**4.1400e-003**	**0.0000**	**12.9049**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

El Paseo Opt 2 (No Ed), San Jose - Construction Podium Mitigation

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	1,036.00	Space	8.85	366,620.00	0
Parking Lot	157.00	Space	0.00	62,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2018 Rate

Land Use - Land uses based on provided PD/Construction worksheet

Construction Phase - Provided construciton schedule

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Trips and VMT - 0 Trips EMFAC2017, pavement demo = 4,500tons, building const = 5,000 cement truck round trips

Demolition - existing building demo = 99,535sf

Grading - grading = 223,108cy export

Construction Off-road Equipment Mitigation - Enhanced BMPs, Tier 4 final engine mitigation, electric cranes, electric portable equip

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	55.00
tblConstructionPhase	NumDays	20.00	145.00
tblConstructionPhase	NumDays	230.00	15.00

tblConstructionPhase	NumDays	230.00	237.00
tblGrading	MaterialExported	0.00	223,108.00
tblLandUse	LandUseSquareFeet	414,400.00	366,620.00
tblLandUse	LotAcreage	9.32	8.85
tblLandUse	LotAcreage	1.41	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	8.00
tblOffRoadEquipment	UsageHours	8.00	1.80
tblOffRoadEquipment	UsageHours	8.00	5.10
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	4.70
tblOffRoadEquipment	UsageHours	8.00	0.60
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	4.70
tblOffRoadEquipment	UsageHours	7.00	0.00

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	HaulingTripNumber	453.00	0.00
tblTripsAndVMT	HaulingTripNumber	27,889.00	0.00
tblTripsAndVMT	VendorTripNumber	70.00	0.00
tblTripsAndVMT	VendorTripNumber	70.00	0.00
tblTripsAndVMT	WorkerTripNumber	33.00	0.00
tblTripsAndVMT	WorkerTripNumber	25.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	180.00	0.00
tblTripsAndVMT	WorkerTripNumber	180.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0716	0.6749	0.8583	1.3200e-003	0.0703	0.0361	0.1064	0.0103	0.0338	0.0440	0.0000	115.6257	115.6257	0.0323	0.0000	116.4340
2022	0.1306	1.2762	1.2856	2.2400e-003	0.0213	0.0642	0.0855	2.8400e-003	0.0598	0.0626	0.0000	195.6419	195.6419	0.0554	0.0000	197.0259

2023	0.3323	3.2648	2.5633	5.1500e-003	0.0000	0.1595	0.1595	0.0000	0.1475	0.1475	0.0000	448.6977	448.6977	0.1357	0.0000	452.0899
Maximum	**0.3323**	**3.2648**	**2.5633**	**5.1500e-003**	**0.0703**	**0.1595**	**0.1595**	**0.0103**	**0.1475**	**0.1475**	**0.0000**	**448.6977**	**448.6977**	**0.1357**	**0.0000**	**452.0899**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0142	0.0613	0.8607	1.3200e-003	0.0274	1.8900e-003	0.0293	2.0000e-003	1.8900e-003	3.8900e-003	0.0000	102.3186	102.3186	0.0316	0.0000	103.1076
2022	0.0193	0.0836	1.1687	2.2400e-003	8.2900e-003	2.5700e-003	0.0109	5.5000e-004	2.5700e-003	3.1300e-003	0.0000	142.5426	142.5426	0.0389	0.0000	143.5160
2023	0.0247	0.1069	1.5205	5.1500e-003	0.0000	3.2900e-003	3.2900e-003	0.0000	3.2900e-003	3.2900e-003	0.0000	179.1223	179.1223	0.0525	0.0000	180.4347
Maximum	**0.0247**	**0.1069**	**1.5205**	**5.1500e-003**	**0.0274**	**3.2900e-003**	**0.0293**	**2.0000e-003**	**3.2900e-003**	**3.8900e-003**	**0.0000**	**179.1223**	**179.1223**	**0.0525**	**0.0000**	**180.4347**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**89.13**	**95.17**	**24.58**	**0.00**	**61.00**	**97.02**	**87.64**	**80.53**	**96.78**	**95.94**	**0.00**	**44.21**	**44.21**	**44.94**	**0.00**	**44.22**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	0.6283	0.0623
2	**12-1-2021**	**2-28-2022**	0.3081	0.0376
3	**3-1-2022**	**5-31-2022**	0.2370	0.0305
4	**6-1-2022**	**8-31-2022**	0.0944	0.0101
5	**9-1-2022**	**11-30-2022**	0.4166	0.0207
6	**12-1-2022**	**2-28-2023**	1.2261	0.0449
7	**3-1-2023**	**5-31-2023**	1.1938	0.0436
8	**6-1-2023**	**8-31-2023**	1.1938	0.0436
9	**9-1-2023**	**9-30-2023**	0.3893	0.0142

		Highest	1.2261	0.0623

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	11/16/2021	5	55	
2	Grading	Grading	10/22/2021	5/12/2022	5	145	
3	Trenching	Trenching	7/15/2022	12/21/2022	5	114	
4	Concrete	Building Construction	7/15/2022	8/4/2022	5	15	
5	Building Construction	Building Construction	11/8/2022	10/4/2023	5	237	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 16.31

Acres of Paving: 8.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	4	1.80	81	0.73
Demolition	Crushing/Proc. Equipment	1	2.90	85	0.78
Demolition	Excavators	4	5.10	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	4	6.50	97	0.37
Grading	Excavators	3	4.70	158	0.38
Grading	Graders	3	0.60	187	0.41
Grading	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Tractors/Loaders/Backhoes	4	4.70	97	0.37
Trenching	Pumps	2	1.80	84	0.74
Trenching	Tractors/Loaders/Backhoes	2	2.80	97	0.37

Concrete	Cranes	0	0.00	231	0.29
Concrete	Forklifts	0	0.00	89	0.20
Concrete	Generator Sets	0	0.00	84	0.74
Concrete	Pumps	1	15.00	84	0.74
Concrete	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Concrete	Welders	0	0.00	46	0.45
Building Construction	Cranes	4	10.00	231	0.29
Building Construction	Forklifts	12	8.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Pumps	2	1.40	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Building Construction	Welders	8	1.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	13	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	10	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Concrete	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	26	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0490	0.0000	0.0490	7.4200e-003	0.0000	7.4200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0474	0.4305	0.5656	8.6000e-004		0.0237	0.0237		0.0223	0.0223	0.0000	75.5339	75.5339	0.0194	0.0000	76.0181
Total	**0.0474**	**0.4305**	**0.5656**	**8.6000e-004**	**0.0490**	**0.0237**	**0.0727**	**7.4200e-003**	**0.0223**	**0.0297**	**0.0000**	**75.5339**	**75.5339**	**0.0194**	**0.0000**	**76.0181**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0191	0.0000	0.0191	1.4500e-003	0.0000	1.4500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.5500e-003	0.0371	0.5272	8.6000e-004		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003	0.0000	62.2269	62.2269	0.0186	0.0000	62.6917
Total	**8.5500e-003**	**0.0371**	**0.5272**	**8.6000e-004**	**0.0191**	**1.1400e-003**	**0.0203**	**1.4500e-003**	**1.1400e-003**	**2.5900e-003**	**0.0000**	**62.2269**	**62.2269**	**0.0186**	**0.0000**	**62.6917**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0213	0.0000	0.0213	2.8400e-003	0.0000	2.8400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0241	0.2444	0.2926	4.6000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	40.0918	40.0918	0.0130	0.0000	40.4159
Total	**0.0241**	**0.2444**	**0.2926**	**4.6000e-004**	**0.0213**	**0.0125**	**0.0337**	**2.8400e-003**	**0.0115**	**0.0143**	**0.0000**	**40.0918**	**40.0918**	**0.0130**	**0.0000**	**40.4159**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.2900e-003	0.0000	8.2900e-003	5.5000e-004	0.0000	5.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6000e-003	0.0243	0.3335	4.6000e-004		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	40.0917	40.0917	0.0130	0.0000	40.4159
Total	**5.6000e-003**	**0.0243**	**0.3335**	**4.6000e-004**	**8.2900e-003**	**7.5000e-004**	**9.0400e-003**	**5.5000e-004**	**7.5000e-004**	**1.3000e-003**	**0.0000**	**40.0917**	**40.0917**	**0.0130**	**0.0000**	**40.4159**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0213	0.0000	0.0213	2.8400e-003	0.0000	2.8400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0394	0.3879	0.5350	8.4000e-004		0.0188	0.0188		0.0173	0.0173	0.0000	73.9114	73.9114	0.0239	0.0000	74.5090
Total	**0.0394**	**0.3879**	**0.5350**	**8.4000e-004**	**0.0213**	**0.0188**	**0.0401**	**2.8400e-003**	**0.0173**	**0.0202**	**0.0000**	**73.9114**	**73.9114**	**0.0239**	**0.0000**	**74.5090**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.2900e-003	0.0000	8.2900e-003	5.5000e-004	0.0000	5.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0103	0.0447	0.6147	8.4000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003	0.0000	73.9113	73.9113	0.0239	0.0000	74.5089
Total	**0.0103**	**0.0447**	**0.6147**	**8.4000e-004**	**8.2900e-003**	**1.3800e-003**	**9.6700e-003**	**5.5000e-004**	**1.3800e-003**	**1.9300e-003**	**0.0000**	**73.9113**	**73.9113**	**0.0239**	**0.0000**	**74.5089**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Trenching - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0156	0.1430	0.1850	2.9000e-004		7.5900e-003	7.5900e-003		7.3000e-003	7.3000e-003	0.0000	25.4014	25.4014	4.2700e-003	0.0000	25.5081
Total	**0.0156**	**0.1430**	**0.1850**	**2.9000e-004**		**7.5900e-003**	**7.5900e-003**		**7.3000e-003**	**7.3000e-003**	**0.0000**	**25.4014**	**25.4014**	**4.2700e-003**	**0.0000**	**25.5081**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2000e-003	0.0139	0.1975	2.9000e-004		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	25.4014	25.4014	4.2700e-003	0.0000	25.5081
Total	**3.2000e-003**	**0.0139**	**0.1975**	**2.9000e-004**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**25.4014**	**25.4014**	**4.2700e-003**	**0.0000**	**25.5081**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Concrete - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	4.9500e-003	0.0418	0.0525	9.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003	0.0000	7.9482	7.9482	4.1000e-004	0.0000	7.9584
Total	**4.9500e-003**	**0.0418**	**0.0525**	**9.0000e-005**		**2.1900e-003**	**2.1900e-003**		**2.1900e-003**	**2.1900e-003**	**0.0000**	**7.9482**	**7.9482**	**4.1000e-004**	**0.0000**	**7.9584**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.3000e-004	4.0100e-003	0.0570	9.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	7.9482	7.9482	4.1000e-004	0.0000	7.9584
Total	**9.3000e-004**	**4.0100e-003**	**0.0570**	**9.0000e-005**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**7.9482**	**7.9482**	**4.1000e-004**	**0.0000**	**7.9584**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0708	0.7036	0.5130	1.0100e-003		0.0356	0.0356		0.0329	0.0329	0.0000	88.3808	88.3808	0.0268	0.0000	89.0505
Total	**0.0708**	**0.7036**	**0.5130**	**1.0100e-003**		**0.0356**	**0.0356**		**0.0329**	**0.0329**	**0.0000**	**88.3808**	**88.3808**	**0.0268**	**0.0000**	**89.0505**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.8600e-003	0.0211	0.2995	1.0100e-003		6.5000e-004	6.5000e-004		6.5000e-004	6.5000e-004	0.0000	35.2817	35.2817	0.0104	0.0000	35.5407
Total	**4.8600e-003**	**0.0211**	**0.2995**	**1.0100e-003**		**6.5000e-004**	**6.5000e-004**		**6.5000e-004**	**6.5000e-004**	**0.0000**	**35.2817**	**35.2817**	**0.0104**	**0.0000**	**35.5407**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3323	3.2648	2.5633	5.1500e-003		0.1595	0.1595		0.1475	0.1475	0.0000	448.6977	448.6977	0.1357	0.0000	452.0899
Total	**0.3323**	**3.2648**	**2.5633**	**5.1500e-003**		**0.1595**	**0.1595**		**0.1475**	**0.1475**	**0.0000**	**448.6977**	**448.6977**	**0.1357**	**0.0000**	**452.0899**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0247	0.1069	1.5205	5.1500e-003		3.2900e-003	3.2900e-003		3.2900e-003	3.2900e-003	0.0000	179.1223	179.1223	0.0525	0.0000	180.4347
Total	**0.0247**	**0.1069**	**1.5205**	**5.1500e-003**		**3.2900e-003**	**3.2900e-003**		**3.2900e-003**	**3.2900e-003**	**0.0000**	**179.1223**	**179.1223**	**0.0525**	**0.0000**	**180.4347**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

El Paseo Opt 2 (No Ed), San Jose - Construction Bldgs 1-3 Mitigated

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	444.00	Space	0.00	184,395.00	0
Apartments Mid Rise	820.00	Dwelling Unit	4.42	939,657.00	2345
Strip Mall	159.00	1000sqft	4.42	159,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2018 Rate

Land Use - and uses based on PD/Construction worksheet from Opt 2 Bldgs 1-3

Construction Phase - Provided construction schedule from Opt 2 Bldgs 1-3

Off-road Equipment -

Off-road Equipment - Provided construction equip & hours for Opt 2 Bldgs 1-3

Off-road Equipment - Provided construction equip & hours for Opt 2 Bldgs 1-3

Off-road Equipment - Provided construction equip & hours for Opt 2 Bldgs 1-3

Off-road Equipment - Provided construction equip & hours for Opt 2 Bldgs 1-3

Off-road Equipment - Provided construction equip & hours for Opt 2 Bldgs 1-3

Off-road Equipment - Provided construction equip & hours for Opt 2 Bldgs 1-3

Off-road Equipment - Provided construction equip & hours for Opt 2 Bldgs 1-3

Trips and VMT - 0 Trips EMFAC2017, Bldg 1 - 850 cement truck round trips, Bldg 2 - 600 cement truck round trips, Bldg 3 - 825 cement truck round trips

Architectural Coating - At least 90% of paints have to be super-compliant VOC = effectively 19gm/L interior and 24g/L exterior

Construction Off-road Equipment Mitigation - Enhanced BMPs, Tier 4 final engine mitigation, electric cranes, portable equip, and aerieal lifts

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	24.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	24.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	24.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	19.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	19.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	19.00
tblArchitecturalCoating	EF_Parking	150.00	24.00
tblArchitecturalCoating	EF_Parking	150.00	24.00
tblArchitecturalCoating	EF_Parking	150.00	24.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	24.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	24.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	24.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	19.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	19.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	19.00
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	307.00
tblConstructionPhase	NumDays	20.00	267.00
tblConstructionPhase	NumDays	20.00	250.00
tblConstructionPhase	NumDays	230.00	312.00
tblConstructionPhase	NumDays	230.00	410.00
tblConstructionPhase	NumDays	230.00	445.00
tblConstructionPhase	NumDays	20.00	21.00
tblLandUse	LandUseSquareFeet	177,600.00	184,395.00
tblLandUse	LandUseSquareFeet	820,000.00	939,657.00
tblLandUse	LotAcreage	4.00	0.00
tblLandUse	LotAcreage	21.58	4.42
tblLandUse	LotAcreage	3.65	4.42
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	6.30
tblOffRoadEquipment	UsageHours	6.00	7.20
tblOffRoadEquipment	UsageHours	6.00	7.70
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	7.00	7.30
tblOffRoadEquipment	UsageHours	7.00	6.70
tblOffRoadEquipment	UsageHours	8.00	5.60
tblOffRoadEquipment	UsageHours	8.00	5.40
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	3.80
tblOffRoadEquipment	UsageHours	8.00	3.80
tblOffRoadEquipment	UsageHours	8.00	3.80
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.90
tblOffRoadEquipment	UsageHours	8.00	0.60
tblOffRoadEquipment	UsageHours	8.00	0.50
tblProjectCharacteristics	CO2IntensityFactor	641.35	206

tblTripsAndVMT	VendorTripNumber	144.00	0.00
tblTripsAndVMT	VendorTripNumber	144.00	0.00
tblTripsAndVMT	VendorTripNumber	144.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	719.00	0.00
tblTripsAndVMT	WorkerTripNumber	719.00	0.00
tblTripsAndVMT	WorkerTripNumber	719.00	0.00
tblTripsAndVMT	WorkerTripNumber	144.00	0.00
tblTripsAndVMT	WorkerTripNumber	144.00	0.00
tblTripsAndVMT	WorkerTripNumber	144.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	6.8700e-003	0.0698	0.0903	1.3000e-004	0.0000	3.7100e-003	3.7100e-003	0.0000	3.4100e-003	3.4100e-003	0.0000	11.5960	11.5960	3.7500e-003	0.0000	11.6898
2023	0.1248	1.2460	0.9766	1.9800e-003	0.0000	0.0611	0.0611	0.0000	0.0565	0.0565	0.0000	172.8499	172.8499	0.0519	0.0000	174.1478
2024	1.9790	2.8061	3.2542	5.8800e-003	0.0000	0.1198	0.1198	0.0000	0.1125	0.1125	0.0000	512.8692	512.8692	0.1325	0.0000	516.1814
2025	2.5272	1.6754	2.7291	4.4900e-003	0.0000	0.0575	0.0575	0.0000	0.0553	0.0553	0.0000	390.9607	390.9607	0.0868	0.0000	393.1306
Maximum	**2.5272**	**2.8061**	**3.2542**	**5.8800e-003**	**0.0000**	**0.1198**	**0.1198**	**0.0000**	**0.1125**	**0.1125**	**0.0000**	**512.8692**	**512.8692**	**0.1325**	**0.0000**	**516.1814**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	1.6200e-003	7.0100e-003	0.0998	1.3000e-004	0.0000	2.2000e-004	2.2000e-004	0.0000	2.2000e-004	2.2000e-004	0.0000	11.5960	11.5960	3.7500e-003	0.0000	11.6898
2023	9.9500e-003	0.0431	0.6134	1.9800e-003	0.0000	1.3300e-003	1.3300e-003	0.0000	1.3300e-003	1.3300e-003	0.0000	72.9573	72.9573	0.0203	0.0000	73.4640
2024	1.7043	0.0683	0.9719	5.8800e-003	0.0000	2.1000e-003	2.1000e-003	0.0000	2.1000e-003	2.1000e-003	0.0000	115.3217	115.3217	0.0324	0.0000	116.1327
2025	2.3530	0.0152	0.2162	4.4900e-003	0.0000	4.7000e-004	4.7000e-004	0.0000	4.7000e-004	4.7000e-004	0.0000	25.5607	25.5607	7.3300e-003	0.0000	25.7439
Maximum	**2.3530**	**0.0683**	**0.9719**	**5.8800e-003**	**0.0000**	**2.1000e-003**	**2.1000e-003**	**0.0000**	**2.1000e-003**	**2.1000e-003**	**0.0000**	**115.3217**	**115.3217**	**0.0324**	**0.0000**	**116.1327**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**12.27**	**97.70**	**73.03**	**0.00**	**0.00**	**98.30**	**98.30**	**0.00**	**98.19**	**98.19**	**0.00**	**79.29**	**79.29**	**76.80**	**0.00**	**79.27**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**6-16-2022**	**9-15-2022**	0.0756	0.0085
4	**3-16-2023**	**6-15-2023**	0.2035	0.0080
5	**6-16-2023**	**9-15-2023**	0.3896	0.0151
6	**9-16-2023**	**12-15-2023**	0.6611	0.0255
7	**12-16-2023**	**3-15-2024**	0.6524	0.0268
8	**3-16-2024**	**6-15-2024**	0.7679	0.0992
9	**6-16-2024**	**9-15-2024**	1.4155	0.6360
10	**9-16-2024**	**12-15-2024**	1.7256	0.8434
11	**12-16-2024**	**3-15-2025**	1.8514	0.9659
12	**3-16-2025**	**6-15-2025**	1.7333	0.9806
13	**6-16-2025**	**9-15-2025**	0.8413	0.5210
14	**9-16-2025**	**9-30-2025**	0.0929	0.0577
		Highest	1.8514	0.9806

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Bldg 1 Paving	Paving	6/16/2022	7/14/2022	5	21	
2	Bldg 1 Building Construction	Building Construction	4/14/2023	6/24/2024	5	312	
3	Bldg 2 Building Construction	Building Construction	8/7/2023	2/28/2025	5	410	
4	Bldg 3 Building Construction	Building Construction	10/3/2023	6/16/2025	5	445	
5	Bldg 2 Architectural Coating	Architectural Coating	5/24/2024	7/28/2025	5	307	
6	Bldg 1 Architectural Coating	Architectural Coating	6/16/2024	6/24/2025	5	267	
7	Bldg 3 Architectural Coating	Architectural Coating	10/21/2024	10/3/2025	5	250	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 1,902,805; Residential Outdoor: 634,268; Non-Residential Indoor: 238,500; Non-Residential Outdoor: 79,500; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Bldg 1 Paving	Pavers	1	3.80	130	0.42
Bldg 1 Paving	Paving Equipment	1	3.80	132	0.36
Bldg 1 Paving	Rollers	2	3.80	80	0.38
Bldg 1 Paving	Tractors/Loaders/Backhoes	2	7.60	97	0.37
Bldg 1 Building Construction	Cranes	1	10.00	231	0.29
Bldg 1 Building Construction	Forklifts	3	8.00	89	0.20
Bldg 1 Building Construction	Generator Sets	0	0.00	84	0.74
Bldg 1 Building Construction	Pumps	1	1.20	84	0.74
Bldg 1 Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Bldg 1 Building Construction	Welders	1	0.90	46	0.45
Bldg 2 Building Construction	Cranes	1	7.30	231	0.29

Bldg 2 Building Construction	Forklifts	3	5.60	89	0.20
Bldg 2 Building Construction	Generator Sets	0	0.00	84	0.74
Bldg 2 Building Construction	Pumps	1	0.80	84	0.74
Bldg 2 Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Bldg 2 Building Construction	Welders	1	0.60	46	0.45
Bldg 3 Building Construction	Cranes	1	6.70	231	0.29
Bldg 3 Building Construction	Forklifts	3	5.40	89	0.20
Bldg 3 Building Construction	Generator Sets	0	0.00	84	0.74
Bldg 3 Building Construction	Pumps	1	0.50	84	0.74
Bldg 3 Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Bldg 3 Building Construction	Welders	1	0.50	46	0.45
Bldg 2 Architectural Coating	Aerial Lifts	6	6.30	63	0.31
Bldg 2 Architectural Coating	Air Compressors	2	6.30	78	0.48
Bldg 1 Architectural Coating	Aerial Lifts	6	7.20	63	0.31
Bldg 1 Architectural Coating	Air Compressors	2	7.20	78	0.48
Bldg 3 Architectural Coating	Aerial Lifts	6	7.70	63	0.31
Bldg 3 Architectural Coating	Air Compressors	2	7.70	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Bldg 1 Paving	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 1 Building Construction	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 2 Building Construction	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 3 Building Construction	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 2 Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 1 Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg 3 Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Bldg 1 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8700e-003	0.0698	0.0903	1.3000e-004		3.7100e-003	3.7100e-003		3.4100e-003	3.4100e-003	0.0000	11.5960	11.5960	3.7500e-003	0.0000	11.6898
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.8700e-003**	**0.0698**	**0.0903**	**1.3000e-004**		**3.7100e-003**	**3.7100e-003**		**3.4100e-003**	**3.4100e-003**	**0.0000**	**11.5960**	**11.5960**	**3.7500e-003**	**0.0000**	**11.6898**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6200e-003	7.0100e-003	0.0998	1.3000e-004		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	11.5960	11.5960	3.7500e-003	0.0000	11.6898
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.6200e-003**	**7.0100e-003**	**0.0998**	**1.3000e-004**		**2.2000e-004**	**2.2000e-004**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**11.5960**	**11.5960**	**3.7500e-003**	**0.0000**	**11.6898**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Bldg 1 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0767	0.7646	0.6022	1.2200e-003		0.0375	0.0375		0.0347	0.0347	0.0000	106.2544	106.2544	0.0318	0.0000	107.0482
Total	**0.0767**	**0.7646**	**0.6022**	**1.2200e-003**		**0.0375**	**0.0375**		**0.0347**	**0.0347**	**0.0000**	**106.2544**	**106.2544**	**0.0318**	**0.0000**	**107.0482**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	6.1700e-003	0.0268	0.3807	1.2200e-003		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	45.3519	45.3519	0.0125	0.0000	45.6638
Total	**6.1700e-003**	**0.0268**	**0.3807**	**1.2200e-003**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**45.3519**	**45.3519**	**0.0125**	**0.0000**	**45.6638**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Bldg 1 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0485	0.4771	0.4020	8.2000e-004		0.0226	0.0226		0.0209	0.0209	0.0000	71.9779	71.9779	0.0215	0.0000	72.5152
Total	**0.0485**	**0.4771**	**0.4020**	**8.2000e-004**		**0.0226**	**0.0226**		**0.0209**	**0.0209**	**0.0000**	**71.9779**	**71.9779**	**0.0215**	**0.0000**	**72.5152**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.1800e-003	0.0181	0.2579	8.2000e-004		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	30.7222	30.7222	8.4400e-003	0.0000	30.9333
Total	**4.1800e-003**	**0.0181**	**0.2579**	**8.2000e-004**		**5.6000e-004**	**5.6000e-004**		**5.6000e-004**	**5.6000e-004**	**0.0000**	**30.7222**	**30.7222**	**8.4400e-003**	**0.0000**	**30.9333**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Bldg 2 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0309	0.3086	0.2403	4.9000e-004		0.0151	0.0151		0.0140	0.0140	0.0000	42.8003	42.8003	0.0129	0.0000	43.1218
Total	**0.0309**	**0.3086**	**0.2403**	**4.9000e-004**		**0.0151**	**0.0151**		**0.0140**	**0.0140**	**0.0000**	**42.8003**	**42.8003**	**0.0129**	**0.0000**	**43.1218**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.4200e-003	0.0105	0.1494	4.9000e-004		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	17.7729	17.7729	4.9200e-003	0.0000	17.8960
Total	**2.4200e-003**	**0.0105**	**0.1494**	**4.9000e-004**		**3.2000e-004**	**3.2000e-004**		**3.2000e-004**	**3.2000e-004**	**0.0000**	**17.7729**	**17.7729**	**4.9200e-003**	**0.0000**	**17.8960**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Bldg 2 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0719	0.7093	0.5906	1.2200e-003		0.0335	0.0335		0.0310	0.0310	0.0000	106.7955	106.7955	0.0321	0.0000	107.5971
Total	**0.0719**	**0.7093**	**0.5906**	**1.2200e-003**		**0.0335**	**0.0335**		**0.0310**	**0.0310**	**0.0000**	**106.7955**	**106.7955**	**0.0321**	**0.0000**	**107.5971**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.0400e-003	0.0262	0.3727	1.2200e-003		8.1000e-004	8.1000e-004		8.1000e-004	8.1000e-004	0.0000	44.3477	44.3477	0.0123	0.0000	44.6546
Total	**6.0400e-003**	**0.0262**	**0.3727**	**1.2200e-003**		**8.1000e-004**	**8.1000e-004**		**8.1000e-004**	**8.1000e-004**	**0.0000**	**44.3477**	**44.3477**	**0.0123**	**0.0000**	**44.6546**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Bldg 2 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1065	0.0959	2.0000e-004		4.9000e-003	4.9000e-003		4.5300e-003	4.5300e-003	0.0000	17.5279	17.5279	5.2600e-003	0.0000	17.6592

Total	**0.0110**	**0.1065**	**0.0959**	**2.0000e-004**		**4.9000e-003**	**4.9000e-003**		**4.5300e-003**	**4.5300e-003**	**0.0000**	**17.5279**	**17.5279**	**5.2600e-003**	**0.0000**	**17.6592**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.9000e-004	4.3000e-003	0.0612	2.0000e-004		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	7.2784	7.2784	2.0100e-003	0.0000	7.3287
Total	**9.9000e-004**	**4.3000e-003**	**0.0612**	**2.0000e-004**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**7.2784**	**7.2784**	**2.0100e-003**	**0.0000**	**7.3287**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Bldg 3 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0172	0.1728	0.1342	2.7000e-004		8.4900e-003	8.4900e-003		7.8400e-003	7.8400e-003	0.0000	23.7953	23.7953	7.3000e-003	0.0000	23.9778
Total	**0.0172**	**0.1728**	**0.1342**	**2.7000e-004**		**8.4900e-003**	**8.4900e-003**		**7.8400e-003**	**7.8400e-003**	**0.0000**	**23.7953**	**23.7953**	**7.3000e-003**	**0.0000**	**23.9778**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3500e-003	5.8600e-003	0.0834	2.7000e-004		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	9.8325	9.8325	2.8700e-003	0.0000	9.9041
Total	**1.3500e-003**	**5.8600e-003**	**0.0834**	**2.7000e-004**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**9.8325**	**9.8325**	**2.8700e-003**	**0.0000**	**9.9041**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Bldg 3 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0658	0.6513	0.5410	1.1100e-003		0.0309	0.0309		0.0285	0.0285	0.0000	97.4106	97.4106	0.0299	0.0000	98.1574
Total	**0.0658**	**0.6513**	**0.5410**	**1.1100e-003**		**0.0309**	**0.0309**		**0.0285**	**0.0285**	**0.0000**	**97.4106**	**97.4106**	**0.0299**	**0.0000**	**98.1574**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.5400e-003	0.0240	0.3414	1.1100e-003		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	40.2517	40.2517	0.0117	0.0000	40.5448
Total	**5.5400e-003**	**0.0240**	**0.3414**	**1.1100e-003**		**7.4000e-004**	**7.4000e-004**		**7.4000e-004**	**7.4000e-004**	**0.0000**	**40.2517**	**40.2517**	**0.0117**	**0.0000**	**40.5448**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Bldg 3 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	0.0279	0.2705	0.2431	5.1000e-004		0.0125	0.0125		0.0116	0.0116	0.0000	44.2446	44.2446	0.0136	0.0000	44.5835
Total	**0.0279**	**0.2705**	**0.2431**	**5.1000e-004**		**0.0125**	**0.0125**		**0.0116**	**0.0116**	**0.0000**	**44.2446**	**44.2446**	**0.0136**	**0.0000**	**44.5835**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.5100e-003	0.0109	0.1550	5.1000e-004		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	18.2823	18.2823	5.3200e-003	0.0000	18.4152
Total	**2.5100e-003**	**0.0109**	**0.1550**	**5.1000e-004**		**3.4000e-004**	**3.4000e-004**		**3.4000e-004**	**3.4000e-004**	**0.0000**	**18.2823**	**18.2823**	**5.3200e-003**	**0.0000**	**18.4152**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Bldg 2 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6927					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0429	0.3987	0.7082	1.1200e-003		0.0135	0.0135		0.0132	0.0132	0.0000	97.4263	97.4263	0.0202	0.0000	97.9312
Total	**0.7357**	**0.3987**	**0.7082**	**1.1200e-003**		**0.0135**	**0.0135**		**0.0132**	**0.0132**	**0.0000**	**97.4263**	**97.4263**	**0.0202**	**0.0000**	**97.9312**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6927					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	1.1200e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.6927**	**0.0000**	**0.0000**	**1.1200e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Bldg 2 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6533					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0387	0.3624	0.6671	1.0600e-003		0.0112	0.0112		0.0109	0.0109	0.0000	91.8767	91.8767	0.0190	0.0000	92.3511
Total	**0.6920**	**0.3624**	**0.6671**	**1.0600e-003**		**0.0112**	**0.0112**		**0.0109**	**0.0109**	**0.0000**	**91.8767**	**91.8767**	**0.0190**	**0.0000**	**92.3511**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6533					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	1.0600e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.6533**	**0.0000**	**0.0000**	**1.0600e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Bldg 1 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0441	0.4095	0.7274	1.1500e-003		0.0139	0.0139		0.0136	0.0136	0.0000	100.0690	100.0690	0.0207	0.0000	100.5876
Total	**0.7599**	**0.4095**	**0.7274**	**1.1500e-003**		**0.0139**	**0.0139**		**0.0136**	**0.0136**	**0.0000**	**100.0690**	**100.0690**	**0.0207**	**0.0000**	**100.5876**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Archit. Coating	0.7159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	1.1500e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.7159**	**0.0000**	**0.0000**	**1.1500e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Bldg 1 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0371	0.3475	0.6396	1.0100e-003		0.0107	0.0107		0.0105	0.0105	0.0000	88.0889	88.0889	0.0182	0.0000	88.5437
Total	**0.6673**	**0.3475**	**0.6396**	**1.0100e-003**		**0.0107**	**0.0107**		**0.0105**	**0.0105**	**0.0000**	**88.0889**	**88.0889**	**0.0182**	**0.0000**	**88.5437**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	1.0100e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.6302**	**0.0000**	**0.0000**	**1.0100e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.8 Bldg 3 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2800					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0173	0.1604	0.2849	4.5000e-004		5.4400e-003	5.4400e-003		5.3300e-003	5.3300e-003	0.0000	39.1898	39.1898	8.1200e-003	0.0000	39.3929
Total	**0.2972**	**0.1604**	**0.2849**	**4.5000e-004**		**5.4400e-003**	**5.4400e-003**		**5.3300e-003**	**5.3300e-003**	**0.0000**	**39.1898**	**39.1898**	**8.1200e-003**	**0.0000**	**39.3929**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2800					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	4.5000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2800**	**0.0000**	**0.0000**	**4.5000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.8 Bldg 3 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0661					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0629	0.5886	1.0835	1.7200e-003		0.0182	0.0182		0.0178	0.0178	0.0000	149.2226	149.2226	0.0308	0.0000	149.9931
Total	**1.1289**	**0.5886**	**1.0835**	**1.7200e-003**		**0.0182**	**0.0182**		**0.0178**	**0.0178**	**0.0000**	**149.2226**	**149.2226**	**0.0308**	**0.0000**	**149.9931**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0661					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	1.7200e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0661**	**0.0000**	**0.0000**	**1.7200e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

1777 Saratoga Ave, San Jose - Construction - Santa Clara County, Annual

1777 Saratoga Ave, San Jose - Construction Mitigation

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	331.00	Space	0.00	182,396.00	0
Apartments Mid Rise	280.00	Dwelling Unit	1.82	350,000.00	801
Strip Mall	6.00	1000sqft	0.00	6,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2018 Rate

Land Use - Based on PD/Constr. - 1777 SaratogaResidential = 280 (350000) retail = 6,000 Parking = 331 (182396)

Construction Phase - Based on provided 1777 Saratoga Construction worksheet

Off-road Equipment - Based on provided 1777 Saratoga Construction worksheet

Off-road Equipment - Based on provided 1777 Saratoga Construction worksheet

Off-road Equipment - Based on provided 1777 Saratoga Construction worksheet

Off-road Equipment - Based on provided 1777 Saratoga Construction worksheet

Off-road Equipment - Based on provided 1777 Saratoga Construction worksheet

Off-road Equipment - Based on provided 1777 Saratoga Construction worksheet

Trips and VMT - 0 Trips EMFAC2017, pavement demo = 900 tons, building const = 1,200 cement truck round trips, paving = 50cy asphalt

Demolition - Existing building demo = 17,000sf / 575tons hauling

Grading - Grading = 64,200cy export

Architectural Coating - At least 90% of paints have to be super-compliant VOC = effectively 19gm/L interior and 24g/L exterior

Construction Off-road Equipment Mitigation - Enhanced BMPs, Tier 4 final engine mitigation, electric cranes, portable equip, and aerieal lifts

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	24.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	19.00
tblArchitecturalCoating	EF_Parking	150.00	24.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	24.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	19.00
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	55.00
tblConstructionPhase	NumDays	4.00	67.00
tblConstructionPhase	NumDays	200.00	453.00
tblConstructionPhase	NumDays	10.00	217.00
tblConstructionPhase	NumDays	10.00	117.00
tblGrading	MaterialExported	0.00	64,200.00
tblLandUse	LandUseSquareFeet	132,400.00	182,396.00
tblLandUse	LandUseSquareFeet	280,000.00	350,000.00
tblLandUse	LotAcreage	2.98	0.00
tblLandUse	LotAcreage	7.37	1.82
tblLandUse	LotAcreage	0.14	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	1.10
tblOffRoadEquipment	UsageHours	6.00	3.00
tblOffRoadEquipment	UsageHours	6.00	2.10
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	7.20
tblOffRoadEquipment	UsageHours	6.00	0.70
tblOffRoadEquipment	UsageHours	8.00	0.70
tblOffRoadEquipment	UsageHours	7.00	0.80
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	3.00
tblOffRoadEquipment	UsageHours	8.00	5.80
tblOffRoadEquipment	UsageHours	7.00	7.20
tblOffRoadEquipment	UsageHours	8.00	2.70
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	HaulingTripNumber	77.00	0.00
tblTripsAndVMT	HaulingTripNumber	8,025.00	0.00
tblTripsAndVMT	VendorTripNumber	61.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	28.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

tblTripsAndVMT	WorkerTripNumber	280.00	0.00
tblTripsAndVMT	WorkerTripNumber	56.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0682	0.7321	0.6867	1.2800e-003	0.0600	0.0330	0.0930	7.0000e-003	0.0305	0.0375	0.0000	112.3784	112.3784	0.0353	0.0000	113.2600
2022	0.0802	0.8597	0.7527	1.5000e-003	0.0516	0.0384	0.0900	5.7300e-003	0.0354	0.0411	0.0000	131.4921	131.4921	0.0425	0.0000	132.5553
2023	0.1620	0.7926	0.7666	1.3800e-003	0.0000	0.0373	0.0373	0.0000	0.0343	0.0343	0.0000	121.2749	121.2749	0.0392	0.0000	122.2554
2024	0.4064	0.4205	0.5988	9.8000e-004	0.0000	0.0156	0.0156	0.0000	0.0144	0.0144	0.0000	86.2708	86.2708	0.0279	0.0000	86.9684
Maximum	**0.4064**	**0.8597**	**0.7666**	**1.5000e-003**	**0.0600**	**0.0384**	**0.0930**	**7.0000e-003**	**0.0354**	**0.0411**	**0.0000**	**131.4921**	**131.4921**	**0.0425**	**0.0000**	**132.5553**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0151	0.0656	0.8071	1.2800e-003	0.0234	2.0200e-003	0.0254	1.3600e-003	2.0200e-003	3.3800e-003	0.0000	108.3122	108.3122	0.0350	0.0000	109.1880
2022	0.0154	0.0668	0.8126	1.5000e-003	0.0201	2.0600e-003	0.0222	1.1200e-003	2.0600e-003	3.1700e-003	0.0000	110.3896	110.3896	0.0357	0.0000	111.2822

2023	0.0948	0.0380	0.5407	1.3800e-003	0.0000	1.1700e-003	1.1700e-003	0.0000	1.1700e-003	1.1700e-003	0.0000	62.9253	62.9253	0.0204	0.0000	63.4341
2024	0.3737	0.0196	0.2784	9.8000e-004	0.0000	6.0000e-004	6.0000e-004	0.0000	6.0000e-004	6.0000e-004	0.0000	32.3845	32.3845	0.0105	0.0000	32.6464
Maximum	**0.3737**	**0.0668**	**0.8126**	**1.5000e-003**	**0.0234**	**2.0600e-003**	**0.0254**	**1.3600e-003**	**2.0600e-003**	**3.3800e-003**	**0.0000**	**110.3896**	**110.3896**	**0.0357**	**0.0000**	**111.2822**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**30.37**	**93.23**	**13.04**	**0.00**	**61.00**	**95.29**	**79.08**	**80.52**	**94.89**	**93.46**	**0.00**	**30.44**	**30.44**	**29.93**	**0.00**	**30.43**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	0.4158	0.0429
2	**12-1-2021**	**2-28-2022**	0.8883	0.0951
4	**6-1-2022**	**8-31-2022**	0.1190	0.0081
5	**9-1-2022**	**11-30-2022**	0.2313	0.0120
6	**12-1-2022**	**2-28-2023**	0.2130	0.0116
7	**3-1-2023**	**5-31-2023**	0.2109	0.0118
8	**6-1-2023**	**8-31-2023**	0.2109	0.0118
9	**9-1-2023**	**11-30-2023**	0.2673	0.0536
10	**12-1-2023**	**2-29-2024**	0.4126	0.1513
11	**3-1-2024**	**5-31-2024**	0.3452	0.1500
12	**6-1-2024**	**8-31-2024**	0.1980	0.1386
13	**9-1-2024**	**9-30-2024**	0.0042	0.0030
		Highest	0.8883	0.1513

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	11/16/2021	5	55	
2	Grading	Grading	11/18/2021	2/18/2022	5	67	

3	Trenching	Trenching	6/17/2022	9/7/2022	5	59	
4	Building Construction	Building Construction	7/29/2022	4/23/2024	5	453	
5	Architectural Coating	Architectural Coating	11/3/2023	9/2/2024	5	217	
6	Paving	Paving	1/4/2024	6/14/2024	5	117	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90.45

Acres of Paving: 0

Residential Indoor: 708,750; Residential Outdoor: 236,250; Non-Residential Indoor: 9,000; Non-Residential Outdoor: 3,000; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	2	1.10	81	0.73
Demolition	Excavators	3	4.40	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	5.80	97	0.37
Grading	Bore/Drill Rigs	1	6.60	221	0.50
Grading	Excavators	3	7.20	158	0.38
Grading	Graders	3	7.20	187	0.41
Grading	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Tractors/Loaders/Backhoes	4	7.20	97	0.37
Trenching	Tractors/Loaders/Backhoes	2	2.70	97	0.37
Building Construction	Cranes	2	3.00	231	0.29
Building Construction	Forklifts	5	2.10	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	3.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Architectural Coating	Aerial Lifts	4	5.90	63	0.31
Architectural Coating	Air Compressors	0	0.00	78	0.48
Paving	Cement and Mortar Mixers	0	0.00	9	0.56

Paving	Pavers	1	0.70	130	0.42
Paving	Paving Equipment	2	0.70	132	0.36
Paving	Rollers	1	0.80	80	0.38
Paving	Tractors/Loaders/Backhoes	1	2.70	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	11	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	2	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					8.3700e-003	0.0000	8.3700e-003	1.2700e-003	0.0000	1.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0245	0.2341	0.3114	4.7000e-004		0.0127	0.0127		0.0118	0.0118	0.0000	40.9828	40.9828	0.0122	0.0000	41.2872
Total	**0.0245**	**0.2341**	**0.3114**	**4.7000e-004**	**8.3700e-003**	**0.0127**	**0.0211**	**1.2700e-003**	**0.0118**	**0.0131**	**0.0000**	**40.9828**	**40.9828**	**0.0122**	**0.0000**	**41.2872**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.2600e-003	0.0000	3.2600e-003	2.5000e-004	0.0000	2.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1500e-003	0.0223	0.3179	4.7000e-004		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	36.9168	36.9168	0.0119	0.0000	37.2152
Total	**5.1500e-003**	**0.0223**	**0.3179**	**4.7000e-004**	**3.2600e-003**	**6.9000e-004**	**3.9500e-003**	**2.5000e-004**	**6.9000e-004**	**9.4000e-004**	**0.0000**	**36.9168**	**36.9168**	**0.0119**	**0.0000**	**37.2152**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0516	0.0000	0.0516	5.7300e-003	0.0000	5.7300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0437	0.4981	0.3753	8.1000e-004		0.0203	0.0203		0.0187	0.0187	0.0000	71.3955	71.3955	0.0231	0.0000	71.9728
Total	**0.0437**	**0.4981**	**0.3753**	**8.1000e-004**	**0.0516**	**0.0203**	**0.0719**	**5.7300e-003**	**0.0187**	**0.0244**	**0.0000**	**71.3955**	**71.3955**	**0.0231**	**0.0000**	**71.9728**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0201	0.0000	0.0201	1.1200e-003	0.0000	1.1200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.9800e-003	0.0433	0.4893	8.1000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	71.3955	71.3955	0.0231	0.0000	71.9727
Total	**9.9800e-003**	**0.0433**	**0.4893**	**8.1000e-004**	**0.0201**	**1.3300e-003**	**0.0215**	**1.1200e-003**	**1.3300e-003**	**2.4500e-003**	**0.0000**	**71.3955**	**71.3955**	**0.0231**	**0.0000**	**71.9727**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0516	0.0000	0.0516	5.7300e-003	0.0000	5.7300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0428	0.4707	0.4056	8.9000e-004		0.0187	0.0187		0.0172	0.0172	0.0000	78.1029	78.1029	0.0253	0.0000	78.7344
Total	**0.0428**	**0.4707**	**0.4056**	**8.9000e-004**	**0.0516**	**0.0187**	**0.0703**	**5.7300e-003**	**0.0172**	**0.0229**	**0.0000**	**78.1029**	**78.1029**	**0.0253**	**0.0000**	**78.7344**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0201	0.0000	0.0201	1.1200e-003	0.0000	1.1200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.0473	0.5351	8.9000e-004		1.4600e-003	1.4600e-003		1.4600e-003	1.4600e-003	0.0000	78.1028	78.1028	0.0253	0.0000	78.7343
Total	**0.0109**	**0.0473**	**0.5351**	**8.9000e-004**	**0.0201**	**1.4600e-003**	**0.0216**	**1.1200e-003**	**1.4600e-003**	**2.5800e-003**	**0.0000**	**78.1028**	**78.1028**	**0.0253**	**0.0000**	**78.7343**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Trenching - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2800e-003	0.0334	0.0446	6.0000e-005		1.7900e-003	1.7900e-003		1.6500e-003	1.6500e-003	0.0000	5.4417	5.4417	1.7600e-003	0.0000	5.4857
Total	**3.2800e-003**	**0.0334**	**0.0446**	**6.0000e-005**		**1.7900e-003**	**1.7900e-003**		**1.6500e-003**	**1.6500e-003**	**0.0000**	**5.4417**	**5.4417**	**1.7600e-003**	**0.0000**	**5.4857**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.6000e-004	3.2800e-003	0.0466	6.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	5.4417	5.4417	1.7600e-003	0.0000	5.4857

Total	**7.6000e-004**	**3.2800e-003**	**0.0466**	**6.0000e-005**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**	**0.0000**	**5.4417**	**5.4417**	**1.7600e-003**	**0.0000**	**5.4857**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0341	0.3556	0.3025	5.5000e-004		0.0180	0.0180		0.0165	0.0165	0.0000	47.9475	47.9475	0.0155	0.0000	48.3352
Total	**0.0341**	**0.3556**	**0.3025**	**5.5000e-004**		**0.0180**	**0.0180**		**0.0165**	**0.0165**	**0.0000**	**47.9475**	**47.9475**	**0.0155**	**0.0000**	**48.3352**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.7400e-003	0.0162	0.2309	5.5000e-004		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	26.8451	26.8451	8.6800e-003	0.0000	27.0622
Total	**3.7400e-003**	**0.0162**	**0.2309**	**5.5000e-004**		**5.0000e-004**	**5.0000e-004**		**5.0000e-004**	**5.0000e-004**	**0.0000**	**26.8451**	**26.8451**	**8.6800e-003**	**0.0000**	**27.0622**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0739	0.7604	0.7005	1.2800e-003		0.0367	0.0367		0.0338	0.0338	0.0000	112.3532	112.3532	0.0363	0.0000	113.2616
Total	**0.0739**	**0.7604**	**0.7005**	**1.2800e-003**		**0.0367**	**0.0367**		**0.0338**	**0.0338**	**0.0000**	**112.3532**	**112.3532**	**0.0363**	**0.0000**	**113.2616**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7700e-003	0.0380	0.5407	1.2800e-003		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003	0.0000	62.9253	62.9253	0.0204	0.0000	63.4341
Total	**8.7700e-003**	**0.0380**	**0.5407**	**1.2800e-003**		**1.1700e-003**	**1.1700e-003**		**1.1700e-003**	**1.1700e-003**	**0.0000**	**62.9253**	**62.9253**	**0.0204**	**0.0000**	**63.4341**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0219	0.2221	0.2190	4.0000e-004		0.0103	0.0103		9.4700e-003	9.4700e-003	0.0000	35.4421	35.4421	0.0115	0.0000	35.7287
Total	**0.0219**	**0.2221**	**0.2190**	**4.0000e-004**		**0.0103**	**0.0103**		**9.4700e-003**	**9.4700e-003**	**0.0000**	**35.4421**	**35.4421**	**0.0115**	**0.0000**	**35.7287**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	2.7700e-003	0.0120	0.1705	4.0000e-004		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	19.8536	19.8536	6.4200e-003	0.0000	20.0142
Total	**2.7700e-003**	**0.0120**	**0.1705**	**4.0000e-004**		**3.7000e-004**	**3.7000e-004**		**3.7000e-004**	**3.7000e-004**	**0.0000**	**19.8536**	**19.8536**	**6.4200e-003**	**0.0000**	**20.0142**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0860					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0900e-003	0.0323	0.0660	1.0000e-004		5.6000e-004	5.6000e-004		5.1000e-004	5.1000e-004	0.0000	8.9217	8.9217	2.8900e-003	0.0000	8.9938

Total	**0.0881**	**0.0323**	**0.0660**	**1.0000e-004**		**5.6000e-004**	**5.6000e-004**		**5.1000e-004**	**5.1000e-004**	**0.0000**	**8.9217**	**8.9217**	**2.8900e-003**	**0.0000**	**8.9938**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0860					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	1.0000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0860**	**0.0000**	**0.0000**	**1.0000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3692					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.9800e-003	0.1366	0.2837	4.4000e-004		2.3700e-003	2.3700e-003		2.1800e-003	2.1800e-003	0.0000	38.2978	38.2978	0.0124	0.0000	38.6075
Total	**0.3782**	**0.1366**	**0.2837**	**4.4000e-004**		**2.3700e-003**	**2.3700e-003**		**2.1800e-003**	**2.1800e-003**	**0.0000**	**38.2978**	**38.2978**	**0.0124**	**0.0000**	**38.6075**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3692					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	4.4000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.3692**	**0.0000**	**0.0000**	**4.4000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3200e-003	0.0617	0.0961	1.4000e-004		2.9400e-003	2.9400e-003		2.7100e-003	2.7100e-003	0.0000	12.5309	12.5309	4.0500e-003	0.0000	12.6322
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.3200e-003**	**0.0617**	**0.0961**	**1.4000e-004**		**2.9400e-003**	**2.9400e-003**		**2.7100e-003**	**2.7100e-003**	**0.0000**	**12.5309**	**12.5309**	**4.0500e-003**	**0.0000**	**12.6322**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7500e-003	7.5800e-003	0.1078	1.4000e-004		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	12.5309	12.5309	4.0500e-003	0.0000	12.6322
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.7500e-003**	**7.5800e-003**	**0.1078**	**1.4000e-004**		**2.3000e-004**	**2.3000e-004**		**2.3000e-004**	**2.3000e-004**	**0.0000**	**12.5309**	**12.5309**	**4.0500e-003**	**0.0000**	**12.6322**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

El Paseo Opt 1 (Ed), San Jose - Operational

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	2,500.00	Student	4.42	450,000.00	0
Enclosed Parking with Elevator	850.00	Space	0.00	350,000.00	0
Parking Lot	260.00	Space	0.00	104,000.00	0
Apartments Mid Rise	450.00	Dwelling Unit	4.43	570,000.00	1287
Strip Mall	60.00	1000sqft	0.00	60,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2018 rate

Land Use - Based on PD - El Paseo Option 1 Res = 450 units 570,000 sf Sch = 2,500 students 450,00sf Retail= 60,000sf parking = 850 garage 250 lot

Construction Phase - no construction

Off-road Equipment - no construction

Trips and VMT - no construction

Vehicle Trips - Based on traffic: Res 3.75,3.60,3.30 Retail 27.42,26.01,12.64 Sch = 1.73,0,0

Vehicle Emission Factors - EMFAC2017 Santa Clara County Emissions Factors 2026

Woodstoves - No hearths

Water And Wastewater - All wastewater treatment at SJ plant

Stationary Sources - Emergency Generators and Fire Pumps - El Paseo Op1 Ed site - four 2,561hp generators, 50 hrs/year

Stationary Sources - Emergency Generators and Fire Pumps EF - >1,000hp generator requires BACT mitigation, NOx = 0.5, PM = 0.02

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	67.50	0.00
tblFireplaces	NumberWood	76.50	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.62	0.59
tblFleetMix	LDA	0.62	0.59
tblFleetMix	LDA	0.62	0.59
tblFleetMix	LDA	0.62	0.59
tblFleetMix	LDA	0.62	0.59
tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17

tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD2	5.0300e-003	5.4010e-003
tblFleetMix	LHD2	5.0300e-003	5.4010e-003
tblFleetMix	LHD2	5.0300e-003	5.4010e-003
tblFleetMix	LHD2	5.0300e-003	5.4010e-003
tblFleetMix	LHD2	5.0300e-003	5.4010e-003
tblFleetMix	MCY	5.2040e-003	4.9790e-003
tblFleetMix	MCY	5.2040e-003	4.9790e-003
tblFleetMix	MCY	5.2040e-003	4.9790e-003
tblFleetMix	MCY	5.2040e-003	4.9790e-003
tblFleetMix	MCY	5.2040e-003	4.9790e-003
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MH	6.8100e-004	7.4200e-004
tblFleetMix	MH	6.8100e-004	7.4200e-004
tblFleetMix	MH	6.8100e-004	7.4200e-004
tblFleetMix	MH	6.8100e-004	7.4200e-004
tblFleetMix	MH	6.8100e-004	7.4200e-004
tblFleetMix	MHD	0.01	0.01
tblFleetMix	MHD	0.01	0.01
tblFleetMix	MHD	0.01	0.01

tblFleetMix	MHD	0.01	0.01
tblFleetMix	MHD	0.01	0.01
tblFleetMix	OBUS	2.1950e-003	1.5280e-003
tblFleetMix	OBUS	2.1950e-003	1.5280e-003
tblFleetMix	OBUS	2.1950e-003	1.5280e-003
tblFleetMix	OBUS	2.1950e-003	1.5280e-003
tblFleetMix	OBUS	2.1950e-003	1.5280e-003
tblFleetMix	SBUS	6.3800e-004	9.1500e-004
tblFleetMix	SBUS	6.3800e-004	9.1500e-004
tblFleetMix	SBUS	6.3800e-004	9.1500e-004
tblFleetMix	SBUS	6.3800e-004	9.1500e-004
tblFleetMix	SBUS	6.3800e-004	9.1500e-004
tblFleetMix	UBUS	1.5020e-003	1.2250e-003
tblFleetMix	UBUS	1.5020e-003	1.2250e-003
tblFleetMix	UBUS	1.5020e-003	1.2250e-003
tblFleetMix	UBUS	1.5020e-003	1.2250e-003
tblFleetMix	UBUS	1.5020e-003	1.2250e-003
tblLandUse	LandUseSquareFeet	209,008.43	450,000.00
tblLandUse	LandUseSquareFeet	340,000.00	350,000.00
tblLandUse	LandUseSquareFeet	450,000.00	570,000.00
tblLandUse	LotAcreage	4.80	4.42
tblLandUse	LotAcreage	7.65	0.00
tblLandUse	LotAcreage	2.34	0.00
tblLandUse	LotAcreage	11.84	4.43
tblLandUse	LotAcreage	1.38	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206

tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.02
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.02
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,561.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	4.00
tblVehicleEF	HHD	0.31	0.02
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	0.07	0.00
tblVehicleEF	HHD	1.52	6.31
tblVehicleEF	HHD	0.93	0.41
tblVehicleEF	HHD	3.74	5.9100e-003
tblVehicleEF	HHD	4,207.12	1,010.86
tblVehicleEF	HHD	1,529.11	1,358.12
tblVehicleEF	HHD	11.80	0.05
tblVehicleEF	HHD	13.04	5.31
tblVehicleEF	HHD	1.80	2.65
tblVehicleEF	HHD	19.31	2.32
tblVehicleEF	HHD	5.9270e-003	2.4220e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.0050e-003	0.02
tblVehicleEF	HHD	1.1600e-004	1.0000e-006
tblVehicleEF	HHD	5.6710e-003	2.3170e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8440e-003	8.8910e-003
tblVehicleEF	HHD	5.7450e-003	0.02
tblVehicleEF	HHD	1.0700e-004	1.0000e-006
tblVehicleEF	HHD	9.5000e-005	2.0000e-006
tblVehicleEF	HHD	4.6590e-003	7.9000e-005

tblVehicleEF	HHD	0.39	0.43
tblVehicleEF	HHD	6.0000e-005	1.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.0300e-004	3.9700e-004
tblVehicleEF	HHD	0.08	2.0000e-006
tblVehicleEF	HHD	0.04	9.4050e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.7900e-004	0.00
tblVehicleEF	HHD	9.5000e-005	2.0000e-006
tblVehicleEF	HHD	4.6590e-003	7.9000e-005
tblVehicleEF	HHD	0.46	0.49
tblVehicleEF	HHD	6.0000e-005	1.0000e-006
tblVehicleEF	HHD	0.15	0.08
tblVehicleEF	HHD	4.0300e-004	3.9700e-004
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	LDA	2.5670e-003	1.3660e-003
tblVehicleEF	LDA	3.2680e-003	0.04
tblVehicleEF	LDA	0.41	0.47
tblVehicleEF	LDA	0.84	1.94
tblVehicleEF	LDA	206.01	220.20
tblVehicleEF	LDA	48.83	46.75
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.04	0.15
tblVehicleEF	LDA	1.5230e-003	1.1910e-003
tblVehicleEF	LDA	2.1880e-003	1.5670e-003
tblVehicleEF	LDA	1.4020e-003	1.0960e-003
tblVehicleEF	LDA	2.0120e-003	1.4410e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.03

tblVehicleEF	LDA	6.4390e-003	4.9190e-003
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.04	0.16
tblVehicleEF	LDA	2.0620e-003	9.3000e-005
tblVehicleEF	LDA	5.0200e-004	0.00
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	9.3640e-003	7.1490e-003
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.05	0.18
tblVehicleEF	LDT1	5.5980e-003	2.7310e-003
tblVehicleEF	LDT1	7.5190e-003	0.05
tblVehicleEF	LDT1	0.76	0.71
tblVehicleEF	LDT1	1.67	2.09
tblVehicleEF	LDT1	262.03	264.87
tblVehicleEF	LDT1	61.70	56.84
tblVehicleEF	LDT1	0.07	0.05
tblVehicleEF	LDT1	0.09	0.19
tblVehicleEF	LDT1	1.9540e-003	1.4440e-003
tblVehicleEF	LDT1	2.6790e-003	1.8820e-003
tblVehicleEF	LDT1	1.7980e-003	1.3280e-003
tblVehicleEF	LDT1	2.4630e-003	1.7300e-003
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.16	0.12
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.01	0.01
tblVehicleEF	LDT1	0.13	0.47
tblVehicleEF	LDT1	0.10	0.22
tblVehicleEF	LDT1	2.6280e-003	2.6150e-003

tblVehicleEF	LDT1	6.4500e-004	0.00
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.16	0.12
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.13	0.47
tblVehicleEF	LDT1	0.11	0.24
tblVehicleEF	LDT2	3.9270e-003	2.4210e-003
tblVehicleEF	LDT2	4.6800e-003	0.05
tblVehicleEF	LDT2	0.58	0.66
tblVehicleEF	LDT2	1.13	2.54
tblVehicleEF	LDT2	296.40	280.92
tblVehicleEF	LDT2	69.39	60.84
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.08	0.21
tblVehicleEF	LDT2	1.6390e-003	1.2680e-003
tblVehicleEF	LDT2	2.3480e-003	1.6140e-003
tblVehicleEF	LDT2	1.5070e-003	1.1670e-003
tblVehicleEF	LDT2	2.1590e-003	1.4840e-003
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	9.7420e-003	9.5470e-003
tblVehicleEF	LDT2	0.06	0.39
tblVehicleEF	LDT2	0.06	0.24
tblVehicleEF	LDT2	2.9680e-003	0.01
tblVehicleEF	LDT2	7.1300e-004	8.8000e-005
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.03	0.05

tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.39
tblVehicleEF	LDT2	0.07	0.27
tblVehicleEF	LHD1	4.6790e-003	4.6670e-003
tblVehicleEF	LHD1	0.01	6.7660e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.18
tblVehicleEF	LHD1	0.81	0.61
tblVehicleEF	LHD1	2.14	0.99
tblVehicleEF	LHD1	8.97	8.66
tblVehicleEF	LHD1	665.14	749.59
tblVehicleEF	LHD1	29.84	11.02
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.82	0.50
tblVehicleEF	LHD1	0.85	0.27
tblVehicleEF	LHD1	8.4500e-004	8.7200e-004
tblVehicleEF	LHD1	0.01	9.8310e-003
tblVehicleEF	LHD1	0.01	8.5970e-003
tblVehicleEF	LHD1	8.1100e-004	2.3200e-004
tblVehicleEF	LHD1	8.0900e-004	8.3400e-004
tblVehicleEF	LHD1	2.5630e-003	2.4580e-003
tblVehicleEF	LHD1	0.01	8.1790e-003
tblVehicleEF	LHD1	7.4600e-004	2.1300e-004
tblVehicleEF	LHD1	2.3230e-003	1.7170e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2230e-003	9.0400e-004
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.30	0.46
tblVehicleEF	LHD1	0.21	0.06

tblVehicleEF	LHD1	9.0000e-005	8.4000e-005
tblVehicleEF	LHD1	6.5140e-003	7.3150e-003
tblVehicleEF	LHD1	3.3800e-004	1.0900e-004
tblVehicleEF	LHD1	2.3230e-003	1.7170e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.2230e-003	9.0400e-004
tblVehicleEF	LHD1	0.13	0.10
tblVehicleEF	LHD1	0.30	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD2	2.9160e-003	2.8270e-003
tblVehicleEF	LHD2	6.1790e-003	6.0420e-003
tblVehicleEF	LHD2	4.7100e-003	6.5340e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.49	0.54
tblVehicleEF	LHD2	0.99	0.55
tblVehicleEF	LHD2	13.82	13.60
tblVehicleEF	LHD2	689.53	727.00
tblVehicleEF	LHD2	22.84	7.15
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.42	0.60
tblVehicleEF	LHD2	0.35	0.15
tblVehicleEF	LHD2	1.1530e-003	1.4660e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8100e-004	1.1700e-004
tblVehicleEF	LHD2	1.1040e-003	1.4020e-003
tblVehicleEF	LHD2	2.7010e-003	2.7000e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5100e-004	1.0800e-004

tblVehicleEF	LHD2	6.3900e-004	8.4300e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.6200e-004	4.5700e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.05	0.20
tblVehicleEF	LHD2	0.06	0.03
tblVehicleEF	LHD2	1.3500e-004	1.3000e-004
tblVehicleEF	LHD2	6.7010e-003	7.0160e-003
tblVehicleEF	LHD2	2.4600e-004	7.1000e-005
tblVehicleEF	LHD2	6.3900e-004	8.4300e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	3.6200e-004	4.5700e-004
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.05	0.20
tblVehicleEF	LHD2	0.07	0.04
tblVehicleEF	MCY	0.45	0.32
tblVehicleEF	MCY	0.16	0.25
tblVehicleEF	MCY	18.05	18.17
tblVehicleEF	MCY	10.25	9.11
tblVehicleEF	MCY	170.65	209.94
tblVehicleEF	MCY	44.05	60.17
tblVehicleEF	MCY	1.14	1.14
tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	2.0890e-003	2.0610e-003
tblVehicleEF	MCY	3.4880e-003	2.9290e-003
tblVehicleEF	MCY	1.9500e-003	1.9240e-003
tblVehicleEF	MCY	3.2730e-003	2.7480e-003
tblVehicleEF	MCY	0.89	1.80

tblVehicleEF	MCY	0.66	0.66
tblVehicleEF	MCY	0.48	0.96
tblVehicleEF	MCY	2.16	2.16
tblVehicleEF	MCY	0.54	1.75
tblVehicleEF	MCY	2.16	1.91
tblVehicleEF	MCY	2.0660e-003	2.0780e-003
tblVehicleEF	MCY	6.7200e-004	5.9500e-004
tblVehicleEF	MCY	0.89	1.80
tblVehicleEF	MCY	0.66	0.66
tblVehicleEF	MCY	0.48	0.96
tblVehicleEF	MCY	2.69	2.70
tblVehicleEF	MCY	0.54	1.75
tblVehicleEF	MCY	2.35	2.08
tblVehicleEF	MDV	7.0480e-003	2.6580e-003
tblVehicleEF	MDV	0.01	0.06
tblVehicleEF	MDV	0.85	0.68
tblVehicleEF	MDV	2.04	2.69
tblVehicleEF	MDV	400.76	339.08
tblVehicleEF	MDV	92.41	72.17
tblVehicleEF	MDV	0.10	0.05
tblVehicleEF	MDV	0.17	0.24
tblVehicleEF	MDV	1.7210e-003	1.3170e-003
tblVehicleEF	MDV	2.4070e-003	1.6620e-003
tblVehicleEF	MDV	1.5860e-003	1.2150e-003
tblVehicleEF	MDV	2.2130e-003	1.5280e-003
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.15	0.12
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.02	0.01
tblVehicleEF	MDV	0.10	0.40

tblVehicleEF	MDV	0.15	0.28
tblVehicleEF	MDV	4.0100e-003	3.3510e-003
tblVehicleEF	MDV	9.5900e-004	7.1400e-004
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.15	0.12
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.10	0.40
tblVehicleEF	MDV	0.16	0.31
tblVehicleEF	MH	0.02	7.6660e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.24	0.68
tblVehicleEF	MH	4.69	1.87
tblVehicleEF	MH	1,198.30	1,445.75
tblVehicleEF	MH	57.81	17.15
tblVehicleEF	MH	1.06	1.21
tblVehicleEF	MH	0.72	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.0090e-003	2.4000e-004
tblVehicleEF	MH	3.2210e-003	3.2870e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.2700e-004	2.2100e-004
tblVehicleEF	MH	0.64	0.52
tblVehicleEF	MH	0.05	0.04
tblVehicleEF	MH	0.23	0.19
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.02	1.01
tblVehicleEF	MH	0.27	0.08
tblVehicleEF	MH	0.01	0.01

tblVehicleEF	MH	6.6000e-004	1.7000e-004
tblVehicleEF	MH	0.64	0.52
tblVehicleEF	MH	0.05	0.04
tblVehicleEF	MH	0.23	0.19
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.02	1.01
tblVehicleEF	MH	0.30	0.09
tblVehicleEF	MHD	0.02	3.6600e-003
tblVehicleEF	MHD	3.4340e-003	1.3680e-003
tblVehicleEF	MHD	0.04	8.6830e-003
tblVehicleEF	MHD	0.37	0.40
tblVehicleEF	MHD	0.29	0.19
tblVehicleEF	MHD	4.65	0.97
tblVehicleEF	MHD	133.69	69.63
tblVehicleEF	MHD	1,178.99	1,051.19
tblVehicleEF	MHD	59.87	8.85
tblVehicleEF	MHD	0.35	0.38
tblVehicleEF	MHD	1.08	1.45
tblVehicleEF	MHD	10.16	1.70
tblVehicleEF	MHD	8.3000e-005	2.7700e-004
tblVehicleEF	MHD	3.0880e-003	7.0640e-003
tblVehicleEF	MHD	8.3800e-004	1.1200e-004
tblVehicleEF	MHD	8.0000e-005	2.6500e-004
tblVehicleEF	MHD	2.9480e-003	6.7520e-003
tblVehicleEF	MHD	7.7100e-004	1.0300e-004
tblVehicleEF	MHD	7.3900e-004	3.3400e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0900e-004	1.8000e-004
tblVehicleEF	MHD	0.04	0.01

tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.28	0.04
tblVehicleEF	MHD	1.2880e-003	6.6100e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.8000e-004	8.8000e-005
tblVehicleEF	MHD	7.3900e-004	3.3400e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	4.0900e-004	1.8000e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.31	0.05
tblVehicleEF	OBUS	0.01	7.0720e-003
tblVehicleEF	OBUS	5.0380e-003	2.9940e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.24	0.61
tblVehicleEF	OBUS	0.37	0.35
tblVehicleEF	OBUS	4.49	1.73
tblVehicleEF	OBUS	104.04	95.34
tblVehicleEF	OBUS	1,285.07	1,283.24
tblVehicleEF	OBUS	65.96	14.49
tblVehicleEF	OBUS	0.22	0.40
tblVehicleEF	OBUS	0.92	1.45
tblVehicleEF	OBUS	2.69	1.11
tblVehicleEF	OBUS	2.0000e-005	1.3100e-004
tblVehicleEF	OBUS	2.8820e-003	7.5500e-003
tblVehicleEF	OBUS	8.7800e-004	1.4900e-004
tblVehicleEF	OBUS	2.0000e-005	1.2600e-004
tblVehicleEF	OBUS	2.7360e-003	7.2100e-003
tblVehicleEF	OBUS	8.0800e-004	1.3700e-004

tblVehicleEF	OBUS	1.1600e-003	1.0720e-003
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	5.1900e-004	4.8300e-004
tblVehicleEF	OBUS	0.04	0.02
tblVehicleEF	OBUS	0.03	0.18
tblVehicleEF	OBUS	0.28	0.08
tblVehicleEF	OBUS	1.0040e-003	9.0500e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.3800e-004	1.4300e-004
tblVehicleEF	OBUS	1.1600e-003	1.0720e-003
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	5.1900e-004	4.8300e-004
tblVehicleEF	OBUS	0.05	0.03
tblVehicleEF	OBUS	0.03	0.18
tblVehicleEF	OBUS	0.31	0.09
tblVehicleEF	SBUS	0.81	0.06
tblVehicleEF	SBUS	0.01	5.4710e-003
tblVehicleEF	SBUS	0.07	5.3640e-003
tblVehicleEF	SBUS	8.46	2.48
tblVehicleEF	SBUS	0.78	0.45
tblVehicleEF	SBUS	8.66	0.76
tblVehicleEF	SBUS	1,071.32	344.98
tblVehicleEF	SBUS	1,032.09	1,025.26
tblVehicleEF	SBUS	58.82	4.41
tblVehicleEF	SBUS	6.58	3.24
tblVehicleEF	SBUS	2.75	4.17
tblVehicleEF	SBUS	11.46	0.95
tblVehicleEF	SBUS	5.0460e-003	3.0570e-003

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	9.7600e-004	5.4000e-005
tblVehicleEF	SBUS	4.8280e-003	2.9250e-003
tblVehicleEF	SBUS	2.6090e-003	2.7030e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.9800e-004	5.0000e-005
tblVehicleEF	SBUS	3.3660e-003	6.4100e-004
tblVehicleEF	SBUS	0.03	6.2050e-003
tblVehicleEF	SBUS	1.00	0.27
tblVehicleEF	SBUS	1.5600e-003	2.9200e-004
tblVehicleEF	SBUS	0.09	0.08
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	0.44	0.03
tblVehicleEF	SBUS	0.01	3.2860e-003
tblVehicleEF	SBUS	9.9690e-003	9.7970e-003
tblVehicleEF	SBUS	7.3700e-004	4.4000e-005
tblVehicleEF	SBUS	3.3660e-003	6.4100e-004
tblVehicleEF	SBUS	0.03	6.2050e-003
tblVehicleEF	SBUS	1.45	0.39
tblVehicleEF	SBUS	1.5600e-003	2.9200e-004
tblVehicleEF	SBUS	0.11	0.09
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	0.48	0.03
tblVehicleEF	UBUS	0.23	1.74
tblVehicleEF	UBUS	0.04	1.7570e-003
tblVehicleEF	UBUS	3.77	13.20
tblVehicleEF	UBUS	7.31	0.14
tblVehicleEF	UBUS	2,007.57	1,654.13
tblVehicleEF	UBUS	114.33	1.40

tblVehicleEF	UBUS	7.17	0.71
tblVehicleEF	UBUS	13.83	0.01
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.15	5.1700e-003
tblVehicleEF	UBUS	1.2080e-003	1.5000e-005
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	8.3320e-003
tblVehicleEF	UBUS	0.15	4.9450e-003
tblVehicleEF	UBUS	1.1100e-003	1.4000e-005
tblVehicleEF	UBUS	2.0830e-003	2.7000e-005
tblVehicleEF	UBUS	0.03	2.5800e-004
tblVehicleEF	UBUS	1.1550e-003	1.3000e-005
tblVehicleEF	UBUS	0.36	0.03
tblVehicleEF	UBUS	7.3900e-003	1.4520e-003
tblVehicleEF	UBUS	0.58	7.3620e-003
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	1.2750e-003	1.4000e-005
tblVehicleEF	UBUS	2.0830e-003	2.7000e-005
tblVehicleEF	UBUS	0.03	2.5800e-004
tblVehicleEF	UBUS	1.1550e-003	1.3000e-005
tblVehicleEF	UBUS	0.62	1.78
tblVehicleEF	UBUS	7.3900e-003	1.4520e-003
tblVehicleEF	UBUS	0.64	8.0600e-003
tblVehicleTrips	ST_TR	6.39	3.60
tblVehicleTrips	ST_TR	42.04	26.01
tblVehicleTrips	SU_TR	5.86	3.30
tblVehicleTrips	SU_TR	20.43	12.64
tblVehicleTrips	WD_TR	6.65	3.75
tblVehicleTrips	WD_TR	1.29	1.73

tblVehicleTrips	WD_TR	44.32	27.42
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.0273	0.0388	3.3718	1.8000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	5.5235	5.5235	5.4000e-003	0.0000	5.6585
Energy	0.0665	0.5929	0.4238	3.6300e-003		0.0459	0.0459		0.0459	0.0459	0.0000	1,313.0733	1,313.0733	0.1049	0.0311	1,324.9756

Mobile	1.9063	2.9235	14.7238	0.0431	4.8092	0.0344	4.8436	1.2867	0.0322	1.3189	0.0000	4,070.2737	4,070.2737	0.1846	0.0000	4,074.8879
Stationary	0.4203	0.2061	1.0716	2.0200e-003		8.2400e-003	8.2400e-003		8.2400e-003	8.2400e-003	0.0000	195.0443	195.0443	0.0274	0.0000	195.7280
Waste						0.0000	0.0000		0.0000	0.0000	147.4222	0.0000	147.4222	8.7124	0.0000	365.2322
Water						0.0000	0.0000		0.0000	0.0000	14.0899	32.1679	46.2577	0.0530	0.0316	56.9935
Total	**7.4203**	**3.7613**	**19.5910**	**0.0490**	**4.8092**	**0.1072**	**4.9164**	**1.2867**	**0.1050**	**1.3917**	**161.5121**	**5,616.0828**	**5,777.5949**	**9.0876**	**0.0627**	**6,023.4757**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.0273	0.0388	3.3718	1.8000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	5.5235	5.5235	5.4000e-003	0.0000	5.6585
Energy	0.0665	0.5929	0.4238	3.6300e-003		0.0459	0.0459		0.0459	0.0459	0.0000	1,313.0733	1,313.0733	0.1049	0.0311	1,324.9756
Mobile	1.9063	2.9235	14.7238	0.0431	4.8092	0.0344	4.8436	1.2867	0.0322	1.3189	0.0000	4,070.2737	4,070.2737	0.1846	0.0000	4,074.8879
Stationary	0.4203	0.2061	1.0716	2.0200e-003		8.2400e-003	8.2400e-003		8.2400e-003	8.2400e-003	0.0000	195.0443	195.0443	0.0274	0.0000	195.7280
Waste						0.0000	0.0000		0.0000	0.0000	147.4222	0.0000	147.4222	8.7124	0.0000	365.2322
Water						0.0000	0.0000		0.0000	0.0000	14.0899	32.1679	46.2577	0.0530	0.0316	56.9935
Total	**7.4203**	**3.7613**	**19.5910**	**0.0490**	**4.8092**	**0.1072**	**4.9164**	**1.2867**	**0.1050**	**1.3917**	**161.5121**	**5,616.0828**	**5,777.5949**	**9.0876**	**0.0627**	**6,023.4757**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.9063	2.9235	14.7238	0.0431	4.8092	0.0344	4.8436	1.2867	0.0322	1.3189	0.0000	4,070.2737	4,070.2737	0.1846	0.0000	4,074.8879
Unmitigated	1.9063	2.9235	14.7238	0.0431	4.8092	0.0344	4.8436	1.2867	0.0322	1.3189	0.0000	4,070.2737	4,070.2737	0.1846	0.0000	4,074.8879

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,687.50	1,620.00	1485.00	3,808,377	3,808,377
Elementary School	4,325.00	0.00	0.00	6,811,687	6,811,687
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	1,645.20	1,560.60	758.40	2,319,950	2,319,950
Total	7,657.70	3,180.60	2,243.40	12,940,014	12,940,014

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Elementary School	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Enclosed Parking with Elevator	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Parking Lot	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Strip Mall	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	655.2069	655.2069	0.0922	0.0191	663.1997
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	655.2069	655.2069	0.0922	0.0191	663.1997
NaturalGas Mitigated	0.0665	0.5929	0.4238	3.6300e-003		0.0459	0.0459		0.0459	0.0459	0.0000	657.8665	657.8665	0.0126	0.0121	661.7759
NaturalGas Unmitigated	0.0665	0.5929	0.4238	3.6300e-003		0.0459	0.0459		0.0459	0.0459	0.0000	657.8665	657.8665	0.0126	0.0121	661.7759

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.88775e+006	0.0210	0.1791	0.0762	1.1400e-003		0.0145	0.0145		0.0145	0.0145	0.0000	207.4653	207.4653	3.9800e-003	3.8000e-003	208.6981
Elementary School	8.298e+006	0.0447	0.4068	0.3417	2.4400e-003		0.0309	0.0309		0.0309	0.0309	0.0000	442.8129	442.8129	8.4900e-003	8.1200e-003	445.4443
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	142200	7.7000e-004	6.9700e-003	5.8600e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.5883	7.5883	1.5000e-004	1.4000e-004	7.6334
Total		**0.0665**	**0.5929**	**0.4238**	**3.6200e-003**		**0.0459**	**0.0459**		**0.0459**	**0.0459**	**0.0000**	**657.8665**	**657.8665**	**0.0126**	**0.0121**	**661.7759**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.88775e+006	0.0210	0.1791	0.0762	1.1400e-003		0.0145	0.0145		0.0145	0.0145	0.0000	207.4653	207.4653	3.9800e-003	3.8000e-003	208.6981
Elementary School	8.298e+006	0.0447	0.4068	0.3417	2.4400e-003		0.0309	0.0309		0.0309	0.0309	0.0000	442.8129	442.8129	8.4900e-003	8.1200e-003	445.4443
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	142200	7.7000e-004	6.9700e-003	5.8600e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.5883	7.5883	1.5000e-004	1.4000e-004	7.6334
Total		**0.0665**	**0.5929**	**0.4238**	**3.6200e-003**		**0.0459**	**0.0459**		**0.0459**	**0.0459**	**0.0000**	**657.8665**	**657.8665**	**0.0126**	**0.0121**	**661.7759**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.85776e+006	173.5889	0.0244	5.0600e-003	175.7065
Elementary School	2.4255e+006	226.6388	0.0319	6.6000e-003	229.4036
Enclosed Parking with Elevator	2.051e+006	191.6455	0.0270	5.5800e-003	193.9834
Parking Lot	36400	3.4012	4.8000e-004	1.0000e-004	3.4427
Strip Mall	641400	59.9324	8.4400e-003	1.7500e-003	60.6636
Total		**655.2069**	**0.0923**	**0.0191**	**663.1997**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.85776e+006	173.5889	0.0244	5.0600e-003	175.7065
Elementary School	2.4255e+006	226.6388	0.0319	6.6000e-003	229.4036
Enclosed Parking with Elevator	2.051e+006	191.6455	0.0270	5.5800e-003	193.9834
Parking Lot	36400	3.4012	4.8000e-004	1.0000e-004	3.4427
Strip Mall	641400	59.9324	8.4400e-003	1.7500e-003	60.6636
Total		**655.2069**	**0.0923**	**0.0191**	**663.1997**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.0273	0.0388	3.3718	1.8000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	5.5235	5.5235	5.4000e-003	0.0000	5.6585
Unmitigated	5.0273	0.0388	3.3718	1.8000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	5.5235	5.5235	5.4000e-003	0.0000	5.6585

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.6767					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.2473					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1033	0.0388	3.3718	1.8000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	5.5235	5.5235	5.4000e-003	0.0000	5.6585
Total	**5.0273**	**0.0388**	**3.3718**	**1.8000e-004**		**0.0186**	**0.0186**		**0.0186**	**0.0186**	**0.0000**	**5.5235**	**5.5235**	**5.4000e-003**	**0.0000**	**5.6585**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.6767					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.2473					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1033	0.0388	3.3718	1.8000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	5.5235	5.5235	5.4000e-003	0.0000	5.6585
Total	**5.0273**	**0.0388**	**3.3718**	**1.8000e-004**		**0.0186**	**0.0186**		**0.0186**	**0.0186**	**0.0000**	**5.5235**	**5.5235**	**5.4000e-003**	**0.0000**	**5.6585**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	46.2577	0.0530	0.0316	56.9935
Unmitigated	46.2577	0.0530	0.0316	56.9935

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	29.3193 / 18.4839	31.2422	0.0386	0.0232	39.1117
Elementary School	6.0606 / 15.5844	10.3052	8.5300e-003	4.9000e-003	11.9789
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.44435 / 2.72396	4.7103	5.8500e-003	3.5100e-003	5.9029
Total		**46.2577**	**0.0530**	**0.0316**	**56.9936**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	29.3193 / 18.4839	31.2422	0.0386	0.0232	39.1117
Elementary School	6.0606 / 15.5844	10.3052	8.5300e-003	4.9000e-003	11.9789
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.44435 / 2.72396	4.7103	5.8500e-003	3.5100e-003	5.9029
Total		**46.2577**	**0.0530**	**0.0316**	**56.9936**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	147.4222	8.7124	0.0000	365.2322
Unmitigated	147.4222	8.7124	0.0000	365.2322

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	207	42.0191	2.4833	0.0000	104.1006
Elementary School	456.25	92.6146	5.4734	0.0000	229.4488
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63	12.7884	0.7558	0.0000	31.6828
Total		**147.4222**	**8.7124**	**0.0000**	**365.2322**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	207	42.0191	2.4833	0.0000	104.1006
Elementary School	456.25	92.6146	5.4734	0.0000	229.4488
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63	12.7884	0.7558	0.0000	31.6828
Total		**147.4222**	**8.7124**	**0.0000**	**365.2322**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	4	0	50	2561	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750 - 9999 HP)	0.4203	0.2061	1.0716	2.0200e-003		8.2400e-003	8.2400e-003		8.2400e-003	8.2400e-003	0.0000	195.0443	195.0443	0.0274	0.0000	195.7280
Total	**0.4203**	**0.2061**	**1.0716**	**2.0200e-003**		**8.2400e-003**	**8.2400e-003**		**8.2400e-003**	**8.2400e-003**	**0.0000**	**195.0443**	**195.0443**	**0.0274**	**0.0000**	**195.7280**

11.0 Vegetation

El Paseo Site - Operational - Santa Clara County, Annual

El Paseo Opt 2 (No Ed) - Operational

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	1,480.00	Space	0.00	551,015.00	0
Parking Lot	157.00	Space	0.00	62,800.00	0
Apartments Mid Rise	820.00	Dwelling Unit	4.43	939,657.00	2345
Strip Mall	70.37	1000sqft	2.38	70,372.00	0
General Office Building	52.51	1000sqft	1.21	52,508.00	0
Medical Office Building	36.12	1000sqft	0.83	36,120.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2018 rate

Land Use - Based on PD - El Paseo Option 2 No Ed / Residential = 279+302+239 (320571+331606+287480) Retail = 70,372sf, Office = 52,508sf, Medical Office = 36,120sf Parking = 1036+444 (366620+184395) ParkingLot = 157spaces

Construction Phase - no construction

Off-road Equipment - no construction

Trips and VMT - no construction

Grading -

Vehicle Trips - Based on traffic: Res 3.82,3.67,3.37 Retail 27.68,26.26,12.76, Office 7.83,1.75,0.75, Med Office 27.96,6.93,1.20

Vehicle Emission Factors - EMFAC2017 Santa Clara County Emissions Factors 2026

Woodstoves - No hearths

Water And Wastewater - All wastewater treatment at SJ plant

Stationary Sources - Emergency Generators and Fire Pumps - El Paseo Opt 2 No Ed site - three 2,561hp diesel generators, 50 hrs/year

Stationary Sources - Emergency Generators and Fire Pumps EF - >1,000hp generator requires BACT mitigation, NOx = 0.5, PM = 0.02

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	9/14/2021	9/1/2021
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	123.00	0.00
tblFireplaces	NumberWood	139.40	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.62	0.59
tblFleetMix	LDA	0.62	0.59
tblFleetMix	LDA	0.62	0.59
tblFleetMix	LDA	0.62	0.59
tblFleetMix	LDA	0.62	0.59
tblFleetMix	LDA	0.62	0.59
tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT1	0.03	0.05

tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD2	5.0300e-003	5.4009e-003
tblFleetMix	LHD2	5.0300e-003	5.4009e-003
tblFleetMix	LHD2	5.0300e-003	5.4009e-003
tblFleetMix	LHD2	5.0300e-003	5.4009e-003
tblFleetMix	LHD2	5.0300e-003	5.4009e-003
tblFleetMix	LHD2	5.0300e-003	5.4009e-003
tblFleetMix	MCY	5.2040e-003	4.9788e-003
tblFleetMix	MCY	5.2040e-003	4.9788e-003
tblFleetMix	MCY	5.2040e-003	4.9788e-003
tblFleetMix	MCY	5.2040e-003	4.9788e-003
tblFleetMix	MCY	5.2040e-003	4.9788e-003
tblFleetMix	MCY	5.2040e-003	4.9788e-003
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MDV	0.10	0.11

tblFleetMix	MDV	0.10	0.11
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MH	6.8100e-004	7.4215e-004
tblFleetMix	MH	6.8100e-004	7.4215e-004
tblFleetMix	MH	6.8100e-004	7.4215e-004
tblFleetMix	MH	6.8100e-004	7.4215e-004
tblFleetMix	MH	6.8100e-004	7.4215e-004
tblFleetMix	MH	6.8100e-004	7.4215e-004
tblFleetMix	MHD	0.01	0.01
tblFleetMix	MHD	0.01	0.01
tblFleetMix	MHD	0.01	0.01
tblFleetMix	MHD	0.01	0.01
tblFleetMix	MHD	0.01	0.01
tblFleetMix	MHD	0.01	0.01
tblFleetMix	OBUS	2.1950e-003	1.5279e-003
tblFleetMix	OBUS	2.1950e-003	1.5279e-003
tblFleetMix	OBUS	2.1950e-003	1.5279e-003
tblFleetMix	OBUS	2.1950e-003	1.5279e-003
tblFleetMix	OBUS	2.1950e-003	1.5279e-003
tblFleetMix	OBUS	2.1950e-003	1.5279e-003
tblFleetMix	SBUS	6.3800e-004	9.1499e-004
tblFleetMix	SBUS	6.3800e-004	9.1499e-004
tblFleetMix	SBUS	6.3800e-004	9.1499e-004
tblFleetMix	SBUS	6.3800e-004	9.1499e-004
tblFleetMix	SBUS	6.3800e-004	9.1499e-004
tblFleetMix	SBUS	6.3800e-004	9.1499e-004
tblFleetMix	UBUS	1.5020e-003	1.2248e-003
tblFleetMix	UBUS	1.5020e-003	1.2248e-003
tblFleetMix	UBUS	1.5020e-003	1.2248e-003

tblFleetMix	UBUS	1.5020e-003	1.2248e-003
tblFleetMix	UBUS	1.5020e-003	1.2248e-003
tblFleetMix	UBUS	1.5020e-003	1.2248e-003
tblLandUse	LandUseSquareFeet	592,000.00	551,015.00
tblLandUse	LandUseSquareFeet	820,000.00	939,657.00
tblLandUse	LotAcreage	13.32	0.00
tblLandUse	LotAcreage	1.41	0.00
tblLandUse	LotAcreage	21.58	4.43
tblLandUse	LotAcreage	1.62	2.38
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.02
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.02
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,561.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblVehicleEF	HHD	0.31	0.02
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	0.07	0.00
tblVehicleEF	HHD	1.52	6.31
tblVehicleEF	HHD	0.93	0.41
tblVehicleEF	HHD	3.74	5.9100e-003
tblVehicleEF	HHD	4,207.12	1,010.86
tblVehicleEF	HHD	1,529.11	1,358.12
tblVehicleEF	HHD	11.80	0.05
tblVehicleEF	HHD	13.04	5.31

tblVehicleEF	HHD	1.80	2.65
tblVehicleEF	HHD	19.31	2.32
tblVehicleEF	HHD	5.9270e-003	2.4220e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.0050e-003	0.02
tblVehicleEF	HHD	1.1600e-004	1.0000e-006
tblVehicleEF	HHD	5.6710e-003	2.3170e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8440e-003	8.8910e-003
tblVehicleEF	HHD	5.7450e-003	0.02
tblVehicleEF	HHD	1.0700e-004	1.0000e-006
tblVehicleEF	HHD	9.5000e-005	2.0000e-006
tblVehicleEF	HHD	4.6590e-003	7.9000e-005
tblVehicleEF	HHD	0.39	0.43
tblVehicleEF	HHD	6.0000e-005	1.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.0300e-004	3.9700e-004
tblVehicleEF	HHD	0.08	2.0000e-006
tblVehicleEF	HHD	0.04	9.4050e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.7900e-004	0.00
tblVehicleEF	HHD	9.5000e-005	2.0000e-006
tblVehicleEF	HHD	4.6590e-003	7.9000e-005
tblVehicleEF	HHD	0.46	0.49
tblVehicleEF	HHD	6.0000e-005	1.0000e-006
tblVehicleEF	HHD	0.15	0.08
tblVehicleEF	HHD	4.0300e-004	3.9700e-004
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	LDA	2.5670e-003	1.3660e-003

tblVehicleEF	LDA	3.2680e-003	0.04
tblVehicleEF	LDA	0.41	0.47
tblVehicleEF	LDA	0.84	1.94
tblVehicleEF	LDA	206.01	220.20
tblVehicleEF	LDA	48.83	46.75
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.04	0.15
tblVehicleEF	LDA	1.5230e-003	1.1910e-003
tblVehicleEF	LDA	2.1880e-003	1.5670e-003
tblVehicleEF	LDA	1.4020e-003	1.0960e-003
tblVehicleEF	LDA	2.0120e-003	1.4410e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	6.4390e-003	4.9190e-003
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.04	0.16
tblVehicleEF	LDA	2.0620e-003	9.3000e-005
tblVehicleEF	LDA	5.0200e-004	0.00
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	9.3640e-003	7.1490e-003
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.05	0.18
tblVehicleEF	LDT1	5.5980e-003	2.7310e-003
tblVehicleEF	LDT1	7.5190e-003	0.05
tblVehicleEF	LDT1	0.76	0.71
tblVehicleEF	LDT1	1.67	2.09
tblVehicleEF	LDT1	262.03	264.87

tblVehicleEF	LDT1	61.70	56.84
tblVehicleEF	LDT1	0.07	0.05
tblVehicleEF	LDT1	0.09	0.19
tblVehicleEF	LDT1	1.9540e-003	1.4440e-003
tblVehicleEF	LDT1	2.6790e-003	1.8820e-003
tblVehicleEF	LDT1	1.7980e-003	1.3280e-003
tblVehicleEF	LDT1	2.4630e-003	1.7300e-003
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.16	0.12
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.01	0.01
tblVehicleEF	LDT1	0.13	0.47
tblVehicleEF	LDT1	0.10	0.22
tblVehicleEF	LDT1	2.6280e-003	2.6150e-003
tblVehicleEF	LDT1	6.4500e-004	0.00
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.16	0.12
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.13	0.47
tblVehicleEF	LDT1	0.11	0.24
tblVehicleEF	LDT2	3.9270e-003	2.4210e-003
tblVehicleEF	LDT2	4.6800e-003	0.05
tblVehicleEF	LDT2	0.58	0.66
tblVehicleEF	LDT2	1.13	2.54
tblVehicleEF	LDT2	296.40	280.92
tblVehicleEF	LDT2	69.39	60.84
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.08	0.21
tblVehicleEF	LDT2	1.6390e-003	1.2680e-003

tblVehicleEF	LDT2	2.3480e-003	1.6140e-003
tblVehicleEF	LDT2	1.5070e-003	1.1670e-003
tblVehicleEF	LDT2	2.1590e-003	1.4840e-003
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	9.7420e-003	9.5470e-003
tblVehicleEF	LDT2	0.06	0.39
tblVehicleEF	LDT2	0.06	0.24
tblVehicleEF	LDT2	2.9680e-003	0.01
tblVehicleEF	LDT2	7.1300e-004	8.8000e-005
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.39
tblVehicleEF	LDT2	0.07	0.27
tblVehicleEF	LHD1	4.6790e-003	4.6670e-003
tblVehicleEF	LHD1	0.01	6.7660e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.18
tblVehicleEF	LHD1	0.81	0.61
tblVehicleEF	LHD1	2.14	0.99
tblVehicleEF	LHD1	8.97	8.66
tblVehicleEF	LHD1	665.14	749.59
tblVehicleEF	LHD1	29.84	11.02
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.82	0.50
tblVehicleEF	LHD1	0.85	0.27
tblVehicleEF	LHD1	8.4500e-004	8.7200e-004

tblVehicleEF	LHD1	0.01	9.8310e-003
tblVehicleEF	LHD1	0.01	8.5970e-003
tblVehicleEF	LHD1	8.1100e-004	2.3200e-004
tblVehicleEF	LHD1	8.0900e-004	8.3400e-004
tblVehicleEF	LHD1	2.5630e-003	2.4580e-003
tblVehicleEF	LHD1	0.01	8.1790e-003
tblVehicleEF	LHD1	7.4600e-004	2.1300e-004
tblVehicleEF	LHD1	2.3230e-003	1.7170e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2230e-003	9.0400e-004
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.30	0.46
tblVehicleEF	LHD1	0.21	0.06
tblVehicleEF	LHD1	9.0000e-005	8.4000e-005
tblVehicleEF	LHD1	6.5140e-003	7.3150e-003
tblVehicleEF	LHD1	3.3800e-004	1.0900e-004
tblVehicleEF	LHD1	2.3230e-003	1.7170e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.2230e-003	9.0400e-004
tblVehicleEF	LHD1	0.13	0.10
tblVehicleEF	LHD1	0.30	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD2	2.9160e-003	2.8270e-003
tblVehicleEF	LHD2	6.1790e-003	6.0420e-003
tblVehicleEF	LHD2	4.7100e-003	6.5340e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.49	0.54
tblVehicleEF	LHD2	0.99	0.55

tblVehicleEF	LHD2	13.82	13.60
tblVehicleEF	LHD2	689.53	727.00
tblVehicleEF	LHD2	22.84	7.15
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.42	0.60
tblVehicleEF	LHD2	0.35	0.15
tblVehicleEF	LHD2	1.1530e-003	1.4660e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8100e-004	1.1700e-004
tblVehicleEF	LHD2	1.1040e-003	1.4020e-003
tblVehicleEF	LHD2	2.7010e-003	2.7000e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5100e-004	1.0800e-004
tblVehicleEF	LHD2	6.3900e-004	8.4300e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.6200e-004	4.5700e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.05	0.20
tblVehicleEF	LHD2	0.06	0.03
tblVehicleEF	LHD2	1.3500e-004	1.3000e-004
tblVehicleEF	LHD2	6.7010e-003	7.0160e-003
tblVehicleEF	LHD2	2.4600e-004	7.1000e-005
tblVehicleEF	LHD2	6.3900e-004	8.4300e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	3.6200e-004	4.5700e-004
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.05	0.20

tblVehicleEF	LHD2	0.07	0.04
tblVehicleEF	MCY	0.45	0.32
tblVehicleEF	MCY	0.16	0.25
tblVehicleEF	MCY	18.05	18.17
tblVehicleEF	MCY	10.25	9.11
tblVehicleEF	MCY	170.65	209.94
tblVehicleEF	MCY	44.05	60.17
tblVehicleEF	MCY	1.14	1.14
tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	2.0890e-003	2.0610e-003
tblVehicleEF	MCY	3.4880e-003	2.9290e-003
tblVehicleEF	MCY	1.9500e-003	1.9240e-003
tblVehicleEF	MCY	3.2730e-003	2.7480e-003
tblVehicleEF	MCY	0.89	1.80
tblVehicleEF	MCY	0.66	0.66
tblVehicleEF	MCY	0.48	0.96
tblVehicleEF	MCY	2.16	2.16
tblVehicleEF	MCY	0.54	1.75
tblVehicleEF	MCY	2.16	1.91
tblVehicleEF	MCY	2.0660e-003	2.0780e-003
tblVehicleEF	MCY	6.7200e-004	5.9500e-004
tblVehicleEF	MCY	0.89	1.80
tblVehicleEF	MCY	0.66	0.66
tblVehicleEF	MCY	0.48	0.96
tblVehicleEF	MCY	2.69	2.70
tblVehicleEF	MCY	0.54	1.75
tblVehicleEF	MCY	2.35	2.08
tblVehicleEF	MDV	7.0480e-003	2.6580e-003
tblVehicleEF	MDV	0.01	0.06
tblVehicleEF	MDV	0.85	0.68

tblVehicleEF	MDV	2.04	2.69
tblVehicleEF	MDV	400.76	339.08
tblVehicleEF	MDV	92.41	72.17
tblVehicleEF	MDV	0.10	0.05
tblVehicleEF	MDV	0.17	0.24
tblVehicleEF	MDV	1.7210e-003	1.3170e-003
tblVehicleEF	MDV	2.4070e-003	1.6620e-003
tblVehicleEF	MDV	1.5860e-003	1.2150e-003
tblVehicleEF	MDV	2.2130e-003	1.5280e-003
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.15	0.12
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.02	0.01
tblVehicleEF	MDV	0.10	0.40
tblVehicleEF	MDV	0.15	0.28
tblVehicleEF	MDV	4.0100e-003	3.3510e-003
tblVehicleEF	MDV	9.5900e-004	7.1400e-004
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.15	0.12
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.10	0.40
tblVehicleEF	MDV	0.16	0.31
tblVehicleEF	MH	0.02	7.6660e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.24	0.68
tblVehicleEF	MH	4.69	1.87
tblVehicleEF	MH	1,198.30	1,445.75
tblVehicleEF	MH	57.81	17.15
tblVehicleEF	MH	1.06	1.21

tblVehicleEF	MH	0.72	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.0090e-003	2.4000e-004
tblVehicleEF	MH	3.2210e-003	3.2870e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.2700e-004	2.2100e-004
tblVehicleEF	MH	0.64	0.52
tblVehicleEF	MH	0.05	0.04
tblVehicleEF	MH	0.23	0.19
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.02	1.01
tblVehicleEF	MH	0.27	0.08
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.6000e-004	1.7000e-004
tblVehicleEF	MH	0.64	0.52
tblVehicleEF	MH	0.05	0.04
tblVehicleEF	MH	0.23	0.19
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.02	1.01
tblVehicleEF	MH	0.30	0.09
tblVehicleEF	MHD	0.02	3.6600e-003
tblVehicleEF	MHD	3.4340e-003	1.3680e-003
tblVehicleEF	MHD	0.04	8.6830e-003
tblVehicleEF	MHD	0.37	0.40
tblVehicleEF	MHD	0.29	0.19
tblVehicleEF	MHD	4.65	0.97
tblVehicleEF	MHD	133.69	69.63
tblVehicleEF	MHD	1,178.99	1,051.19
tblVehicleEF	MHD	59.87	8.85

tblVehicleEF	MHD	0.35	0.38
tblVehicleEF	MHD	1.08	1.45
tblVehicleEF	MHD	10.16	1.70
tblVehicleEF	MHD	8.3000e-005	2.7700e-004
tblVehicleEF	MHD	3.0880e-003	7.0640e-003
tblVehicleEF	MHD	8.3800e-004	1.1200e-004
tblVehicleEF	MHD	8.0000e-005	2.6500e-004
tblVehicleEF	MHD	2.9480e-003	6.7520e-003
tblVehicleEF	MHD	7.7100e-004	1.0300e-004
tblVehicleEF	MHD	7.3900e-004	3.3400e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0900e-004	1.8000e-004
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.28	0.04
tblVehicleEF	MHD	1.2880e-003	6.6100e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.8000e-004	8.8000e-005
tblVehicleEF	MHD	7.3900e-004	3.3400e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	4.0900e-004	1.8000e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.31	0.05
tblVehicleEF	OBUS	0.01	7.0720e-003
tblVehicleEF	OBUS	5.0380e-003	2.9940e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.24	0.61

tblVehicleEF	OBUS	0.37	0.35
tblVehicleEF	OBUS	4.49	1.73
tblVehicleEF	OBUS	104.04	95.34
tblVehicleEF	OBUS	1,285.07	1,283.24
tblVehicleEF	OBUS	65.96	14.49
tblVehicleEF	OBUS	0.22	0.40
tblVehicleEF	OBUS	0.92	1.45
tblVehicleEF	OBUS	2.69	1.11
tblVehicleEF	OBUS	2.0000e-005	1.3100e-004
tblVehicleEF	OBUS	2.8820e-003	7.5500e-003
tblVehicleEF	OBUS	8.7800e-004	1.4900e-004
tblVehicleEF	OBUS	2.0000e-005	1.2600e-004
tblVehicleEF	OBUS	2.7360e-003	7.2100e-003
tblVehicleEF	OBUS	8.0800e-004	1.3700e-004
tblVehicleEF	OBUS	1.1600e-003	1.0720e-003
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	5.1900e-004	4.8300e-004
tblVehicleEF	OBUS	0.04	0.02
tblVehicleEF	OBUS	0.03	0.18
tblVehicleEF	OBUS	0.28	0.08
tblVehicleEF	OBUS	1.0040e-003	9.0500e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.3800e-004	1.4300e-004
tblVehicleEF	OBUS	1.1600e-003	1.0720e-003
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	5.1900e-004	4.8300e-004
tblVehicleEF	OBUS	0.05	0.03
tblVehicleEF	OBUS	0.03	0.18

tblVehicleEF	OBUS	0.31	0.09
tblVehicleEF	SBUS	0.81	0.06
tblVehicleEF	SBUS	0.01	5.4710e-003
tblVehicleEF	SBUS	0.07	5.3640e-003
tblVehicleEF	SBUS	8.46	2.48
tblVehicleEF	SBUS	0.78	0.45
tblVehicleEF	SBUS	8.66	0.76
tblVehicleEF	SBUS	1,071.32	344.98
tblVehicleEF	SBUS	1,032.09	1,025.26
tblVehicleEF	SBUS	58.82	4.41
tblVehicleEF	SBUS	6.58	3.24
tblVehicleEF	SBUS	2.75	4.17
tblVehicleEF	SBUS	11.46	0.95
tblVehicleEF	SBUS	5.0460e-003	3.0570e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	9.7600e-004	5.4000e-005
tblVehicleEF	SBUS	4.8280e-003	2.9250e-003
tblVehicleEF	SBUS	2.6090e-003	2.7030e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.9800e-004	5.0000e-005
tblVehicleEF	SBUS	3.3660e-003	6.4100e-004
tblVehicleEF	SBUS	0.03	6.2050e-003
tblVehicleEF	SBUS	1.00	0.27
tblVehicleEF	SBUS	1.5600e-003	2.9200e-004
tblVehicleEF	SBUS	0.09	0.08
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	0.44	0.03
tblVehicleEF	SBUS	0.01	3.2860e-003
tblVehicleEF	SBUS	9.9690e-003	9.7970e-003

tblVehicleEF	SBUS	7.3700e-004	4.4000e-005
tblVehicleEF	SBUS	3.3660e-003	6.4100e-004
tblVehicleEF	SBUS	0.03	6.2050e-003
tblVehicleEF	SBUS	1.45	0.39
tblVehicleEF	SBUS	1.5600e-003	2.9200e-004
tblVehicleEF	SBUS	0.11	0.09
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	0.48	0.03
tblVehicleEF	UBUS	0.23	1.74
tblVehicleEF	UBUS	0.04	1.7570e-003
tblVehicleEF	UBUS	3.77	13.20
tblVehicleEF	UBUS	7.31	0.14
tblVehicleEF	UBUS	2,007.57	1,654.13
tblVehicleEF	UBUS	114.33	1.40
tblVehicleEF	UBUS	7.17	0.71
tblVehicleEF	UBUS	13.83	0.01
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.15	5.1700e-003
tblVehicleEF	UBUS	1.2080e-003	1.5000e-005
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	8.3320e-003
tblVehicleEF	UBUS	0.15	4.9450e-003
tblVehicleEF	UBUS	1.1100e-003	1.4000e-005
tblVehicleEF	UBUS	2.0830e-003	2.7000e-005
tblVehicleEF	UBUS	0.03	2.5800e-004
tblVehicleEF	UBUS	1.1550e-003	1.3000e-005
tblVehicleEF	UBUS	0.36	0.03
tblVehicleEF	UBUS	7.3900e-003	1.4520e-003
tblVehicleEF	UBUS	0.58	7.3620e-003

tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	1.2750e-003	1.4000e-005
tblVehicleEF	UBUS	2.0830e-003	2.7000e-005
tblVehicleEF	UBUS	0.03	2.5800e-004
tblVehicleEF	UBUS	1.1550e-003	1.3000e-005
tblVehicleEF	UBUS	0.62	1.78
tblVehicleEF	UBUS	7.3900e-003	1.4520e-003
tblVehicleEF	UBUS	0.64	8.0600e-003
tblVehicleTrips	ST_TR	6.39	3.67
tblVehicleTrips	ST_TR	42.04	26.26
tblVehicleTrips	ST_TR	2.46	1.75
tblVehicleTrips	ST_TR	8.96	6.93
tblVehicleTrips	SU_TR	5.86	3.37
tblVehicleTrips	SU_TR	20.43	12.76
tblVehicleTrips	SU_TR	1.05	0.75
tblVehicleTrips	SU_TR	1.55	1.20
tblVehicleTrips	WD_TR	6.65	3.82
tblVehicleTrips	WD_TR	44.32	27.68
tblVehicleTrips	WD_TR	11.03	7.83
tblVehicleTrips	WD_TR	36.13	27.96
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.2718	0.0702	6.0993	3.2000e-004		0.0338	0.0338		0.0338	0.0338	0.0000	9.9777	9.9777	9.6100e-003	0.0000	10.2179
Energy	0.0469	0.4057	0.2055	2.5600e-003		0.0324	0.0324		0.0324	0.0324	0.0000	1,302.4049	1,302.4049	0.1269	0.0329	1,315.3876
Mobile	1.8029	2.7401	13.8133	0.0402	4.4821	0.0321	4.5142	1.1992	0.0300	1.2292	0.0000	3,796.1436	3,796.1436	0.1736	0.0000	3,800.4836
Stationary	0.3152	0.1546	0.8037	1.5100e-003		6.1800e-003	6.1800e-003		6.1800e-003	6.1800e-003	0.0000	146.2832	146.2832	0.0205	0.0000	146.7960
Waste						0.0000	0.0000		0.0000	0.0000	180.6660	0.0000	180.6660	10.6771	0.0000	447.5924
Water						0.0000	0.0000		0.0000	0.0000	25.6520	50.8714	76.5234	0.0955	0.0573	95.9752
Total	**7.4368**	**3.3706**	**20.9218**	**0.0446**	**4.4821**	**0.1045**	**4.5866**	**1.1992**	**0.1024**	**1.3016**	**206.3180**	**5,305.6808**	**5,511.9988**	**11.1031**	**0.0902**	**5,816.4526**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.2718	0.0702	6.0993	3.2000e-004		0.0338	0.0338		0.0338	0.0338	0.0000	9.9777	9.9777	9.6100e-003	0.0000	10.2179
Energy	0.0469	0.4057	0.2055	2.5600e-003		0.0324	0.0324		0.0324	0.0324	0.0000	1,302.4049	1,302.4049	0.1269	0.0329	1,315.3876
Mobile	1.8029	2.7401	13.8133	0.0402	4.4821	0.0321	4.5142	1.1992	0.0300	1.2292	0.0000	3,796.1436	3,796.1436	0.1736	0.0000	3,800.4836
Stationary	0.3152	0.1546	0.8037	1.5100e-003		6.1800e-003	6.1800e-003		6.1800e-003	6.1800e-003	0.0000	146.2832	146.2832	0.0205	0.0000	146.7960
Waste						0.0000	0.0000		0.0000	0.0000	180.6660	0.0000	180.6660	10.6771	0.0000	447.5924
Water						0.0000	0.0000		0.0000	0.0000	25.6520	50.8714	76.5234	0.0955	0.0573	95.9752
Total	**7.4368**	**3.3706**	**20.9218**	**0.0446**	**4.4821**	**0.1045**	**4.5866**	**1.1992**	**0.1024**	**1.3016**	**206.3180**	**5,305.6808**	**5,511.9988**	**11.1031**	**0.0902**	**5,816.4526**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Mitigated	1.8029	2.7401	13.8133	0.0402	4.4821	0.0321	4.5142	1.1992	0.0300	1.2292	0.0000	3,796.1436	3,796.1436	0.1736	0.0000	3,800.4836
Unmitigated	1.8029	2.7401	13.8133	0.0402	4.4821	0.0321	4.5142	1.1992	0.0300	1.2292	0.0000	3,796.1436	3,796.1436	0.1736	0.0000	3,800.4836

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	3,132.40	3,009.40	2763.40	7,072,282	7,072,282
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	1,947.90	1,847.97	897.95	2,746,847	2,746,847
General Office Building	411.14	91.89	39.38	746,613	746,613
Medical Office Building	1,009.92	250.31	43.34	1,494,006	1,494,006
Total	6,501.35	5,199.57	3,744.07	12,059,747	12,059,747

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Enclosed Parking with Elevator	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
General Office Building	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Medical Office Building	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Parking Lot	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Strip Mall	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	838.0345	838.0345	0.1180	0.0244	848.2577
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	838.0345	838.0345	0.1180	0.0244	848.2577
NaturalGas Mitigated	0.0469	0.4057	0.2055	2.5600e-003		0.0324	0.0324		0.0324	0.0324	0.0000	464.3703	464.3703	8.9000e-003	8.5100e-003	467.1298
NaturalGas Unmitigated	0.0469	0.4057	0.2055	2.5600e-003		0.0324	0.0324		0.0324	0.0324	0.0000	464.3703	464.3703	8.9000e-003	8.5100e-003	467.1298

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	7.08435e+006	0.0382	0.3264	0.1389	2.0800e-003		0.0264	0.0264		0.0264	0.0264	0.0000	378.0478	378.0478	7.2500e-003	6.9300e-003	380.2944
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	859556	4.6300e-003	0.0421	0.0354	2.5000e-004		3.2000e-003	3.2000e-003		3.2000e-003	3.2000e-003	0.0000	45.8692	45.8692	8.8000e-004	8.4000e-004	46.1418

Medical Office Building	591284	3.1900e-003	0.0290	0.0244	1.7000e-004		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003	0.0000	31.5532	31.5532	6.0000e-004	5.8000e-004	31.7407
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	166782	9.0000e-004	8.1800e-003	6.8700e-003	5.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	8.9001	8.9001	1.7000e-004	1.6000e-004	8.9530
Total		**0.0469**	**0.4057**	**0.2055**	**2.5500e-003**		**0.0324**	**0.0324**		**0.0324**	**0.0324**	**0.0000**	**464.3703**	**464.3703**	**8.9000e-003**	**8.5100e-003**	**467.1298**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	7.08435e+006	0.0382	0.3264	0.1389	2.0800e-003		0.0264	0.0264		0.0264	0.0264	0.0000	378.0478	378.0478	7.2500e-003	6.9300e-003	380.2944
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	859556	4.6300e-003	0.0421	0.0354	2.5000e-004		3.2000e-003	3.2000e-003		3.2000e-003	3.2000e-003	0.0000	45.8692	45.8692	8.8000e-004	8.4000e-004	46.1418
Medical Office Building	591284	3.1900e-003	0.0290	0.0244	1.7000e-004		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003	0.0000	31.5532	31.5532	6.0000e-004	5.8000e-004	31.7407
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	166782	9.0000e-004	8.1800e-003	6.8700e-003	5.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	8.9001	8.9001	1.7000e-004	1.6000e-004	8.9530
Total		**0.0469**	**0.4057**	**0.2055**	**2.5500e-003**		**0.0324**	**0.0324**		**0.0324**	**0.0324**	**0.0000**	**464.3703**	**464.3703**	**8.9000e-003**	**8.5100e-003**	**467.1298**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

Apartments Mid Rise	3.38525e+006	316.3176	0.0445	9.2100e-003	320.1763
Enclosed Parking with Elevator	3.22895e+006	301.7130	0.0425	8.7900e-003	305.3936
General Office Building	936218	87.4802	0.0123	2.5500e-003	88.5474
Medical Office Building	644020	60.1772	8.4700e-003	1.7500e-003	60.9113
Parking Lot	21980	2.0538	2.9000e-004	6.0000e-005	2.0789
Strip Mall	752277	70.2928	9.9000e-003	2.0500e-003	71.1503
Total		**838.0345**	**0.1180**	**0.0244**	**848.2578**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	3.38525e+006	316.3176	0.0445	9.2100e-003	320.1763
Enclosed Parking with Elevator	3.22895e+006	301.7130	0.0425	8.7900e-003	305.3936
General Office Building	936218	87.4802	0.0123	2.5500e-003	88.5474
Medical Office Building	644020	60.1772	8.4700e-003	1.7500e-003	60.9113
Parking Lot	21980	2.0538	2.9000e-004	6.0000e-005	2.0789
Strip Mall	752277	70.2928	9.9000e-003	2.0500e-003	71.1503
Total		**838.0345**	**0.1180**	**0.0244**	**848.2578**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.2718	0.0702	6.0993	3.2000e-004		0.0338	0.0338		0.0338	0.0338	0.0000	9.9777	9.9777	9.6100e-003	0.0000	10.2179
Unmitigated	5.2718	0.0702	6.0993	3.2000e-004		0.0338	0.0338		0.0338	0.0338	0.0000	9.9777	9.9777	9.6100e-003	0.0000	10.2179

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.7572					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3305					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1842	0.0702	6.0993	3.2000e-004		0.0338	0.0338		0.0338	0.0338	0.0000	9.9777	9.9777	9.6100e-003	0.0000	10.2179
Total	**5.2718**	**0.0702**	**6.0993**	**3.2000e-004**		**0.0338**	**0.0338**		**0.0338**	**0.0338**	**0.0000**	**9.9777**	**9.9777**	**9.6100e-003**	**0.0000**	**10.2179**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.7572					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3305					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1842	0.0702	6.0993	3.2000e-004		0.0338	0.0338		0.0338	0.0338	0.0000	9.9777	9.9777	9.6100e-003	0.0000	10.2179
Total	**5.2718**	**0.0702**	**6.0993**	**3.2000e-004**		**0.0338**	**0.0338**		**0.0338**	**0.0338**	**0.0000**	**9.9777**	**9.9777**	**9.6100e-003**	**0.0000**	**10.2179**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	76.5234	0.0955	0.0573	95.9752
Unmitigated	76.5234	0.0955	0.0573	95.9752

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	53.4263 / 33.6818	56.9302	0.0704	0.0422	71.2703
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	9.3328 / 5.7201	9.8914	0.0123	7.3700e-003	12.3957
Medical Office Building	4.53236 / 0.863306	4.1775	5.8800e-003	3.5600e-003	5.3860
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	5.21248 / 3.19475	5.5245	6.8700e-003	4.1200e-003	6.9232
Total		**76.5234**	**0.0955**	**0.0573**	**95.9752**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	53.4263 / 33.6818	56.9302	0.0704	0.0422	71.2703
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	9.3328 / 5.7201	9.8914	0.0123	7.3700e-003	12.3957
Medical Office Building	4.53236 / 0.863306	4.1775	5.8800e-003	3.5600e-003	5.3860
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	5.21248 / 3.19475	5.5245	6.8700e-003	4.1200e-003	6.9232

Total		**76.5234**	**0.0955**	**0.0573**	**95.9752**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	180.6660	10.6771	0.0000	447.5924
Unmitigated	180.6660	10.6771	0.0000	447.5924

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	377.2	76.5682	4.5251	0.0000	189.6945
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	48.83	9.9121	0.5858	0.0000	24.5567
Medical Office Building	390.1	79.1868	4.6798	0.0000	196.1819

Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	73.89	14.9990	0.8864	0.0000	37.1594
Total		**180.6660**	**10.6771**	**0.0000**	**447.5924**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	377.2	76.5682	4.5251	0.0000	189.6945
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	48.83	9.9121	0.5858	0.0000	24.5567
Medical Office Building	390.1	79.1868	4.6798	0.0000	196.1819
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	73.89	14.9990	0.8864	0.0000	37.1594
Total		**180.6660**	**10.6771**	**0.0000**	**447.5924**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Emergency Generator	3	0	50	2561	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750 - 9999 HP)	0.3152	0.1546	0.8037	1.5100e-003		6.1800e-003	6.1800e-003		6.1800e-003	6.1800e-003	0.0000	146.2832	146.2832	0.0205	0.0000	146.7960
Total	**0.3152**	**0.1546**	**0.8037**	**1.5100e-003**		**6.1800e-003**	**6.1800e-003**		**6.1800e-003**	**6.1800e-003**	**0.0000**	**146.2832**	**146.2832**	**0.0205**	**0.0000**	**146.7960**

11.0 Vegetation

1777 Saratoga Site, San Jose - Operational - Santa Clara County, Annual

1777 Saratoga Site, San Jose - Operational

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	331.00	Space	0.00	182,396.00	0
Apartments Mid Rise	280.00	Dwelling Unit	1.82	350,000.00	801
Strip Mall	6.00	1000sqft	0.00	6,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2018 rate

Land Use - Based on PD/Constr. - 1777 Saratoga Site, Residential = 280 (350000) retail = 6,000 Parking = 331 (182396)

Construction Phase - no construction

Off-road Equipment - no construction

Trips and VMT - no construction

Grading -

Vehicle Trips - Based on higher traffic rates: Res 3.83,3.67,3.37 Comm 26.83,25.45,12.37

Vehicle Emission Factors - EMFAC2017 Santa Clara County Emissions Factors 2026

Woodstoves - No hearths

Water And Wastewater - All wastewater treatment at SJ plant

Stationary Sources - Emergency Generators and Fire Pumps - Saratoga site - one 2,561hp generator, 50 hrs/year

Stationary Sources - Emergency Generators and Fire Pumps EF - >1,000hp generator requires BACT mitigation, NOx = 0.5, PM = 0.02

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	42.00	0.00
tblFireplaces	NumberWood	47.60	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.62	0.59
tblFleetMix	LDA	0.62	0.59
tblFleetMix	LDA	0.62	0.59
tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD2	5.0300e-003	5.4010e-003
tblFleetMix	LHD2	5.0300e-003	5.4010e-003
tblFleetMix	LHD2	5.0300e-003	5.4010e-003
tblFleetMix	MCY	5.2040e-003	4.9790e-003
tblFleetMix	MCY	5.2040e-003	4.9790e-003

tblFleetMix	MCY	5.2040e-003	4.9790e-003
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MH	6.8100e-004	7.4200e-004
tblFleetMix	MH	6.8100e-004	7.4200e-004
tblFleetMix	MH	6.8100e-004	7.4200e-004
tblFleetMix	MHD	0.01	0.01
tblFleetMix	MHD	0.01	0.01
tblFleetMix	MHD	0.01	0.01
tblFleetMix	OBUS	2.1950e-003	1.5280e-003
tblFleetMix	OBUS	2.1950e-003	1.5280e-003
tblFleetMix	OBUS	2.1950e-003	1.5280e-003
tblFleetMix	SBUS	6.3800e-004	9.1500e-004
tblFleetMix	SBUS	6.3800e-004	9.1500e-004
tblFleetMix	SBUS	6.3800e-004	9.1500e-004
tblFleetMix	UBUS	1.5020e-003	1.2250e-003
tblFleetMix	UBUS	1.5020e-003	1.2250e-003
tblFleetMix	UBUS	1.5020e-003	1.2250e-003
tblLandUse	LandUseSquareFeet	132,400.00	182,396.00
tblLandUse	LandUseSquareFeet	280,000.00	350,000.00
tblLandUse	LotAcreage	2.98	0.00
tblLandUse	LotAcreage	7.37	1.82
tblLandUse	LotAcreage	0.14	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00

tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.02
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.02
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,561.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleEF	HHD	0.31	0.02
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	0.07	0.00
tblVehicleEF	HHD	1.52	6.31
tblVehicleEF	HHD	0.93	0.41
tblVehicleEF	HHD	3.74	5.9100e-003
tblVehicleEF	HHD	4,207.12	1,010.86
tblVehicleEF	HHD	1,529.11	1,358.12
tblVehicleEF	HHD	11.80	0.05
tblVehicleEF	HHD	13.04	5.31
tblVehicleEF	HHD	1.80	2.65
tblVehicleEF	HHD	19.31	2.32
tblVehicleEF	HHD	5.9270e-003	2.4220e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.0050e-003	0.02
tblVehicleEF	HHD	1.1600e-004	1.0000e-006
tblVehicleEF	HHD	5.6710e-003	2.3170e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8440e-003	8.8910e-003
tblVehicleEF	HHD	5.7450e-003	0.02
tblVehicleEF	HHD	1.0700e-004	1.0000e-006
tblVehicleEF	HHD	9.5000e-005	2.0000e-006

tblVehicleEF	HHD	4.6590e-003	7.9000e-005
tblVehicleEF	HHD	0.39	0.43
tblVehicleEF	HHD	6.0000e-005	1.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.0300e-004	3.9700e-004
tblVehicleEF	HHD	0.08	2.0000e-006
tblVehicleEF	HHD	0.04	9.4050e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.7900e-004	0.00
tblVehicleEF	HHD	9.5000e-005	2.0000e-006
tblVehicleEF	HHD	4.6590e-003	7.9000e-005
tblVehicleEF	HHD	0.46	0.49
tblVehicleEF	HHD	6.0000e-005	1.0000e-006
tblVehicleEF	HHD	0.15	0.08
tblVehicleEF	HHD	4.0300e-004	3.9700e-004
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	LDA	2.5670e-003	1.3660e-003
tblVehicleEF	LDA	3.2680e-003	0.04
tblVehicleEF	LDA	0.41	0.47
tblVehicleEF	LDA	0.84	1.94
tblVehicleEF	LDA	206.01	220.20
tblVehicleEF	LDA	48.83	46.75
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.04	0.15
tblVehicleEF	LDA	1.5230e-003	1.1910e-003
tblVehicleEF	LDA	2.1880e-003	1.5670e-003
tblVehicleEF	LDA	1.4020e-003	1.0960e-003
tblVehicleEF	LDA	2.0120e-003	1.4410e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.07	0.08

tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	6.4390e-003	4.9190e-003
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.04	0.16
tblVehicleEF	LDA	2.0620e-003	9.3000e-005
tblVehicleEF	LDA	5.0200e-004	0.00
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	9.3640e-003	7.1490e-003
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.05	0.18
tblVehicleEF	LDT1	5.5980e-003	2.7310e-003
tblVehicleEF	LDT1	7.5190e-003	0.05
tblVehicleEF	LDT1	0.76	0.71
tblVehicleEF	LDT1	1.67	2.09
tblVehicleEF	LDT1	262.03	264.87
tblVehicleEF	LDT1	61.70	56.84
tblVehicleEF	LDT1	0.07	0.05
tblVehicleEF	LDT1	0.09	0.19
tblVehicleEF	LDT1	1.9540e-003	1.4440e-003
tblVehicleEF	LDT1	2.6790e-003	1.8820e-003
tblVehicleEF	LDT1	1.7980e-003	1.3280e-003
tblVehicleEF	LDT1	2.4630e-003	1.7300e-003
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.16	0.12
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.01	0.01
tblVehicleEF	LDT1	0.13	0.47
tblVehicleEF	LDT1	0.10	0.22

tblVehicleEF	LDT1	2.6280e-003	2.6150e-003
tblVehicleEF	LDT1	6.4500e-004	0.00
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.16	0.12
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.13	0.47
tblVehicleEF	LDT1	0.11	0.24
tblVehicleEF	LDT2	3.9270e-003	2.4210e-003
tblVehicleEF	LDT2	4.6800e-003	0.05
tblVehicleEF	LDT2	0.58	0.66
tblVehicleEF	LDT2	1.13	2.54
tblVehicleEF	LDT2	296.40	280.92
tblVehicleEF	LDT2	69.39	60.84
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.08	0.21
tblVehicleEF	LDT2	1.6390e-003	1.2680e-003
tblVehicleEF	LDT2	2.3480e-003	1.6140e-003
tblVehicleEF	LDT2	1.5070e-003	1.1670e-003
tblVehicleEF	LDT2	2.1590e-003	1.4840e-003
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	9.7420e-003	9.5470e-003
tblVehicleEF	LDT2	0.06	0.39
tblVehicleEF	LDT2	0.06	0.24
tblVehicleEF	LDT2	2.9680e-003	0.01
tblVehicleEF	LDT2	7.1300e-004	8.8000e-005
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.09	0.11

tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.39
tblVehicleEF	LDT2	0.07	0.27
tblVehicleEF	LHD1	4.6790e-003	4.6670e-003
tblVehicleEF	LHD1	0.01	6.7660e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.18
tblVehicleEF	LHD1	0.81	0.61
tblVehicleEF	LHD1	2.14	0.99
tblVehicleEF	LHD1	8.97	8.66
tblVehicleEF	LHD1	665.14	749.59
tblVehicleEF	LHD1	29.84	11.02
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.82	0.50
tblVehicleEF	LHD1	0.85	0.27
tblVehicleEF	LHD1	8.4500e-004	8.7200e-004
tblVehicleEF	LHD1	0.01	9.8310e-003
tblVehicleEF	LHD1	0.01	8.5970e-003
tblVehicleEF	LHD1	8.1100e-004	2.3200e-004
tblVehicleEF	LHD1	8.0900e-004	8.3400e-004
tblVehicleEF	LHD1	2.5630e-003	2.4580e-003
tblVehicleEF	LHD1	0.01	8.1790e-003
tblVehicleEF	LHD1	7.4600e-004	2.1300e-004
tblVehicleEF	LHD1	2.3230e-003	1.7170e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2230e-003	9.0400e-004
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.30	0.46

tblVehicleEF	LHD1	0.21	0.06
tblVehicleEF	LHD1	9.0000e-005	8.4000e-005
tblVehicleEF	LHD1	6.5140e-003	7.3150e-003
tblVehicleEF	LHD1	3.3800e-004	1.0900e-004
tblVehicleEF	LHD1	2.3230e-003	1.7170e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.2230e-003	9.0400e-004
tblVehicleEF	LHD1	0.13	0.10
tblVehicleEF	LHD1	0.30	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD2	2.9160e-003	2.8270e-003
tblVehicleEF	LHD2	6.1790e-003	6.0420e-003
tblVehicleEF	LHD2	4.7100e-003	6.5340e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.49	0.54
tblVehicleEF	LHD2	0.99	0.55
tblVehicleEF	LHD2	13.82	13.60
tblVehicleEF	LHD2	689.53	727.00
tblVehicleEF	LHD2	22.84	7.15
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.42	0.60
tblVehicleEF	LHD2	0.35	0.15
tblVehicleEF	LHD2	1.1530e-003	1.4660e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8100e-004	1.1700e-004
tblVehicleEF	LHD2	1.1040e-003	1.4020e-003
tblVehicleEF	LHD2	2.7010e-003	2.7000e-003
tblVehicleEF	LHD2	0.01	0.01

tblVehicleEF	LHD2	3.5100e-004	1.0800e-004
tblVehicleEF	LHD2	6.3900e-004	8.4300e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.6200e-004	4.5700e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.05	0.20
tblVehicleEF	LHD2	0.06	0.03
tblVehicleEF	LHD2	1.3500e-004	1.3000e-004
tblVehicleEF	LHD2	6.7010e-003	7.0160e-003
tblVehicleEF	LHD2	2.4600e-004	7.1000e-005
tblVehicleEF	LHD2	6.3900e-004	8.4300e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	3.6200e-004	4.5700e-004
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.05	0.20
tblVehicleEF	LHD2	0.07	0.04
tblVehicleEF	MCY	0.45	0.32
tblVehicleEF	MCY	0.16	0.25
tblVehicleEF	MCY	18.05	18.17
tblVehicleEF	MCY	10.25	9.11
tblVehicleEF	MCY	170.65	209.94
tblVehicleEF	MCY	44.05	60.17
tblVehicleEF	MCY	1.14	1.14
tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	2.0890e-003	2.0610e-003
tblVehicleEF	MCY	3.4880e-003	2.9290e-003
tblVehicleEF	MCY	1.9500e-003	1.9240e-003
tblVehicleEF	MCY	3.2730e-003	2.7480e-003

tblVehicleEF	MCY	0.89	1.80
tblVehicleEF	MCY	0.66	0.66
tblVehicleEF	MCY	0.48	0.96
tblVehicleEF	MCY	2.16	2.16
tblVehicleEF	MCY	0.54	1.75
tblVehicleEF	MCY	2.16	1.91
tblVehicleEF	MCY	2.0660e-003	2.0780e-003
tblVehicleEF	MCY	6.7200e-004	5.9500e-004
tblVehicleEF	MCY	0.89	1.80
tblVehicleEF	MCY	0.66	0.66
tblVehicleEF	MCY	0.48	0.96
tblVehicleEF	MCY	2.69	2.70
tblVehicleEF	MCY	0.54	1.75
tblVehicleEF	MCY	2.35	2.08
tblVehicleEF	MDV	7.0480e-003	2.6580e-003
tblVehicleEF	MDV	0.01	0.06
tblVehicleEF	MDV	0.85	0.68
tblVehicleEF	MDV	2.04	2.69
tblVehicleEF	MDV	400.76	339.08
tblVehicleEF	MDV	92.41	72.17
tblVehicleEF	MDV	0.10	0.05
tblVehicleEF	MDV	0.17	0.24
tblVehicleEF	MDV	1.7210e-003	1.3170e-003
tblVehicleEF	MDV	2.4070e-003	1.6620e-003
tblVehicleEF	MDV	1.5860e-003	1.2150e-003
tblVehicleEF	MDV	2.2130e-003	1.5280e-003
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.15	0.12
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.02	0.01

tblVehicleEF	MDV	0.10	0.40
tblVehicleEF	MDV	0.15	0.28
tblVehicleEF	MDV	4.0100e-003	3.3510e-003
tblVehicleEF	MDV	9.5900e-004	7.1400e-004
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.15	0.12
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.10	0.40
tblVehicleEF	MDV	0.16	0.31
tblVehicleEF	MH	0.02	7.6660e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.24	0.68
tblVehicleEF	MH	4.69	1.87
tblVehicleEF	MH	1,198.30	1,445.75
tblVehicleEF	MH	57.81	17.15
tblVehicleEF	MH	1.06	1.21
tblVehicleEF	MH	0.72	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.0090e-003	2.4000e-004
tblVehicleEF	MH	3.2210e-003	3.2870e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.2700e-004	2.2100e-004
tblVehicleEF	MH	0.64	0.52
tblVehicleEF	MH	0.05	0.04
tblVehicleEF	MH	0.23	0.19
tblVehicleEF	MH	0.07	0.05
tblVehicleEF	MH	0.02	1.01
tblVehicleEF	MH	0.27	0.08

tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.6000e-004	1.7000e-004
tblVehicleEF	MH	0.64	0.52
tblVehicleEF	MH	0.05	0.04
tblVehicleEF	MH	0.23	0.19
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.02	1.01
tblVehicleEF	MH	0.30	0.09
tblVehicleEF	MHD	0.02	3.6600e-003
tblVehicleEF	MHD	3.4340e-003	1.3680e-003
tblVehicleEF	MHD	0.04	8.6830e-003
tblVehicleEF	MHD	0.37	0.40
tblVehicleEF	MHD	0.29	0.19
tblVehicleEF	MHD	4.65	0.97
tblVehicleEF	MHD	133.69	69.63
tblVehicleEF	MHD	1,178.99	1,051.19
tblVehicleEF	MHD	59.87	8.85
tblVehicleEF	MHD	0.35	0.38
tblVehicleEF	MHD	1.08	1.45
tblVehicleEF	MHD	10.16	1.70
tblVehicleEF	MHD	8.3000e-005	2.7700e-004
tblVehicleEF	MHD	3.0880e-003	7.0640e-003
tblVehicleEF	MHD	8.3800e-004	1.1200e-004
tblVehicleEF	MHD	8.0000e-005	2.6500e-004
tblVehicleEF	MHD	2.9480e-003	6.7520e-003
tblVehicleEF	MHD	7.7100e-004	1.0300e-004
tblVehicleEF	MHD	7.3900e-004	3.3400e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0900e-004	1.8000e-004

tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.28	0.04
tblVehicleEF	MHD	1.2880e-003	6.6100e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.8000e-004	8.8000e-005
tblVehicleEF	MHD	7.3900e-004	3.3400e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	4.0900e-004	1.8000e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.31	0.05
tblVehicleEF	OBUS	0.01	7.0720e-003
tblVehicleEF	OBUS	5.0380e-003	2.9940e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.24	0.61
tblVehicleEF	OBUS	0.37	0.35
tblVehicleEF	OBUS	4.49	1.73
tblVehicleEF	OBUS	104.04	95.34
tblVehicleEF	OBUS	1,285.07	1,283.24
tblVehicleEF	OBUS	65.96	14.49
tblVehicleEF	OBUS	0.22	0.40
tblVehicleEF	OBUS	0.92	1.45
tblVehicleEF	OBUS	2.69	1.11
tblVehicleEF	OBUS	2.0000e-005	1.3100e-004
tblVehicleEF	OBUS	2.8820e-003	7.5500e-003
tblVehicleEF	OBUS	8.7800e-004	1.4900e-004
tblVehicleEF	OBUS	2.0000e-005	1.2600e-004
tblVehicleEF	OBUS	2.7360e-003	7.2100e-003

tblVehicleEF	OBUS	8.0800e-004	1.3700e-004
tblVehicleEF	OBUS	1.1600e-003	1.0720e-003
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	5.1900e-004	4.8300e-004
tblVehicleEF	OBUS	0.04	0.02
tblVehicleEF	OBUS	0.03	0.18
tblVehicleEF	OBUS	0.28	0.08
tblVehicleEF	OBUS	1.0040e-003	9.0500e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.3800e-004	1.4300e-004
tblVehicleEF	OBUS	1.1600e-003	1.0720e-003
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	5.1900e-004	4.8300e-004
tblVehicleEF	OBUS	0.05	0.03
tblVehicleEF	OBUS	0.03	0.18
tblVehicleEF	OBUS	0.31	0.09
tblVehicleEF	SBUS	0.81	0.06
tblVehicleEF	SBUS	0.01	5.4710e-003
tblVehicleEF	SBUS	0.07	5.3640e-003
tblVehicleEF	SBUS	8.46	2.48
tblVehicleEF	SBUS	0.78	0.45
tblVehicleEF	SBUS	8.66	0.76
tblVehicleEF	SBUS	1,071.32	344.98
tblVehicleEF	SBUS	1,032.09	1,025.26
tblVehicleEF	SBUS	58.82	4.41
tblVehicleEF	SBUS	6.58	3.24
tblVehicleEF	SBUS	2.75	4.17
tblVehicleEF	SBUS	11.46	0.95

tblVehicleEF	SBUS	5.0460e-003	3.0570e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	9.7600e-004	5.4000e-005
tblVehicleEF	SBUS	4.8280e-003	2.9250e-003
tblVehicleEF	SBUS	2.6090e-003	2.7030e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.9800e-004	5.0000e-005
tblVehicleEF	SBUS	3.3660e-003	6.4100e-004
tblVehicleEF	SBUS	0.03	6.2050e-003
tblVehicleEF	SBUS	1.00	0.27
tblVehicleEF	SBUS	1.5600e-003	2.9200e-004
tblVehicleEF	SBUS	0.09	0.08
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	0.44	0.03
tblVehicleEF	SBUS	0.01	3.2860e-003
tblVehicleEF	SBUS	9.9690e-003	9.7970e-003
tblVehicleEF	SBUS	7.3700e-004	4.4000e-005
tblVehicleEF	SBUS	3.3660e-003	6.4100e-004
tblVehicleEF	SBUS	0.03	6.2050e-003
tblVehicleEF	SBUS	1.45	0.39
tblVehicleEF	SBUS	1.5600e-003	2.9200e-004
tblVehicleEF	SBUS	0.11	0.09
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	0.48	0.03
tblVehicleEF	UBUS	0.23	1.74
tblVehicleEF	UBUS	0.04	1.7570e-003
tblVehicleEF	UBUS	3.77	13.20
tblVehicleEF	UBUS	7.31	0.14
tblVehicleEF	UBUS	2,007.57	1,654.13

tblVehicleEF	UBUS	114.33	1.40
tblVehicleEF	UBUS	7.17	0.71
tblVehicleEF	UBUS	13.83	0.01
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.15	5.1700e-003
tblVehicleEF	UBUS	1.2080e-003	1.5000e-005
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	8.3320e-003
tblVehicleEF	UBUS	0.15	4.9450e-003
tblVehicleEF	UBUS	1.1100e-003	1.4000e-005
tblVehicleEF	UBUS	2.0830e-003	2.7000e-005
tblVehicleEF	UBUS	0.03	2.5800e-004
tblVehicleEF	UBUS	1.1550e-003	1.3000e-005
tblVehicleEF	UBUS	0.36	0.03
tblVehicleEF	UBUS	7.3900e-003	1.4520e-003
tblVehicleEF	UBUS	0.58	7.3620e-003
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	1.2750e-003	1.4000e-005
tblVehicleEF	UBUS	2.0830e-003	2.7000e-005
tblVehicleEF	UBUS	0.03	2.5800e-004
tblVehicleEF	UBUS	1.1550e-003	1.3000e-005
tblVehicleEF	UBUS	0.62	1.78
tblVehicleEF	UBUS	7.3900e-003	1.4520e-003
tblVehicleEF	UBUS	0.64	8.0600e-003
tblVehicleTrips	ST_TR	6.39	3.67
tblVehicleTrips	ST_TR	42.04	25.45
tblVehicleTrips	SU_TR	5.86	3.37
tblVehicleTrips	SU_TR	20.43	12.37
tblVehicleTrips	WD_TR	6.65	3.83

tblVehicleTrips	WD_TR	44.32	26.83
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7181	0.0240	2.0802	1.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	3.4021	3.4021	3.2700e-003	0.0000	3.4838
Energy	0.0131	0.1122	0.0480	7.2000e-004		9.0700e-003	9.0700e-003		9.0700e-003	9.0700e-003	0.0000	343.7250	343.7250	0.0326	8.6100e-003	347.1057
Mobile	0.3686	0.5855	2.9377	8.8100e-003	0.9836	6.9800e-003	0.9906	0.2632	6.5300e-003	0.2697	0.0000	830.2441	830.2441	0.0365	0.0000	831.1556
Stationary	0.1051	0.0515	0.2679	5.0000e-004		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	48.7611	48.7611	6.8400e-003	0.0000	48.9320
Waste						0.0000	0.0000		0.0000	0.0000	27.4241	0.0000	27.4241	1.6207	0.0000	67.9420
Water						0.0000	0.0000		0.0000	0.0000	6.6117	13.2989	19.9106	0.0246	0.0148	24.9265

Total	**2.2049**	**0.7731**	**5.3338**	**0.0101**	**0.9836**	**0.0297**	**1.0133**	**0.2632**	**0.0292**	**0.2924**	**34.0358**	**1,239.4311**	**1,273.4669**	**1.7245**	**0.0234**	**1,323.5455**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7181	0.0240	2.0802	1.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	3.4021	3.4021	3.2700e-003	0.0000	3.4838
Energy	0.0131	0.1122	0.0480	7.2000e-004		9.0700e-003	9.0700e-003		9.0700e-003	9.0700e-003	0.0000	343.7250	343.7250	0.0326	8.6100e-003	347.1057
Mobile	0.3686	0.5855	2.9377	8.8100e-003	0.9836	6.9800e-003	0.9906	0.2632	6.5300e-003	0.2697	0.0000	830.2441	830.2441	0.0365	0.0000	831.1556
Stationary	0.1051	0.0515	0.2679	5.0000e-004		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	48.7611	48.7611	6.8400e-003	0.0000	48.9320
Waste						0.0000	0.0000		0.0000	0.0000	27.4241	0.0000	27.4241	1.6207	0.0000	67.9420
Water						0.0000	0.0000		0.0000	0.0000	6.6117	13.2989	19.9106	0.0246	0.0148	24.9265
Total	**2.2049**	**0.7731**	**5.3338**	**0.0101**	**0.9836**	**0.0297**	**1.0133**	**0.2632**	**0.0292**	**0.2924**	**34.0358**	**1,239.4311**	**1,273.4669**	**1.7245**	**0.0234**	**1,323.5455**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3686	0.5855	2.9377	8.8100e-003	0.9836	6.9800e-003	0.9906	0.2632	6.5300e-003	0.2697	0.0000	830.2441	830.2441	0.0365	0.0000	831.1556
Unmitigated	0.3686	0.5855	2.9377	8.8100e-003	0.9836	6.9800e-003	0.9906	0.2632	6.5300e-003	0.2697	0.0000	830.2441	830.2441	0.0365	0.0000	831.1556

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,072.40	1,027.60	943.60	2,419,545	2,419,545
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	160.98	152.70	74.22	227,005	227,005
Total	1,233.38	1,180.30	1,017.82	2,646,550	2,646,550

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Enclosed Parking with Elevator	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Strip Mall	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	213.8766	213.8766	0.0301	6.2300e-003	216.4857
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	213.8766	213.8766	0.0301	6.2300e-003	216.4857
NaturalGas Mitigated	0.0131	0.1122	0.0480	7.2000e-004		9.0700e-003	9.0700e-003		9.0700e-003	9.0700e-003	0.0000	129.8483	129.8483	2.4900e-003	2.3800e-003	130.6200
NaturalGas Unmitigated	0.0131	0.1122	0.0480	7.2000e-004		9.0700e-003	9.0700e-003		9.0700e-003	9.0700e-003	0.0000	129.8483	129.8483	2.4900e-003	2.3800e-003	130.6200

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.41905e+006	0.0130	0.1115	0.0474	7.1000e-004		9.0100e-003	9.0100e-003		9.0100e-003	9.0100e-003	0.0000	129.0895	129.0895	2.4700e-003	2.3700e-003	129.8566
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	14220	8.0000e-005	7.0000e-004	5.9000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7588	0.7588	1.0000e-005	1.0000e-005	0.7633
Total		**0.0131**	**0.1122**	**0.0480**	**7.1000e-004**		**9.0600e-003**	**9.0600e-003**		**9.0600e-003**	**9.0600e-003**	**0.0000**	**129.8483**	**129.8483**	**2.4800e-003**	**2.3800e-003**	**130.6200**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.41905e+006	0.0130	0.1115	0.0474	7.1000e-004		9.0100e-003	9.0100e-003		9.0100e-003	9.0100e-003	0.0000	129.0895	129.0895	2.4700e-003	2.3700e-003	129.8566
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	14220	8.0000e-005	7.0000e-004	5.9000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7588	0.7588	1.0000e-005	1.0000e-005	0.7633
Total		**0.0131**	**0.1122**	**0.0480**	**7.1000e-004**		**9.0600e-003**	**9.0600e-003**		**9.0600e-003**	**9.0600e-003**	**0.0000**	**129.8483**	**129.8483**	**2.4800e-003**	**2.3800e-003**	**130.6200**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.15594e+006	108.0109	0.0152	3.1500e-003	109.3285
Enclosed Parking with Elevator	1.06884e+006	99.8725	0.0141	2.9100e-003	101.0908
Strip Mall	64140	5.9932	8.4000e-004	1.7000e-004	6.0664
Total		**213.8766**	**0.0301**	**6.2300e-003**	**216.4857**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e

Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.15594e+006	108.0109	0.0152	3.1500e-003	109.3285
Enclosed Parking with Elevator	1.06884e+006	99.8725	0.0141	2.9100e-003	101.0908
Strip Mall	64140	5.9932	8.4000e-004	1.7000e-004	6.0664
Total		**213.8766**	**0.0301**	**6.2300e-003**	**216.4857**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.7181	0.0240	2.0802	1.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	3.4021	3.4021	3.2700e-003	0.0000	3.4838
Unmitigated	1.7181	0.0240	2.0802	1.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	3.4021	3.4021	3.2700e-003	0.0000	3.4838

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					

Architectural Coating	0.2533					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4022					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0627	0.0240	2.0802	1.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	3.4021	3.4021	3.2700e-003	0.0000	3.4838
Total	**1.7181**	**0.0240**	**2.0802**	**1.1000e-004**		**0.0115**	**0.0115**		**0.0115**	**0.0115**	**0.0000**	**3.4021**	**3.4021**	**3.2700e-003**	**0.0000**	**3.4838**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2533					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4022					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0627	0.0240	2.0802	1.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	3.4021	3.4021	3.2700e-003	0.0000	3.4838
Total	**1.7181**	**0.0240**	**2.0802**	**1.1000e-004**		**0.0115**	**0.0115**		**0.0115**	**0.0115**	**0.0000**	**3.4021**	**3.4021**	**3.2700e-003**	**0.0000**	**3.4838**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e

Category	MT/yr			
Mitigated	19.9106	0.0246	0.0148	24.9265
Unmitigated	19.9106	0.0246	0.0148	24.9265

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	18.2431 / 11.5011	19.4396	0.0240	0.0144	24.3362
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.444435 / 0.272396	0.4710	5.9000e-004	3.5000e-004	0.5903
Total		**19.9106**	**0.0246**	**0.0148**	**24.9265**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	18.2431 / 11.5011	19.4396	0.0240	0.0144	24.3362
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.444435 / 0.272396	0.4710	5.9000e-004	3.5000e-004	0.5903

Total		**19.9106**	**0.0246**	**0.0148**	**24.9265**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	27.4241	1.6207	0.0000	67.9420
Unmitigated	27.4241	1.6207	0.0000	67.9420

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	128.8	26.1452	1.5451	0.0000	64.7737
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	6.3	1.2788	0.0756	0.0000	3.1683
Total		**27.4241**	**1.6207**	**0.0000**	**67.9420**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	128.8	26.1452	1.5451	0.0000	64.7737
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	6.3	1.2788	0.0756	0.0000	3.1683
Total		**27.4241**	**1.6207**	**0.0000**	**67.9420**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0	50	2561	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750 - 9999 HP)	0.1051	0.0515	0.2679	5.0000e-004		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	48.7611	48.7611	6.8400e-003	0.0000	48.9320
Total	**0.1051**	**0.0515**	**0.2679**	**5.0000e-004**		**2.0600e-003**	**2.0600e-003**		**2.0600e-003**	**2.0600e-003**	**0.0000**	**48.7611**	**48.7611**	**6.8400e-003**	**0.0000**	**48.9320**

11.0 Vegetation

El Paseo Site - Existing Operational

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Strip Mall	72.94	1000sqft	1.67	72,940.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2018 rate

Land Use - Based on Traffic existing retail

Construction Phase - no construction

Off-road Equipment - no construction

Vehicle Trips - Based on traffic 2,228 total trips/72,940sf (30.55,28.97,14.08)

Woodstoves - No hearths

Water And Wastewater - All wastewater treatment at SJ plant

Grading - no construction

Trips and VMT - no construction

Vehicle Emission Factors - EMFAC2017 Santa Clara County Emissions Factors 2020

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	2/23/2021	2/22/2021
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.62	0.59
tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD2	5.0300e-003	5.0275e-003
tblFleetMix	MCY	5.2040e-003	5.3073e-003
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MH	6.8100e-004	7.7873e-004
tblFleetMix	MHD	0.01	0.01
tblFleetMix	OBUS	2.1950e-003	1.7473e-003
tblFleetMix	SBUS	6.3800e-004	9.2634e-004
tblFleetMix	UBUS	1.5020e-003	1.3021e-003
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblVehicleEF	HHD	0.31	0.03
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.07	0.00
tblVehicleEF	HHD	1.52	5.38
tblVehicleEF	HHD	0.93	0.76

tblVehicleEF	HHD	3.74	6.2050e-003
tblVehicleEF	HHD	4,207.12	1,078.53
tblVehicleEF	HHD	1,529.11	1,581.53
tblVehicleEF	HHD	11.80	0.06
tblVehicleEF	HHD	13.04	6.03
tblVehicleEF	HHD	1.80	4.62
tblVehicleEF	HHD	19.31	1.73
tblVehicleEF	HHD	5.9270e-003	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.0050e-003	0.07
tblVehicleEF	HHD	1.1600e-004	1.0000e-006
tblVehicleEF	HHD	5.6710e-003	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8440e-003	8.8630e-003
tblVehicleEF	HHD	5.7450e-003	0.07
tblVehicleEF	HHD	1.0700e-004	1.0000e-006
tblVehicleEF	HHD	9.5000e-005	5.0000e-006
tblVehicleEF	HHD	4.6590e-003	2.2500e-004
tblVehicleEF	HHD	0.39	0.44
tblVehicleEF	HHD	6.0000e-005	3.0000e-006
tblVehicleEF	HHD	0.09	0.17
tblVehicleEF	HHD	4.0300e-004	1.4070e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.7900e-004	1.0000e-006
tblVehicleEF	HHD	9.5000e-005	5.0000e-006
tblVehicleEF	HHD	4.6590e-003	2.2500e-004
tblVehicleEF	HHD	0.46	0.50

tblVehicleEF	HHD	6.0000e-005	3.0000e-006
tblVehicleEF	HHD	0.15	0.24
tblVehicleEF	HHD	4.0300e-004	1.4070e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	LDA	2.5670e-003	3.0610e-003
tblVehicleEF	LDA	3.2680e-003	0.06
tblVehicleEF	LDA	0.41	0.74
tblVehicleEF	LDA	0.84	2.38
tblVehicleEF	LDA	206.01	264.68
tblVehicleEF	LDA	48.83	56.07
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.04	0.22
tblVehicleEF	LDA	1.5230e-003	1.5800e-003
tblVehicleEF	LDA	2.1880e-003	1.9810e-003
tblVehicleEF	LDA	1.4020e-003	1.4560e-003
tblVehicleEF	LDA	2.0120e-003	1.8220e-003
tblVehicleEF	LDA	0.02	0.05
tblVehicleEF	LDA	0.07	0.11
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	6.4390e-003	0.01
tblVehicleEF	LDA	0.03	0.23
tblVehicleEF	LDA	0.04	0.29
tblVehicleEF	LDA	2.0620e-003	8.7000e-005
tblVehicleEF	LDA	5.0200e-004	0.00
tblVehicleEF	LDA	0.02	0.05
tblVehicleEF	LDA	0.07	0.11
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	9.3640e-003	0.02
tblVehicleEF	LDA	0.03	0.23
tblVehicleEF	LDA	0.05	0.32

tblVehicleEF	LDT1	5.5980e-003	6.5560e-003
tblVehicleEF	LDT1	7.5190e-003	0.08
tblVehicleEF	LDT1	0.76	1.36
tblVehicleEF	LDT1	1.67	2.64
tblVehicleEF	LDT1	262.03	314.05
tblVehicleEF	LDT1	61.70	67.50
tblVehicleEF	LDT1	0.07	0.12
tblVehicleEF	LDT1	0.09	0.29
tblVehicleEF	LDT1	1.9540e-003	2.2660e-003
tblVehicleEF	LDT1	2.6790e-003	2.7710e-003
tblVehicleEF	LDT1	1.7980e-003	2.0860e-003
tblVehicleEF	LDT1	2.4630e-003	2.5480e-003
tblVehicleEF	LDT1	0.06	0.11
tblVehicleEF	LDT1	0.16	0.21
tblVehicleEF	LDT1	0.05	0.08
tblVehicleEF	LDT1	0.01	0.03
tblVehicleEF	LDT1	0.13	0.74
tblVehicleEF	LDT1	0.10	0.43
tblVehicleEF	LDT1	2.6280e-003	2.5610e-003
tblVehicleEF	LDT1	6.4500e-004	0.00
tblVehicleEF	LDT1	0.06	0.11
tblVehicleEF	LDT1	0.16	0.21
tblVehicleEF	LDT1	0.05	0.08
tblVehicleEF	LDT1	0.02	0.04
tblVehicleEF	LDT1	0.13	0.74
tblVehicleEF	LDT1	0.11	0.47
tblVehicleEF	LDT2	3.9270e-003	4.4900e-003
tblVehicleEF	LDT2	4.6800e-003	0.08
tblVehicleEF	LDT2	0.58	1.01
tblVehicleEF	LDT2	1.13	3.10

tblVehicleEF	LDT2	296.40	346.93
tblVehicleEF	LDT2	69.39	75.00
tblVehicleEF	LDT2	0.05	0.10
tblVehicleEF	LDT2	0.08	0.35
tblVehicleEF	LDT2	1.6390e-003	1.5660e-003
tblVehicleEF	LDT2	2.3480e-003	1.9310e-003
tblVehicleEF	LDT2	1.5070e-003	1.4410e-003
tblVehicleEF	LDT2	2.1590e-003	1.7760e-003
tblVehicleEF	LDT2	0.03	0.07
tblVehicleEF	LDT2	0.09	0.14
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	9.7420e-003	0.02
tblVehicleEF	LDT2	0.06	0.45
tblVehicleEF	LDT2	0.06	0.39
tblVehicleEF	LDT2	2.9680e-003	0.01
tblVehicleEF	LDT2	7.1300e-004	9.1000e-005
tblVehicleEF	LDT2	0.03	0.07
tblVehicleEF	LDT2	0.09	0.14
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.01	0.03
tblVehicleEF	LDT2	0.06	0.45
tblVehicleEF	LDT2	0.07	0.43
tblVehicleEF	LHD1	4.6790e-003	5.6860e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.14	0.19
tblVehicleEF	LHD1	0.81	1.02
tblVehicleEF	LHD1	2.14	1.23
tblVehicleEF	LHD1	8.97	9.13
tblVehicleEF	LHD1	665.14	837.42

tblVehicleEF	LHD1	29.84	12.75
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.82	1.05
tblVehicleEF	LHD1	0.85	0.37
tblVehicleEF	LHD1	8.4500e-004	7.7000e-004
tblVehicleEF	LHD1	0.01	9.6220e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.1100e-004	3.0500e-004
tblVehicleEF	LHD1	8.0900e-004	7.3700e-004
tblVehicleEF	LHD1	2.5630e-003	2.4060e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.4600e-004	2.8100e-004
tblVehicleEF	LHD1	2.3230e-003	2.4030e-003
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2230e-003	1.1790e-003
tblVehicleEF	LHD1	0.11	0.11
tblVehicleEF	LHD1	0.30	0.62
tblVehicleEF	LHD1	0.21	0.10
tblVehicleEF	LHD1	9.0000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5140e-003	8.1860e-003
tblVehicleEF	LHD1	3.3800e-004	1.2600e-004
tblVehicleEF	LHD1	2.3230e-003	2.4030e-003
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.2230e-003	1.1790e-003
tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.30	0.62
tblVehicleEF	LHD1	0.23	0.11
tblVehicleEF	LHD2	2.9160e-003	3.5440e-003

tblVehicleEF	LHD2	6.1790e-003	8.7930e-003
tblVehicleEF	LHD2	4.7100e-003	0.01
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.49	0.77
tblVehicleEF	LHD2	0.99	0.75
tblVehicleEF	LHD2	13.82	14.26
tblVehicleEF	LHD2	689.53	809.32
tblVehicleEF	LHD2	22.84	8.63
tblVehicleEF	LHD2	0.09	0.11
tblVehicleEF	LHD2	0.42	1.29
tblVehicleEF	LHD2	0.35	0.22
tblVehicleEF	LHD2	1.1530e-003	1.3780e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8100e-004	1.6100e-004
tblVehicleEF	LHD2	1.1040e-003	1.3190e-003
tblVehicleEF	LHD2	2.7010e-003	2.6690e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.4800e-004
tblVehicleEF	LHD2	6.3900e-004	1.3640e-003
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.6200e-004	6.5500e-004
tblVehicleEF	LHD2	0.10	0.12
tblVehicleEF	LHD2	0.05	0.37
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	1.3500e-004	1.3600e-004
tblVehicleEF	LHD2	6.7010e-003	7.8220e-003
tblVehicleEF	LHD2	2.4600e-004	8.5000e-005
tblVehicleEF	LHD2	6.3900e-004	1.3640e-003

tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	3.6200e-004	6.5500e-004
tblVehicleEF	LHD2	0.11	0.15
tblVehicleEF	LHD2	0.05	0.37
tblVehicleEF	LHD2	0.07	0.06
tblVehicleEF	MCY	0.45	0.33
tblVehicleEF	MCY	0.16	0.26
tblVehicleEF	MCY	18.05	20.00
tblVehicleEF	MCY	10.25	8.95
tblVehicleEF	MCY	170.65	210.53
tblVehicleEF	MCY	44.05	62.15
tblVehicleEF	MCY	1.14	1.16
tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	2.0890e-003	1.8410e-003
tblVehicleEF	MCY	3.4880e-003	3.2620e-003
tblVehicleEF	MCY	1.9500e-003	1.7250e-003
tblVehicleEF	MCY	3.2730e-003	3.0800e-003
tblVehicleEF	MCY	0.89	1.83
tblVehicleEF	MCY	0.66	0.73
tblVehicleEF	MCY	0.48	1.01
tblVehicleEF	MCY	2.16	2.28
tblVehicleEF	MCY	0.54	2.21
tblVehicleEF	MCY	2.16	1.98
tblVehicleEF	MCY	2.0660e-003	2.0830e-003
tblVehicleEF	MCY	6.7200e-004	6.1500e-004
tblVehicleEF	MCY	0.89	1.83
tblVehicleEF	MCY	0.66	0.73
tblVehicleEF	MCY	0.48	1.01
tblVehicleEF	MCY	2.69	2.80

tblVehicleEF	MCY	0.54	2.21
tblVehicleEF	MCY	2.35	2.16
tblVehicleEF	MDV	7.0480e-003	6.1720e-003
tblVehicleEF	MDV	0.01	0.10
tblVehicleEF	MDV	0.85	1.24
tblVehicleEF	MDV	2.04	3.71
tblVehicleEF	MDV	400.76	420.60
tblVehicleEF	MDV	92.41	90.34
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.17	0.44
tblVehicleEF	MDV	1.7210e-003	1.7830e-003
tblVehicleEF	MDV	2.4070e-003	2.2440e-003
tblVehicleEF	MDV	1.5860e-003	1.6450e-003
tblVehicleEF	MDV	2.2130e-003	2.0650e-003
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.15	0.16
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.10	0.50
tblVehicleEF	MDV	0.15	0.52
tblVehicleEF	MDV	4.0100e-003	4.1580e-003
tblVehicleEF	MDV	9.5900e-004	8.9400e-004
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.15	0.16
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.10	0.50
tblVehicleEF	MDV	0.16	0.57
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.03

tblVehicleEF	MH	1.24	2.05
tblVehicleEF	MH	4.69	2.50
tblVehicleEF	MH	1,198.30	1,611.87
tblVehicleEF	MH	57.81	20.50
tblVehicleEF	MH	1.06	1.60
tblVehicleEF	MH	0.72	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	1.0090e-003	3.5200e-004
tblVehicleEF	MH	3.2210e-003	3.2600e-003
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	9.2700e-004	3.2500e-004
tblVehicleEF	MH	0.64	0.96
tblVehicleEF	MH	0.05	0.08
tblVehicleEF	MH	0.23	0.32
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	0.02	1.93
tblVehicleEF	MH	0.27	0.12
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	6.6000e-004	2.0300e-004
tblVehicleEF	MH	0.64	0.96
tblVehicleEF	MH	0.05	0.08
tblVehicleEF	MH	0.23	0.32
tblVehicleEF	MH	0.09	0.14
tblVehicleEF	MH	0.02	1.93
tblVehicleEF	MH	0.30	0.13
tblVehicleEF	MHD	0.02	3.3020e-003
tblVehicleEF	MHD	3.4340e-003	0.01
tblVehicleEF	MHD	0.04	9.8030e-003
tblVehicleEF	MHD	0.37	0.36

tblVehicleEF	MHD	0.29	0.93
tblVehicleEF	MHD	4.65	1.27
tblVehicleEF	MHD	133.69	78.16
tblVehicleEF	MHD	1,178.99	1,180.29
tblVehicleEF	MHD	59.87	9.18
tblVehicleEF	MHD	0.35	0.73
tblVehicleEF	MHD	1.08	3.39
tblVehicleEF	MHD	10.16	1.06
tblVehicleEF	MHD	8.3000e-005	2.6060e-003
tblVehicleEF	MHD	3.0880e-003	0.09
tblVehicleEF	MHD	8.3800e-004	1.3000e-004
tblVehicleEF	MHD	8.0000e-005	2.4930e-003
tblVehicleEF	MHD	2.9480e-003	0.09
tblVehicleEF	MHD	7.7100e-004	1.1900e-004
tblVehicleEF	MHD	7.3900e-004	5.4800e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.0900e-004	2.6100e-004
tblVehicleEF	MHD	0.04	0.24
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.28	0.06
tblVehicleEF	MHD	1.2880e-003	7.4100e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.8000e-004	9.1000e-005
tblVehicleEF	MHD	7.3900e-004	5.4800e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	4.0900e-004	2.6100e-004
tblVehicleEF	MHD	0.05	0.28
tblVehicleEF	MHD	0.02	0.14

tblVehicleEF	MHD	0.31	0.06
tblVehicleEF	OBUS	0.01	7.6010e-003
tblVehicleEF	OBUS	5.0380e-003	9.9430e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.24	0.57
tblVehicleEF	OBUS	0.37	0.90
tblVehicleEF	OBUS	4.49	2.02
tblVehicleEF	OBUS	104.04	99.74
tblVehicleEF	OBUS	1,285.07	1,402.55
tblVehicleEF	OBUS	65.96	15.98
tblVehicleEF	OBUS	0.22	0.69
tblVehicleEF	OBUS	0.92	2.31
tblVehicleEF	OBUS	2.69	0.92
tblVehicleEF	OBUS	2.0000e-005	2.9700e-003
tblVehicleEF	OBUS	2.8820e-003	0.04
tblVehicleEF	OBUS	8.7800e-004	1.4400e-004
tblVehicleEF	OBUS	2.0000e-005	2.8410e-003
tblVehicleEF	OBUS	2.7360e-003	0.04
tblVehicleEF	OBUS	8.0800e-004	1.3300e-004
tblVehicleEF	OBUS	1.1600e-003	1.0920e-003
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	5.1900e-004	4.7000e-004
tblVehicleEF	OBUS	0.04	0.13
tblVehicleEF	OBUS	0.03	0.17
tblVehicleEF	OBUS	0.28	0.10
tblVehicleEF	OBUS	1.0040e-003	9.4700e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.3800e-004	1.5800e-004
tblVehicleEF	OBUS	1.1600e-003	1.0920e-003

tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	5.1900e-004	4.7000e-004
tblVehicleEF	OBUS	0.05	0.15
tblVehicleEF	OBUS	0.03	0.17
tblVehicleEF	OBUS	0.31	0.11
tblVehicleEF	SBUS	0.81	0.04
tblVehicleEF	SBUS	0.01	7.1250e-003
tblVehicleEF	SBUS	0.07	4.2090e-003
tblVehicleEF	SBUS	8.46	1.89
tblVehicleEF	SBUS	0.78	0.58
tblVehicleEF	SBUS	8.66	0.64
tblVehicleEF	SBUS	1,071.32	347.29
tblVehicleEF	SBUS	1,032.09	1,091.13
tblVehicleEF	SBUS	58.82	3.52
tblVehicleEF	SBUS	6.58	3.76
tblVehicleEF	SBUS	2.75	5.50
tblVehicleEF	SBUS	11.46	0.69
tblVehicleEF	SBUS	5.0460e-003	4.8070e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.04
tblVehicleEF	SBUS	9.7600e-004	3.8000e-005
tblVehicleEF	SBUS	4.8280e-003	4.5990e-003
tblVehicleEF	SBUS	2.6090e-003	2.7520e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.9800e-004	3.5000e-005
tblVehicleEF	SBUS	3.3660e-003	4.4100e-004
tblVehicleEF	SBUS	0.03	4.2270e-003
tblVehicleEF	SBUS	1.00	0.21
tblVehicleEF	SBUS	1.5600e-003	1.7000e-004

tblVehicleEF	SBUS	0.09	0.10
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	0.44	0.02
tblVehicleEF	SBUS	0.01	3.3020e-003
tblVehicleEF	SBUS	9.9690e-003	0.01
tblVehicleEF	SBUS	7.3700e-004	3.5000e-005
tblVehicleEF	SBUS	3.3660e-003	4.4100e-004
tblVehicleEF	SBUS	0.03	4.2270e-003
tblVehicleEF	SBUS	1.45	0.30
tblVehicleEF	SBUS	1.5600e-003	1.7000e-004
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	0.48	0.03
tblVehicleEF	UBUS	0.23	1.38
tblVehicleEF	UBUS	0.04	2.5800e-003
tblVehicleEF	UBUS	3.77	10.36
tblVehicleEF	UBUS	7.31	0.14
tblVehicleEF	UBUS	2,007.57	1,606.71
tblVehicleEF	UBUS	114.33	1.64
tblVehicleEF	UBUS	7.17	0.73
tblVehicleEF	UBUS	13.83	0.02
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.15	5.2780e-003
tblVehicleEF	UBUS	1.2080e-003	2.0000e-006
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	8.3320e-003
tblVehicleEF	UBUS	0.15	5.0490e-003
tblVehicleEF	UBUS	1.1100e-003	2.0000e-006
tblVehicleEF	UBUS	2.0830e-003	1.5400e-004

tblVehicleEF	UBUS	0.03	2.3510e-003
tblVehicleEF	UBUS	1.1550e-003	9.7000e-005
tblVehicleEF	UBUS	0.36	0.02
tblVehicleEF	UBUS	7.3900e-003	0.02
tblVehicleEF	UBUS	0.58	0.01
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	1.2750e-003	1.6000e-005
tblVehicleEF	UBUS	2.0830e-003	1.5400e-004
tblVehicleEF	UBUS	0.03	2.3510e-003
tblVehicleEF	UBUS	1.1550e-003	9.7000e-005
tblVehicleEF	UBUS	0.62	1.41
tblVehicleEF	UBUS	7.3900e-003	0.02
tblVehicleEF	UBUS	0.64	0.01
tblVehicleTrips	ST_TR	42.04	28.97
tblVehicleTrips	SU_TR	20.43	14.08
tblVehicleTrips	WD_TR	44.32	30.55
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Area	0.3230	1.0000e-005	6.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-003	1.3000e-003	0.0000	0.0000	1.3900e-003
Energy	9.3000e-004	8.4700e-003	7.1200e-003	5.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	82.0828	82.0828	0.0104	2.2900e-003	83.0264
Mobile	0.8938	1.2745	5.7020	0.0122	1.1674	0.0185	1.1858	0.3123	0.0174	0.3297	0.0000	1,191.5116	1,191.5116	0.0792	0.0000	1,193.4926
Waste						0.0000	0.0000		0.0000	0.0000	15.5471	0.0000	15.5471	0.9188	0.0000	38.5172
Water						0.0000	0.0000		0.0000	0.0000	1.9115	3.8147	5.7262	7.1200e-003	4.2700e-003	7.1760
Total	**1.2177**	**1.2830**	**5.7098**	**0.0122**	**1.1674**	**0.0191**	**1.1865**	**0.3123**	**0.0180**	**0.3303**	**17.4586**	**1,277.4103**	**1,294.8689**	**1.0156**	**6.5600e-003**	**1,322.2136**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3230	1.0000e-005	6.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-003	1.3000e-003	0.0000	0.0000	1.3900e-003
Energy	9.3000e-004	8.4700e-003	7.1200e-003	5.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	82.0828	82.0828	0.0104	2.2900e-003	83.0264
Mobile	0.8938	1.2745	5.7020	0.0122	1.1674	0.0185	1.1858	0.3123	0.0174	0.3297	0.0000	1,191.5116	1,191.5116	0.0792	0.0000	1,193.4926
Waste						0.0000	0.0000		0.0000	0.0000	15.5471	0.0000	15.5471	0.9188	0.0000	38.5172
Water						0.0000	0.0000		0.0000	0.0000	1.9115	3.8147	5.7262	7.1200e-003	4.2700e-003	7.1760
Total	**1.2177**	**1.2830**	**5.7098**	**0.0122**	**1.1674**	**0.0191**	**1.1865**	**0.3123**	**0.0180**	**0.3303**	**17.4586**	**1,277.4103**	**1,294.8689**	**1.0156**	**6.5600e-003**	**1,322.2136**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.8938	1.2745	5.7020	0.0122	1.1674	0.0185	1.1858	0.3123	0.0174	0.3297	0.0000	1,191.5116	1,191.5116	0.0792	0.0000	1,193.4926
Unmitigated	0.8938	1.2745	5.7020	0.0122	1.1674	0.0185	1.1858	0.3123	0.0174	0.3297	0.0000	1,191.5116	1,191.5116	0.0792	0.0000	1,193.4926

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	2,228.32	2,113.07	1027.00	3,142,031	3,142,031
Total	2,228.32	2,113.07	1,027.00	3,142,031	3,142,031

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Strip Mall	0.585494	0.052026	0.183432	0.108306	0.021147	0.005027	0.013218	0.021288	0.001747	0.001302	0.005307	0.000926	0.000779

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	72.8579	72.8579	0.0103	2.1200e-003	73.7467
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	72.8579	72.8579	0.0103	2.1200e-003	73.7467
NaturalGas Mitigated	9.3000e-004	8.4700e-003	7.1200e-003	5.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	9.2249	9.2249	1.8000e-004	1.7000e-004	9.2797
NaturalGas Unmitigated	9.3000e-004	8.4700e-003	7.1200e-003	5.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	9.2249	9.2249	1.8000e-004	1.7000e-004	9.2797

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	172868	9.3000e-004	8.4700e-003	7.1200e-003	5.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	9.2249	9.2249	1.8000e-004	1.7000e-004	9.2797
Total		**9.3000e-004**	**8.4700e-003**	**7.1200e-003**	**5.0000e-005**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**9.2249**	**9.2249**	**1.8000e-004**	**1.7000e-004**	**9.2797**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	172868	9.3000e-004	8.4700e-003	7.1200e-003	5.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	9.2249	9.2249	1.8000e-004	1.7000e-004	9.2797
Total		**9.3000e-004**	**8.4700e-003**	**7.1200e-003**	**5.0000e-005**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**9.2249**	**9.2249**	**1.8000e-004**	**1.7000e-004**	**9.2797**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	779729	72.8579	0.0103	2.1200e-003	73.7467
Total		**72.8579**	**0.0103**	**2.1200e-003**	**73.7467**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	779729	72.8579	0.0103	2.1200e-003	73.7467

Total		**72.8579**	**0.0103**	**2.1200e-003**	**73.7467**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3230	1.0000e-005	6.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-003	1.3000e-003	0.0000	0.0000	1.3900e-003
Unmitigated	0.3230	1.0000e-005	6.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-003	1.3000e-003	0.0000	0.0000	1.3900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0380					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2849					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e-005	1.0000e-005	6.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-003	1.3000e-003	0.0000	0.0000	1.3900e-003

Total	**0.3230**	**1.0000e-005**	**6.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.3000e-003**	**1.3000e-003**	**0.0000**	**0.0000**	**1.3900e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0380					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2849					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e-005	1.0000e-005	6.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-003	1.3000e-003	0.0000	0.0000	1.3900e-003
Total	**0.3230**	**1.0000e-005**	**6.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.3000e-003**	**1.3000e-003**	**0.0000**	**0.0000**	**1.3900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.7262	7.1200e-003	4.2700e-003	7.1760
Unmitigated	5.7262	7.1200e-003	4.2700e-003	7.1760

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	5.40285 / 3.31142	5.7262	7.1200e-003	4.2700e-003	7.1760
Total		**5.7262**	**7.1200e-003**	**4.2700e-003**	**7.1760**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	5.40285 / 3.31142	5.7262	7.1200e-003	4.2700e-003	7.1760
Total		**5.7262**	**7.1200e-003**	**4.2700e-003**	**7.1760**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15.5471	0.9188	0.0000	38.5172
Unmitigated	15.5471	0.9188	0.0000	38.5172

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	76.59	15.5471	0.9188	0.0000	38.5172
Total		**15.5471**	**0.9188**	**0.0000**	**38.5172**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	76.59	15.5471	0.9188	0.0000	38.5172

Total		**15.5471**	**0.9188**	**0.0000**	**38.5172**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

1777 Saratoga Site - Existing Operational - Santa Clara County, Annual

1777 Saratoga Site - Existing Operational

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	25.18	1000sqft	0.58	25,184.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2018 rate

Land Use - Based on Traffic. -

Construction Phase - no construction

Off-road Equipment - no construction

Vehicle Trips - Based on traffic 226 total trips/25,184sf (8.97,2.00,0.85)

Woodstoves - No hearths

Water And Wastewater - All wastewater treatment at SJ plant

Grading - no construction

Trips and VMT - no construction

Vehicle Emission Factors - EMFAC2017 Santa Clara County Emissions Factors 2020

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.60	0.59
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.19	0.18
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	4.9810e-003	5.0275e-003
tblFleetMix	MCY	5.3630e-003	5.3073e-003
tblFleetMix	MDV	0.11	0.11
tblFleetMix	MH	7.8500e-004	7.7873e-004
tblFleetMix	MHD	0.01	0.01
tblFleetMix	OBUS	2.0830e-003	1.7473e-003
tblFleetMix	SBUS	6.2000e-004	9.2634e-004
tblFleetMix	UBUS	1.5710e-003	1.3021e-003
tblLandUse	LandUseSquareFeet	25,180.00	25,184.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblVehicleEF	HHD	0.52	0.03
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.11	0.00
tblVehicleEF	HHD	2.70	5.38
tblVehicleEF	HHD	1.02	0.76
tblVehicleEF	HHD	3.82	6.2050e-003
tblVehicleEF	HHD	4,650.35	1,078.53
tblVehicleEF	HHD	1,665.34	1,581.53
tblVehicleEF	HHD	11.77	0.06

tblVehicleEF	HHD	22.38	6.03
tblVehicleEF	HHD	4.47	4.62
tblVehicleEF	HHD	19.49	1.73
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.07
tblVehicleEF	HHD	1.1700e-004	1.0000e-006
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8180e-003	8.8630e-003
tblVehicleEF	HHD	0.02	0.07
tblVehicleEF	HHD	1.0800e-004	1.0000e-006
tblVehicleEF	HHD	1.1200e-004	5.0000e-006
tblVehicleEF	HHD	6.3600e-003	2.2500e-004
tblVehicleEF	HHD	0.69	0.44
tblVehicleEF	HHD	6.8000e-005	3.0000e-006
tblVehicleEF	HHD	0.15	0.17
tblVehicleEF	HHD	5.5200e-004	1.4070e-003
tblVehicleEF	HHD	0.13	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	1.8200e-004	1.0000e-006
tblVehicleEF	HHD	1.1200e-004	5.0000e-006
tblVehicleEF	HHD	6.3600e-003	2.2500e-004
tblVehicleEF	HHD	0.80	0.50
tblVehicleEF	HHD	6.8000e-005	3.0000e-006
tblVehicleEF	HHD	0.22	0.24
tblVehicleEF	HHD	5.5200e-004	1.4070e-003
tblVehicleEF	HHD	0.14	3.0000e-006

tblVehicleEF	LDA	4.5620e-003	3.0610e-003
tblVehicleEF	LDA	7.2750e-003	0.06
tblVehicleEF	LDA	0.61	0.74
tblVehicleEF	LDA	1.49	2.38
tblVehicleEF	LDA	265.03	264.68
tblVehicleEF	LDA	61.46	56.07
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.10	0.22
tblVehicleEF	LDA	1.7250e-003	1.5800e-003
tblVehicleEF	LDA	2.2880e-003	1.9810e-003
tblVehicleEF	LDA	1.5900e-003	1.4560e-003
tblVehicleEF	LDA	2.1040e-003	1.8220e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.10	0.29
tblVehicleEF	LDA	2.6540e-003	8.7000e-005
tblVehicleEF	LDA	6.4000e-004	0.00
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.11	0.32
tblVehicleEF	LDT1	0.01	6.5560e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.36	1.36
tblVehicleEF	LDT1	3.24	2.64

tblVehicleEF	LDT1	322.57	314.05
tblVehicleEF	LDT1	74.06	67.50
tblVehicleEF	LDT1	0.14	0.12
tblVehicleEF	LDT1	0.18	0.29
tblVehicleEF	LDT1	2.5170e-003	2.2660e-003
tblVehicleEF	LDT1	3.3150e-003	2.7710e-003
tblVehicleEF	LDT1	2.3180e-003	2.0860e-003
tblVehicleEF	LDT1	3.0490e-003	2.5480e-003
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.26	0.21
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.18	0.74
tblVehicleEF	LDT1	0.22	0.43
tblVehicleEF	LDT1	3.2420e-003	2.5610e-003
tblVehicleEF	LDT1	7.9800e-004	0.00
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.26	0.21
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.18	0.74
tblVehicleEF	LDT1	0.24	0.47
tblVehicleEF	LDT2	6.4900e-003	4.4900e-003
tblVehicleEF	LDT2	9.3170e-003	0.08
tblVehicleEF	LDT2	0.83	1.01
tblVehicleEF	LDT2	1.92	3.10
tblVehicleEF	LDT2	369.46	346.93
tblVehicleEF	LDT2	85.12	75.00
tblVehicleEF	LDT2	0.09	0.10
tblVehicleEF	LDT2	0.16	0.35

tblVehicleEF	LDT2	1.6360e-003	1.5660e-003
tblVehicleEF	LDT2	2.2210e-003	1.9310e-003
tblVehicleEF	LDT2	1.5040e-003	1.4410e-003
tblVehicleEF	LDT2	2.0430e-003	1.7760e-003
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.45
tblVehicleEF	LDT2	0.13	0.39
tblVehicleEF	LDT2	3.7010e-003	0.01
tblVehicleEF	LDT2	8.8400e-004	9.1000e-005
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.08	0.45
tblVehicleEF	LDT2	0.14	0.43
tblVehicleEF	LHD1	6.2340e-003	5.6860e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.16	0.19
tblVehicleEF	LHD1	1.31	1.02
tblVehicleEF	LHD1	3.15	1.23
tblVehicleEF	LHD1	8.98	9.13
tblVehicleEF	LHD1	713.46	837.42
tblVehicleEF	LHD1	34.78	12.75
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	1.42	1.05
tblVehicleEF	LHD1	1.13	0.37

tblVehicleEF	LHD1	8.5300e-004	7.7000e-004
tblVehicleEF	LHD1	9.8970e-003	9.6220e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	1.1500e-003	3.0500e-004
tblVehicleEF	LHD1	8.1600e-004	7.3700e-004
tblVehicleEF	LHD1	2.4740e-003	2.4060e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	1.0590e-003	2.8100e-004
tblVehicleEF	LHD1	2.9040e-003	2.4030e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.4230e-003	1.1790e-003
tblVehicleEF	LHD1	0.14	0.11
tblVehicleEF	LHD1	0.34	0.62
tblVehicleEF	LHD1	0.33	0.10
tblVehicleEF	LHD1	9.0000e-005	8.9000e-005
tblVehicleEF	LHD1	7.0210e-003	8.1860e-003
tblVehicleEF	LHD1	4.0800e-004	1.2600e-004
tblVehicleEF	LHD1	2.9040e-003	2.4030e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.4230e-003	1.1790e-003
tblVehicleEF	LHD1	0.17	0.14
tblVehicleEF	LHD1	0.34	0.62
tblVehicleEF	LHD1	0.36	0.11
tblVehicleEF	LHD2	4.0630e-003	3.5440e-003
tblVehicleEF	LHD2	0.01	8.7930e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.13	0.14
tblVehicleEF	LHD2	0.68	0.77

tblVehicleEF	LHD2	1.50	0.75
tblVehicleEF	LHD2	14.10	14.26
tblVehicleEF	LHD2	728.87	809.32
tblVehicleEF	LHD2	25.76	8.63
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	1.10	1.29
tblVehicleEF	LHD2	0.57	0.22
tblVehicleEF	LHD2	1.3170e-003	1.3780e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.0900e-004	1.6100e-004
tblVehicleEF	LHD2	1.2600e-003	1.3190e-003
tblVehicleEF	LHD2	2.6740e-003	2.6690e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.6800e-004	1.4800e-004
tblVehicleEF	LHD2	1.1000e-003	1.3640e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.4900e-004	6.5500e-004
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.10	0.37
tblVehicleEF	LHD2	0.14	0.06
tblVehicleEF	LHD2	1.3800e-004	1.3600e-004
tblVehicleEF	LHD2	7.0950e-003	7.8220e-003
tblVehicleEF	LHD2	2.8500e-004	8.5000e-005
tblVehicleEF	LHD2	1.1000e-003	1.3640e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.4900e-004	6.5500e-004
tblVehicleEF	LHD2	0.14	0.15

tblVehicleEF	LHD2	0.10	0.37
tblVehicleEF	LHD2	0.15	0.06
tblVehicleEF	MCY	0.44	0.33
tblVehicleEF	MCY	0.16	0.26
tblVehicleEF	MCY	19.82	20.00
tblVehicleEF	MCY	10.12	8.95
tblVehicleEF	MCY	168.14	210.53
tblVehicleEF	MCY	46.41	62.15
tblVehicleEF	MCY	1.16	1.16
tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	1.8900e-003	1.8410e-003
tblVehicleEF	MCY	4.0800e-003	3.2620e-003
tblVehicleEF	MCY	1.7710e-003	1.7250e-003
tblVehicleEF	MCY	3.8550e-003	3.0800e-003
tblVehicleEF	MCY	0.91	1.83
tblVehicleEF	MCY	0.74	0.73
tblVehicleEF	MCY	0.50	1.01
tblVehicleEF	MCY	2.27	2.28
tblVehicleEF	MCY	0.64	2.21
tblVehicleEF	MCY	2.25	1.98
tblVehicleEF	MCY	2.0710e-003	2.0830e-003
tblVehicleEF	MCY	6.9600e-004	6.1500e-004
tblVehicleEF	MCY	0.91	1.83
tblVehicleEF	MCY	0.74	0.73
tblVehicleEF	MCY	0.50	1.01
tblVehicleEF	MCY	2.79	2.80
tblVehicleEF	MCY	0.64	2.21
tblVehicleEF	MCY	2.44	2.16
tblVehicleEF	MDV	0.01	6.1720e-003
tblVehicleEF	MDV	0.02	0.10

tblVehicleEF	MDV	1.47	1.24
tblVehicleEF	MDV	3.59	3.71
tblVehicleEF	MDV	487.26	420.60
tblVehicleEF	MDV	110.36	90.34
tblVehicleEF	MDV	0.19	0.14
tblVehicleEF	MDV	0.33	0.44
tblVehicleEF	MDV	1.9100e-003	1.7830e-003
tblVehicleEF	MDV	2.6380e-003	2.2440e-003
tblVehicleEF	MDV	1.7630e-003	1.6450e-003
tblVehicleEF	MDV	2.4290e-003	2.0650e-003
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.18	0.16
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.50
tblVehicleEF	MDV	0.29	0.52
tblVehicleEF	MDV	4.8850e-003	4.1580e-003
tblVehicleEF	MDV	1.1670e-003	8.9400e-004
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.18	0.16
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.11	0.50
tblVehicleEF	MDV	0.31	0.57
tblVehicleEF	MH	0.05	0.02
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	3.56	2.05
tblVehicleEF	MH	7.30	2.50
tblVehicleEF	MH	1,229.07	1,611.87
tblVehicleEF	MH	61.91	20.50

tblVehicleEF	MH	1.59	1.60
tblVehicleEF	MH	0.96	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.5660e-003	3.5200e-004
tblVehicleEF	MH	3.2120e-003	3.2600e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.4480e-003	3.2500e-004
tblVehicleEF	MH	1.05	0.96
tblVehicleEF	MH	0.09	0.08
tblVehicleEF	MH	0.36	0.32
tblVehicleEF	MH	0.15	0.10
tblVehicleEF	MH	0.02	1.93
tblVehicleEF	MH	0.44	0.12
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.4700e-004	2.0300e-004
tblVehicleEF	MH	1.05	0.96
tblVehicleEF	MH	0.09	0.08
tblVehicleEF	MH	0.36	0.32
tblVehicleEF	MH	0.20	0.14
tblVehicleEF	MH	0.02	1.93
tblVehicleEF	MH	0.48	0.13
tblVehicleEF	MHD	0.02	3.3020e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	9.8030e-003
tblVehicleEF	MHD	0.46	0.36
tblVehicleEF	MHD	0.68	0.93
tblVehicleEF	MHD	8.00	1.27
tblVehicleEF	MHD	140.29	78.16
tblVehicleEF	MHD	1,210.30	1,180.29

tblVehicleEF	MHD	62.15	9.18
tblVehicleEF	MHD	0.89	0.73
tblVehicleEF	MHD	2.30	3.39
tblVehicleEF	MHD	10.47	1.06
tblVehicleEF	MHD	2.8510e-003	2.6060e-003
tblVehicleEF	MHD	0.05	0.09
tblVehicleEF	MHD	1.0450e-003	1.3000e-004
tblVehicleEF	MHD	2.7280e-003	2.4930e-003
tblVehicleEF	MHD	0.04	0.09
tblVehicleEF	MHD	9.6100e-004	1.1900e-004
tblVehicleEF	MHD	1.1800e-003	5.4800e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	5.7100e-004	2.6100e-004
tblVehicleEF	MHD	0.12	0.24
tblVehicleEF	MHD	0.03	0.14
tblVehicleEF	MHD	0.47	0.06
tblVehicleEF	MHD	1.3510e-003	7.4100e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	7.6200e-004	9.1000e-005
tblVehicleEF	MHD	1.1800e-003	5.4800e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	5.7100e-004	2.6100e-004
tblVehicleEF	MHD	0.15	0.28
tblVehicleEF	MHD	0.03	0.14
tblVehicleEF	MHD	0.52	0.06
tblVehicleEF	OBUS	0.01	7.6010e-003
tblVehicleEF	OBUS	0.01	9.9430e-003
tblVehicleEF	OBUS	0.03	0.02

tblVehicleEF	OBUS	0.29	0.57
tblVehicleEF	OBUS	0.65	0.90
tblVehicleEF	OBUS	5.78	2.02
tblVehicleEF	OBUS	110.21	99.74
tblVehicleEF	OBUS	1,322.53	1,402.55
tblVehicleEF	OBUS	67.52	15.98
tblVehicleEF	OBUS	0.66	0.69
tblVehicleEF	OBUS	2.30	2.31
tblVehicleEF	OBUS	2.92	0.92
tblVehicleEF	OBUS	3.1200e-004	2.9700e-003
tblVehicleEF	OBUS	0.01	0.04
tblVehicleEF	OBUS	7.2600e-004	1.4400e-004
tblVehicleEF	OBUS	2.9900e-004	2.8410e-003
tblVehicleEF	OBUS	0.01	0.04
tblVehicleEF	OBUS	6.6800e-004	1.3300e-004
tblVehicleEF	OBUS	1.1970e-003	1.0920e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	5.1100e-004	4.7000e-004
tblVehicleEF	OBUS	0.08	0.13
tblVehicleEF	OBUS	0.03	0.17
tblVehicleEF	OBUS	0.36	0.10
tblVehicleEF	OBUS	1.0630e-003	9.4700e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.7700e-004	1.5800e-004
tblVehicleEF	OBUS	1.1970e-003	1.0920e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	5.1100e-004	4.7000e-004
tblVehicleEF	OBUS	0.10	0.15

tblVehicleEF	OBUS	0.03	0.17
tblVehicleEF	OBUS	0.40	0.11
tblVehicleEF	SBUS	0.87	0.04
tblVehicleEF	SBUS	0.02	7.1250e-003
tblVehicleEF	SBUS	0.10	4.2090e-003
tblVehicleEF	SBUS	7.94	1.89
tblVehicleEF	SBUS	1.35	0.58
tblVehicleEF	SBUS	11.03	0.64
tblVehicleEF	SBUS	1,147.37	347.29
tblVehicleEF	SBUS	1,074.56	1,091.13
tblVehicleEF	SBUS	53.01	3.52
tblVehicleEF	SBUS	10.41	3.76
tblVehicleEF	SBUS	4.78	5.50
tblVehicleEF	SBUS	12.80	0.69
tblVehicleEF	SBUS	0.01	4.8070e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	8.5500e-004	3.8000e-005
tblVehicleEF	SBUS	0.01	4.5990e-003
tblVehicleEF	SBUS	2.6490e-003	2.7520e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	7.8600e-004	3.5000e-005
tblVehicleEF	SBUS	3.8820e-003	4.4100e-004
tblVehicleEF	SBUS	0.04	4.2270e-003
tblVehicleEF	SBUS	0.96	0.21
tblVehicleEF	SBUS	1.4980e-003	1.7000e-004
tblVehicleEF	SBUS	0.13	0.10
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	0.55	0.02
tblVehicleEF	SBUS	0.01	3.3020e-003

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	7.2000e-004	3.5000e-005
tblVehicleEF	SBUS	3.8820e-003	4.4100e-004
tblVehicleEF	SBUS	0.04	4.2270e-003
tblVehicleEF	SBUS	1.38	0.30
tblVehicleEF	SBUS	1.4980e-003	1.7000e-004
tblVehicleEF	SBUS	0.17	0.11
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	0.60	0.03
tblVehicleEF	UBUS	0.28	1.38
tblVehicleEF	UBUS	0.04	2.5800e-003
tblVehicleEF	UBUS	5.74	10.36
tblVehicleEF	UBUS	7.96	0.14
tblVehicleEF	UBUS	2,147.22	1,606.71
tblVehicleEF	UBUS	88.39	1.64
tblVehicleEF	UBUS	12.54	0.73
tblVehicleEF	UBUS	15.64	0.02
tblVehicleEF	UBUS	0.63	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.29	5.2780e-003
tblVehicleEF	UBUS	9.6700e-004	2.0000e-006
tblVehicleEF	UBUS	0.27	0.03
tblVehicleEF	UBUS	3.0000e-003	8.3320e-003
tblVehicleEF	UBUS	0.27	5.0490e-003
tblVehicleEF	UBUS	8.8900e-004	2.0000e-006
tblVehicleEF	UBUS	2.2470e-003	1.5400e-004
tblVehicleEF	UBUS	0.04	2.3510e-003
tblVehicleEF	UBUS	1.0240e-003	9.7000e-005
tblVehicleEF	UBUS	0.79	0.02
tblVehicleEF	UBUS	7.8890e-003	0.02

tblVehicleEF	UBUS	0.54	0.01
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	1.0250e-003	1.6000e-005
tblVehicleEF	UBUS	2.2470e-003	1.5400e-004
tblVehicleEF	UBUS	0.04	2.3510e-003
tblVehicleEF	UBUS	1.0240e-003	9.7000e-005
tblVehicleEF	UBUS	1.13	1.41
tblVehicleEF	UBUS	7.8890e-003	0.02
tblVehicleEF	UBUS	0.59	0.01
tblVehicleTrips	ST_TR	2.46	2.00
tblVehicleTrips	SU_TR	1.05	0.85
tblVehicleTrips	WD_TR	11.03	8.97
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1115	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004
Energy	2.2200e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003	0.0000	63.9573	63.9573	6.3300e-003	1.6300e-003	64.5999
Mobile	0.0812	0.1487	0.6406	1.5800e-003	0.1524	2.3200e-003	0.1547	0.0408	2.1900e-003	0.0430	0.0000	152.5540	152.5540	7.9600e-003	0.0000	152.7530
Waste						0.0000	0.0000		0.0000	0.0000	4.7541	0.0000	4.7541	0.2810	0.0000	11.7780

Water						0.0000	0.0000		0.0000	0.0000	1.5834	3.1598	4.7432	5.8900e-003	3.5400e-003	5.9441
Total	**0.1950**	**0.1689**	**0.6578**	**1.7000e-003**	**0.1524**	**3.8600e-003**	**0.1562**	**0.0408**	**3.7300e-003**	**0.0445**	**6.3374**	**219.6716**	**226.0090**	**0.3011**	**5.1700e-003**	**235.0754**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1115	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004
Energy	2.2200e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003	0.0000	63.9573	63.9573	6.3300e-003	1.6300e-003	64.5999
Mobile	0.0812	0.1487	0.6406	1.5800e-003	0.1524	2.3200e-003	0.1547	0.0408	2.1900e-003	0.0430	0.0000	152.5540	152.5540	7.9600e-003	0.0000	152.7530
Waste						0.0000	0.0000		0.0000	0.0000	4.7541	0.0000	4.7541	0.2810	0.0000	11.7780
Water						0.0000	0.0000		0.0000	0.0000	1.5834	3.1598	4.7432	5.8900e-003	3.5400e-003	5.9441
Total	**0.1950**	**0.1689**	**0.6578**	**1.7000e-003**	**0.1524**	**3.8600e-003**	**0.1562**	**0.0408**	**3.7300e-003**	**0.0445**	**6.3374**	**219.6716**	**226.0090**	**0.3011**	**5.1700e-003**	**235.0754**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0812	0.1487	0.6406	1.5800e-003	0.1524	2.3200e-003	0.1547	0.0408	2.1900e-003	0.0430	0.0000	152.5540	152.5540	7.9600e-003	0.0000	152.7530
Unmitigated	0.0812	0.1487	0.6406	1.5800e-003	0.1524	2.3200e-003	0.1547	0.0408	2.1900e-003	0.0430	0.0000	152.5540	152.5540	7.9600e-003	0.0000	152.7530

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	225.86	50.36	21.40	410,043	410,043
Total	225.86	50.36	21.40	410,043	410,043

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.585494	0.052026	0.183432	0.108306	0.021147	0.005027	0.013218	0.021288	0.001747	0.001302	0.005307	0.000926	0.000779

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	41.9574	41.9574	5.9100e-003	1.2200e-003	42.4693
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	41.9574	41.9574	5.9100e-003	1.2200e-003	42.4693
NaturalGas Mitigated	2.2200e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003	0.0000	21.9999	21.9999	4.2000e-004	4.0000e-004	22.1306
NaturalGas Unmitigated	2.2200e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003	0.0000	21.9999	21.9999	4.2000e-004	4.0000e-004	22.1306

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	412262	2.2200e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003	0.0000	21.9999	21.9999	4.2000e-004	4.0000e-004	22.1306
Total		**2.2200e-003**	**0.0202**	**0.0170**	**1.2000e-004**		**1.5400e-003**	**1.5400e-003**		**1.5400e-003**	**1.5400e-003**	**0.0000**	**21.9999**	**21.9999**	**4.2000e-004**	**4.0000e-004**	**22.1306**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	412262	2.2200e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003	0.0000	21.9999	21.9999	4.2000e-004	4.0000e-004	22.1306

Total		**2.2200e-003**	**0.0202**	**0.0170**	**1.2000e-004**		**1.5400e-003**	**1.5400e-003**		**1.5400e-003**	**1.5400e-003**	**0.0000**	**21.9999**	**21.9999**	**4.2000e-004**	**4.0000e-004**	**22.1306**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	449031	41.9574	5.9100e-003	1.2200e-003	42.4693
Total		**41.9574**	**5.9100e-003**	**1.2200e-003**	**42.4693**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	449031	41.9574	5.9100e-003	1.2200e-003	42.4693
Total		**41.9574**	**5.9100e-003**	**1.2200e-003**	**42.4693**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1115	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004
Unmitigated	0.1115	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0131					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0984					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004
Total	**0.1115**	**0.0000**	**2.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.5000e-004**	**4.5000e-004**	**0.0000**	**0.0000**	**4.8000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0131					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0984					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004
Total	**0.1115**	**0.0000**	**2.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.5000e-004**	**4.5000e-004**	**0.0000**	**0.0000**	**4.8000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.7432	5.8900e-003	3.5400e-003	5.9441
Unmitigated	4.7432	5.8900e-003	3.5400e-003	5.9441

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr			
General Office Building	4.47534 / 2.74295	4.7432	5.8900e-003	3.5400e-003	5.9441
Total		**4.7432**	**5.8900e-003**	**3.5400e-003**	**5.9441**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	4.47534 / 2.74295	4.7432	5.8900e-003	3.5400e-003	5.9441
Total		**4.7432**	**5.8900e-003**	**3.5400e-003**	**5.9441**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.7541	0.2810	0.0000	11.7780

Unmitigated	4.7541	0.2810	0.0000	11.7780

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	23.42	4.7541	0.2810	0.0000	11.7780
Total		**4.7541**	**0.2810**	**0.0000**	**11.7780**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	23.42	4.7541	0.2810	0.0000	11.7780
Total		**4.7541**	**0.2810**	**0.0000**	**11.7780**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment 3: EMFAC2017 Emissions and CARB SAFE Off-Model Adjustment Factors

CalEEMod Construction Inputs

Phase	CalEEMod WORKER TRIPS	CalEEMod VENDOR TRIPS	Total Worker Trips	Total Vendor Trips	CalEEMod HAULING TRIPS	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class	*Worker VMT*	*Vendor VMT*	*Hauling VMT*
Demolition	33	0	2013	0	1353	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	21740.4	0	27060
Grading	25	0	2900	0	19,375	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	31320	0	387500
Trenching	10	0	810	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	8748	0	0
Concrete	191	74	2865	1110	600	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	30942	8103	4380
Building Construction	191	74	49851	19314	7200	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	538390.8	140992.2	52560

Number of Days Per Year					
2021	9/1/21	12/31/21	122	**88**	
2022	1/1/22	12/31/22	365	**260**	
2023	1/1/23	7/19/2023	200	**143**	
			687	**491**	***Total Workdays***

Phase	Start Date	End Date	Days/Week	Workdays
Demolition	9/1/2021	11/24/2021	5	61
Grading	10/21/2021	3/31/2022	5	116
Trenching	6/2/2022	9/22/2022	5	81
Concrete	6/2/2022	6/22/2022	5	15
Building Construction	7/20/2022	7/19/2023	5	261

CalEEMod Construction Inputs

Phase	CalEEMod WORKER TRIPS	CalEEMod VENDOR TRIPS	Total Worker Trips	Total Vendor Trips	CalEEMod HAULING TRIPS	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class	*Worker VMT*	*Vendor VMT*	*Hauling VMT*
Bldg 1 Building Construction	676	153	276484	62577	800	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	2986027	456812.1	5840
Bldg 2 Building Construction	676	153	260260	58905	800	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	2810808	430006.5	5840
Bldg 3 Building Construction	676	153	270400	61200	500	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	2920320	446760	3650
Bldg 4 Building Construction	676	153	297440	67320	500	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	3212352	491436	3650
Bldg 1 Architectural Coating	135	0	35775	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	386370	0	0
Bldg 2 Architectural Coating	135	0	35640	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	384912	0	0
Bldg 1 Paving	15	0	360	0	0	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	3888	0	0
Bldg 3 Architectural Coating	135	0	35640	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	384912	0	0
Bldg 2 Paving	15	0	360	0	0	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	3888	0	0
Bldg 4 Architectural Coating	135	0	44550	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	481140	0	0
Bldg 3 Paving	15	0	390	0	0	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	4212	0	0
Bldg 4 Paving	15	0	600	0	0	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	6480	0	0

Number of Days Per Year				
2023	1/4/23	12/31/23	362	**258**
2024	1/1/24	12/31/24	366	**262**
2025	1/1/25	8/27/2025	239	**171**
			967	**691** ***Total Workdays***

Phase	Start Date	End Date	Days/Week	Workdays
Bldg 1 Building Construction	1/4/2023	7/29/2024	5	409
Bldg 2 Building Construction	3/3/2023	8/22/2024	5	385
Bldg 3 Building Construction	4/25/2023	11/4/2024	5	400
Bldg 4 Building Construction	6/10/2023	2/14/2025	5	440
Bldg 1 Architectural Coating	11/9/2023	11/13/2024	5	265
Bldg 2 Architectural Coating	1/10/2024	1/13/2025	5	264
Bldg 1 Paving	3/6/2024	4/8/2024	5	24
Bldg 3 Architectural Coating	3/24/2024	3/27/2025	5	264
Bldg 2 Paving	5/1/2024	6/3/2024	5	24
Bldg 4 Architectural Coating	5/23/2024	8/27/2025	5	330
Bldg 3 Paving	7/10/2024	8/14/2024	5	26
Bldg 4 Paving	1/9/2025	3/5/2025	5	40

CalEEMod Construction Inputs

Phase	CalEEMod WORKER TRIPS	CalEEMod VENDOR TRIPS	Total Worker Trips	Total Vendor Trips	CalEEMod HAULING TRIPS	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class	*Worker VMT*	*Vendor VMT*	*Hauling VMT*
Bldg 1 Paving	15	0	315	0	0	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	3402	0	0
Bldg 1 Building Construction	719	144	224328	44928	1700	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	2422742	327974.4	12410
Bldg 2 Building Construction	719	144	294790	59040	1200	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	3183732	430992	8760
Bldg 3 Building Construction	719	144	319955	64080	1650	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	3455514	467784	12045
Bldg 2 Architectural Coating	144	0	44208	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	477446.4	0	0
Bldg 1 Architectural Coating	144	0	38448	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	415238.4	0	0
Bldg 3 Architectural Coating	144	0	36000	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	388800	0	0

Number of Days Per Year					
2022	6/16/22	12/31/22	199	**142**	
2023	1/1/23	12/31/23	365	**260**	
2024	1/1/24	12/31/24	366	**262**	
2025	1/1/25	10/3/2025	276	**198**	
			1206	**862**	***Total Workdays***

Phase	Start Date	End Date	Days/Week	Workdays
Bldg 1 Paving	6/16/2022	7/14/2022	5	21
Bldg 1 Building Construction	4/14/2023	6/24/2024	5	312
Bldg 2 Building Construction	8/7/2023	2/28/2025	5	410
Bldg 3 Building Construction	10/3/2023	6/16/2025	5	445
Bldg 2 Architectural Coating	5/24/2024	7/28/2025	5	307
Bldg 1 Architectural Coating	6/16/2024	6/24/2025	5	267
Bldg 3 Architectural Coating	10/21/2024	10/3/2025	5	250

CalEEMod Construction Inputs

Phase	CalEEMod WORKER TRIPS	CalEEMod VENDOR TRIPS	Total Worker Trips	Total Vendor Trips	CalEEMod HAULING TRIPS	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class	*Worker VMT*	*Vendor VMT*	*Hauling VMT*
Demolition	33	0	1815	0	1353	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	19602	0	27060
Grading	25	0	3625	0	27,888	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	39150	0	557760
Concrete	180	70	2700	1050	600	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	29160	7665	4380
Trenching	10	0	1140	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	12312	0	0
Building Construction	180	70	42660	16590	10000	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	460728	121107	73000

Number of Days Per Year					
2021	9/1/21	12/31/21	122	**88**	
2022	1/1/22	12/31/22	365	**260**	
2023	1/1/23	10/4/2023	277	**198**	
			764	**546**	***Total Workdays***

Phase	Start Date	End Date	Days/Week	Workdays
Demolition	9/1/2021	11/16/2021	5	55
Grading	10/22/2021	5/12/2022	5	145
Concrete	7/15/2022	8/4/2022	5	15
Trenching	7/15/2022	12/21/2022	5	114
Building Construction	11/8/2022	10/4/2023	5	237

CalEEMod Construction Inputs

Phase	CalEEMod WORKER TRIPS	CalEEMod VENDOR TRIPS	Total Worker Trips	Total Vendor Trips	CalEEMod HAULING TRIPS	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class	*Worker VMT*	*Vendor VMT*	*Hauling VMT*
Demolition	20	0	1100	0	257	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	11880	0	5140
Grading	28	0	1876	0	8025	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	20260.8	0	160500
Trenching	5	0	295	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	3186	0	0
Building Construction	280	61	126840	27633	2400	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	1369872	201720.9	17520
Architectural Coating	56	0	12152	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	131241.6	0	0
Paving	13	0	1521	0	12	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	16426.8	0	87.6

Number of Days Per Year					
2021	9/1/21	12/31/21	122	**88**	
2022	1/1/22	12/31/22	365	**260**	
2023	1/1/23	12/31/2023	365	**260**	
2024	1/1/24	9/2/2024	246	**176**	
			1098	**784**	***Total Workdays***

Phase	Start Date	End Date	Days/Week	Workdays
Demolition	9/1/2021	11/16/2021	5	55
Grading	11/18/2021	2/18/2022	5	67
Trenching	6/17/2022	9/7/2022	5	59
Building Construction	7/29/2022	4/23/2024	5	453
Architectural Coating	11/3/2023	9/2/2024	5	217
Paving	1/4/2024	6/14/2024	5	117

Unmititated El Paseo Option 1 Education Summary of Construction Traffic Emissions (EMFAC2017)

LAND USE	Pollutants YEAR	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	NBio- CO2
		Tons										*Metric Tons*
Criteria Pollutants												
Site Prep & Podium	*2021*	0.032	0.562	0.252	0.002	0.073	0.026	0.099	0.011	0.014	0.025	207
	2022	0.072	1.455	0.676	0.006	0.219	0.067	0.286	0.033	0.033	0.066	604
	2023	0.026	0.632	0.336	0.003	0.120	0.034	0.154	0.018	0.016	0.034	316
Buildings 1-4	*2023*	0.469	2.625	5.498	0.024	1.904	0.360	2.264	0.286	0.154	0.441	2338
	2024	0.444	2.621	5.266	0.024	1.925	0.364	2.288	0.290	0.156	0.445	2315
	2025	0.273	1.687	3.273	0.015	1.257	0.237	1.494	0.189	0.102	0.291	1480
Toxic Air Contaminants (1 Mile Trip Length)												
Site Prep & Podium	*2021*	0.015	0.107	0.091	0.000	0.006	0.002	0.009	0.001	0.001	0.002	25
	2022	0.040	0.304	0.270	0.001	0.019	0.006	0.025	0.003	0.003	0.006	72
	2023	0.020	0.152	0.149	0.000	0.010	0.003	0.013	0.002	0.001	0.003	38
Buildings 1-4	*2023*	0.406	0.947	2.038	0.003	0.186	0.039	0.225	0.028	0.017	0.045	341
	2024	0.388	0.946	1.995	0.003	0.188	0.039	0.228	0.028	0.017	0.046	338
	2025	0.240	0.610	1.261	0.002	0.123	0.026	0.149	0.019	0.011	0.030	216

Unmitigated El Paseo Option 2 No Education Summary of Construction Traffic Emissions (EMFAC2017)

LAND USE	Pollutants YEAR	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	NBio- CO2
		Tons										*Metric Tons*
Criteria Pollutants												
Site Prep & Podium	*2021*	0.033	0.643	0.244	0.002	0.071	0.027	0.098	0.011	0.015	0.026	227
	2022	0.072	1.666	0.651	0.007	0.213	0.070	0.283	0.032	0.035	0.067	663
	2023	0.034	1.001	0.446	0.005	0.162	0.049	0.211	0.024	0.023	0.047	481
Buildings 1-3	*2022*	0.182	0.993	1.964	0.008	0.631	0.122	0.753	0.095	0.054	0.149	777
	2023	0.285	1.477	3.341	0.014	1.158	0.215	1.373	0.174	0.092	0.266	1379
	2024	0.268	1.461	3.172	0.014	1.161	0.216	1.377	0.175	0.092	0.267	1354
	2025	0.190	1.085	2.275	0.010	0.875	0.162	1.038	0.132	0.069	0.201	999
Toxic Air Contaminants (1 Mile Trip Length)												
Site Prep & Podium	*2021*	0.013	0.115	0.089	0.000	0.006	0.002	0.008	0.001	0.001	0.002	26
	2022	0.036	0.328	0.264	0.001	0.017	0.006	0.023	0.003	0.003	0.005	76
	2023	0.025	0.227	0.203	0.001	0.013	0.004	0.017	0.002	0.002	0.004	55
Buildings 1-3	*2022*	0.146	0.320	0.686	0.001	0.061	0.013	0.075	0.009	0.006	0.015	112
	2023	0.248	0.534	1.224	0.002	0.113	0.023	0.136	0.017	0.010	0.027	198
	2024	0.234	0.528	1.188	0.002	0.113	0.023	0.136	0.017	0.010	0.027	195
	2025	0.167	0.393	0.867	0.001	0.085	0.017	0.103	0.013	0.008	0.021	144

Unmitigated 1777 Saratoga Summary of Construction Traffic Emissions (EMFAC2017)

Pollutants YEAR	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	NBio- CO2
					Tons						*Metric Tons*
Criteria Pollutants											
2021	0.0253	0.2266	0.2405	0.0012	0.0710	0.0168	0.0878	0.0107	0.0084	0.0191	115.4653
2022	0.0630	0.5829	0.6569	0.0035	0.2123	0.0463	0.2586	0.0319	0.0214	0.0533	336.7826
2023	0.0508	0.4663	0.6061	0.0033	0.2123	0.0442	0.2566	0.0319	0.0194	0.0513	324.2511
2024	0.0322	0.3122	0.3889	0.0022	0.1431	0.0298	0.1729	0.0215	0.0131	0.0346	214.3024
Toxic Air Contaminants (1 Mile Trip Length)											
2021	0.0168	0.0519	0.0810	0.0001	0.0067	0.0017	0.0084	0.0010	0.0009	0.0019	15.0080
2022	0.0464	0.1464	0.2355	0.0004	0.0200	0.0046	0.0246	0.0030	0.0022	0.0052	44.1627
2023	0.0429	0.1332	0.2308	0.0004	0.0200	0.0044	0.0243	0.0030	0.0020	0.0050	42.5850
2024	0.0273	0.0889	0.1512	0.0003	0.0134	0.0029	0.0164	0.0020	0.0013	0.0033	28.1749

Mitigated El Paseo Option 1 Education Summary of Construction Traffic Emissions (EMFAC2017)

LAND USE	Pollutants YEAR	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	NBio- CO2
		Tons										*Metric Tons*
Criteria Pollutants												
Site Prep & Podium	*2021*	0.022	0.450	0.252	0.002	0.073	0.026	0.099	0.011	0.014	0.025	207
	2022	0.051	1.164	0.676	0.006	0.219	0.067	0.286	0.033	0.033	0.066	604
	2023	0.018	0.506	0.336	0.003	0.120	0.034	0.154	0.018	0.016	0.034	316
Buildings 1-4	*2023*	0.328	2.100	5.498	0.024	1.904	0.360	2.264	0.286	0.154	0.441	2338
	2024	0.315	2.097	5.266	0.024	1.925	0.364	2.288	0.290	0.156	0.445	2315
	2025	0.191	1.350	3.273	0.015	1.257	0.237	1.494	0.189	0.102	0.291	1480
Toxic Air Contaminants (1 Mile Trip Length)												
Site Prep & Podium	*2021*	0.015	0.107	0.091	0.000	0.006	0.002	0.009	0.001	0.001	0.002	25
	2022	0.040	0.304	0.270	0.001	0.019	0.006	0.025	0.003	0.003	0.006	72
	2023	0.020	0.152	0.149	0.000	0.010	0.003	0.013	0.002	0.001	0.003	38
Buildings 1-4	*2023*	0.406	0.947	2.038	0.003	0.186	0.039	0.225	0.028	0.017	0.045	341
	2024	0.388	0.946	1.995	0.003	0.188	0.039	0.228	0.028	0.017	0.046	338
	2025	0.240	0.610	1.261	0.002	0.123	0.026	0.149	0.019	0.011	0.030	216

Mitigated El Paseo Option 2 No Education Summary of Construction Traffic Emissions (EMFAC2017)

LAND USE	Pollutants YEAR	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	NBio- CO2
		Tons										*Metric Tons*
Criteria Pollutants												
Site Prep & Podium	*2021*	0.023	0.514	0.244	0.002	0.071	0.027	0.098	0.011	0.015	0.026	227
	2022	0.050	1.332	0.651	0.007	0.213	0.070	0.283	0.032	0.035	0.067	663
	2023	0.024	0.800	0.446	0.005	0.162	0.049	0.211	0.024	0.023	0.047	481
Buildings 1-3	*2022*	0.127	0.794	1.964	0.008	0.631	0.122	0.753	0.095	0.054	0.149	777
	2023	0.200	1.182	3.341	0.014	1.158	0.215	1.373	0.174	0.092	0.266	1379
	2024	0.188	1.169	3.172	0.014	1.161	0.216	1.377	0.175	0.092	0.267	1354
	2025	0.133	0.868	2.275	0.010	0.875	0.162	1.038	0.132	0.069	0.201	999
Toxic Air Contaminants (1 Mile Trip Length)												
Site Prep & Podium	*2021*	0.013	0.115	0.089	0.000	0.006	0.002	0.008	0.001	0.001	0.002	26
	2022	0.036	0.328	0.264	0.001	0.017	0.006	0.023	0.003	0.003	0.005	76
	2023	0.025	0.227	0.203	0.001	0.013	0.004	0.017	0.002	0.002	0.004	55
Buildings 1-3	*2022*	0.146	0.320	0.686	0.001	0.061	0.013	0.075	0.009	0.006	0.015	112
	2023	0.248	0.534	1.224	0.002	0.113	0.023	0.136	0.017	0.010	0.027	198
	2024	0.234	0.528	1.188	0.002	0.113	0.023	0.136	0.017	0.010	0.027	195
	2025	0.167	0.393	0.867	0.001	0.085	0.017	0.103	0.013	0.008	0.021	144

Mitigated 1777 Saratoga Summary of Construction Traffic Emissions (EMFAC2017)

Pollutants YEAR	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	NBio- CO2
					Tons						*Metric Tons*
Criteria Pollutants											
2021	0.0177	0.1812	0.2405	0.0012	0.0710	0.0168	0.0878	0.0107	0.0084	0.0191	115.4653
2022	0.0441	0.4663	0.6569	0.0035	0.2123	0.0463	0.2586	0.0319	0.0214	0.0533	336.7826
2023	0.0355	0.3731	0.6061	0.0033	0.2123	0.0442	0.2566	0.0319	0.0194	0.0513	324.2511
2024	0.0225	0.2497	0.3889	0.0022	0.1431	0.0298	0.1729	0.0215	0.0131	0.0346	214.3024
Toxic Air Contaminants (1 Mile Trip Length)											
2021	0.0168	0.0519	0.0810	0.0001	0.0067	0.0017	0.0084	0.0010	0.0009	0.0019	15.0080
2022	0.0464	0.1464	0.2355	0.0004	0.0200	0.0046	0.0246	0.0030	0.0022	0.0052	44.1627
2023	0.0429	0.1332	0.2308	0.0004	0.0200	0.0044	0.0243	0.0030	0.0020	0.0050	42.5850
2024	0.0273	0.0889	0.1512	0.0003	0.0134	0.0029	0.0164	0.0020	0.0013	0.0033	28.1749

Adjustment Factors for EMFAC2017 Gasoline Light Duty Vehicles						
Year	NOx Exhaust	TOG Evaporative	TOG Exhaust	PM Exhaust	CO Exhaust	CO2 Exhaust
NA	1	1	1	1	1	1
2021	1.0002	1.0001	1.0002	1.0009	1.0005	1.0023
2022	1.0004	1.0003	1.0004	1.0018	1.0014	1.0065
2023	1.0007	1.0006	1.0007	1.0032	1.0027	1.0126
2024	1.0012	1.0010	1.0011	1.0051	1.0044	1.0207
2025	1.0018	1.0016	1.0016	1.0074	1.0065	1.0309
2026	1.0023	1.0022	1.0020	1.0091	1.0083	1.0394
2027	1.0028	1.0028	1.0024	1.0105	1.0102	1.0475
2028	1.0034	1.0035	1.0028	1.0117	1.0120	1.0554
2029	1.0040	1.0042	1.0032	1.0129	1.0138	1.0629
2030	1.0047	1.0051	1.0037	1.0142	1.0156	1.0702
2031	1.0054	1.0061	1.0042	1.0155	1.0173	1.0770
2032	1.0061	1.0072	1.0047	1.0169	1.0189	1.0834
2033	1.0068	1.0083	1.0052	1.0182	1.0204	1.0893
2034	1.0075	1.0095	1.0058	1.0196	1.0218	1.0947
2035	1.0081	1.0108	1.0063	1.0210	1.0232	1.0997
2036	1.0088	1.0121	1.0069	1.0223	1.0244	1.1041
2037	1.0094	1.0134	1.0074	1.0236	1.0255	1.1080
2038	1.0099	1.0148	1.0079	1.0248	1.0265	1.1114
2039	1.0104	1.0161	1.0085	1.0259	1.0274	1.1143
2040	1.0109	1.0174	1.0090	1.0270	1.0281	1.1168
2041	1.0113	1.0186	1.0095	1.0279	1.0288	1.1189
2042	1.0116	1.0198	1.0099	1.0286	1.0294	1.1207
2043	1.0119	1.0207	1.0103	1.0293	1.0299	1.1221
2044	1.0122	1.0216	1.0106	1.0299	1.0303	1.1233
2045	1.0124	1.0225	1.0109	1.0303	1.0306	1.1243
2046	1.0125	1.0233	1.0111	1.0308	1.0309	1.1251
2047	1.0127	1.0240	1.0113	1.0311	1.0311	1.1258
2048	1.0128	1.0246	1.0115	1.0314	1.0313	1.1263
2049	1.0128	1.0252	1.0116	1.0316	1.0315	1.1268
2050	1.0129	1.0257	1.0117	1.0318	1.0316	1.1272
Enter Year: 2023	**1.0007**	**1.0006**	**1.0007**	**1.0032**	**1.0027**	**1.0126**

*PM Exhaust off model factor is only applied to the PM Exhaust emissions not start/idle

The off-model adjustment factors need to be applied only to emissions from gasoline light duty vehicles (LDA, LDT1, LDT2 and MDV). Please note that the adjustment factors are by calendar year and includes all model years.

Enter NA in the date field if adjustments do not apply

CalEEMod EMFAC2017 Emission Factors Input 2026

Season	EmissionType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
A	CH4_IDLEX	0	0	0	0	0.004667	0.002827	0.00366	0.024581591	0.007072	0	0	0.059089	0
A	CH4_RUNEX	0.001366	0.002731	0.002421	0.002658	0.006766	0.006042	0.001368	0.048196739	0.002994	1.740623	0.322636	0.005471	0.007666
A	CH4_STREX	0.037668	0.048087	0.053787	0.059284	0.01193	0.006534	0.008683	4.41955E-07	0.016313	0.001757	0.251748	0.005364	0.021211
A	CO_IDLEX	0	0	0	0	0.181133	0.135072	0.395395	6.312916051	0.608593	0	0	2.477558	0
A	CO_RUNEX	0.470702	0.713398	0.660069	0.67636	0.614851	0.539388	0.193142	0.407888609	0.35403	13.20374	18.16544	0.449129	0.676059
A	CO_STREX	1.942342	2.094896	2.537292	2.688431	0.986313	0.549762	0.974119	0.005910001	1.731489	0.139137	9.112103	0.757026	1.865376
A	CO2_NBIO_IDLEX	0	0	0	0	8.664375	13.59577	69.62637	1010.863198	95.34232	0	0	344.9774	0
A	CO2_NBIO_RUNEX	220.2019	264.8733	280.9156	339.0796	749.5934	726.996	1051.185	1358.122651	1283.241	1654.125	209.9417	1025.262	1445.753
A	CO2_NBIO_STREX	46.74942	56.84445	60.83851	72.17283	11.01943	7.147686	8.852125	0.047796651	14.49277	1.395763	60.16678	4.41435	17.15363
A	NOX_IDLEX	0	0	0	0	0.052779	0.086502	0.384054	5.313842098	0.401134	0	0	3.237041	0
A	NOX_RUNEX	0.024319	0.052355	0.048719	0.054591	0.501705	0.60498	1.445388	2.645781643	1.452791	0.710904	1.142407	4.169337	1.212147
A	NOX_STREX	0.146785	0.185778	0.214688	0.241181	0.274	0.153209	1.698467	2.32114605	1.111138	0.012275	0.270461	0.952464	0.240339
A	PM10_IDLEX	0	0	0	0	0.000872	0.001466	0.000277	0.002421971	0.000131	0	0	0.003057	0
A	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.08918	0.13034	0.061011269	0.13034	0.069383	0.01176	0.7448	0.13034
A	PM10_PMTW	0.008	0.008	0.008	0.008	0.009831	0.010801	0.012	0.035565238	0.012	0.033326	0.004	0.010812	0.013148
A	PM10_RUNEX	0.001191	0.001444	0.001268	0.001317	0.008597	0.014576	0.007064	0.024793091	0.00755	0.00517	0.002061	0.027088	0.020231
A	PM10_STREX	0.001567	0.001882	0.001614	0.001662	0.000232	0.000117	0.000112	6.07666E-07	0.000149	1.52E-05	0.002929	5.43E-05	0.00024
A	PM25_IDLEX	0	0	0	0	0.000834	0.001402	0.000265	0.002317197	0.000126	0	0	0.002925	0
A	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.03822	0.05586	0.026147687	0.05586	0.029736	0.00504	0.3192	0.05586
A	PM25_PMTW	0.002	0.002	0.002	0.002	0.002458	0.0027	0.003	0.00889131	0.003	0.008332	0.001	0.002703	0.003287
A	PM25_RUNEX	0.001096	0.001328	0.001167	0.001215	0.008179	0.013921	0.006752	0.023720525	0.00721	0.004945	0.001924	0.025902	0.019315
A	PM25_STREX	0.001441	0.00173	0.001484	0.001528	0.000213	0.000108	0.000103	5.58726E-07	0.000137	1.4E-05	0.002748	4.99E-05	0.000221
A	ROG_DIURN	0.031026	0.063386	0.056043	0.063565	0.001717	0.000843	0.000334	1.73946E-06	0.001072	2.71E-05	1.796069	0.000641	0.521835
A	ROG_HTSK	0.07546	0.124908	0.10677	0.116658	0.064563	0.033077	0.016141	7.87131E-05	0.015877	0.000258	0.658739	0.006205	0.044593
A	ROG_IDLEX	0	0	0	0	0.019371	0.01467	0.018199	0.425464995	0.0479	0	0	0.274128	0
A	ROG_RESTL	0.028067	0.053388	0.054637	0.062343	0.000904	0.000457	0.00018	9.87177E-07	0.000483	1.3E-05	0.964052	0.000292	0.192731
A	ROG_RUNEX	0.004919	0.011315	0.009547	0.010801	0.082268	0.103701	0.013929	0.025230325	0.020648	0.025271	2.163162	0.076133	0.053216
A	ROG_RUNLS	0.185854	0.473603	0.387491	0.396121	0.458804	0.204792	0.087699	0.000396674	0.180023	0.001452	1.752085	0.040739	1.014315
A	ROG_STREX	0.160651	0.222735	0.243054	0.281273	0.059664	0.032087	0.044627	2.31009E-06	0.083133	0.007362	1.911911	0.030553	0.084521
A	SO2_IDLEX	0	0	0	0	8.4E-05	0.00013	0.000661	0.009404557	0.000905	0	0	0.003286	0
A	SO2_RUNEX	9.28E-05	0.002615	0.010025	0.003351	0.007315	0.007016	0.010025	0.012421666	0.012348	0.010671	0.002078	0.009797	0.014185
A	SO2_STREX	0	0	8.76E-05	0.000714	0.000109	7.07E-05	8.76E-05	4.72987E-07	0.000143	1.38E-05	0.000595	4.37E-05	0.00017
A	TOG_DIURN	0.031026	0.063386	0.056043	0.063565	0.001717	0.000843	0.000334	1.73946E-06	0.001072	2.71E-05	1.796069	0.000641	0.521835
A	TOG_HTSK	0.07546	0.124908	0.10677	0.116658	0.064563	0.033077	0.016141	7.87131E-05	0.015877	0.000258	0.658739	0.006205	0.044593
A	TOG_IDLEX	0	0	0	0	0.027158	0.019579	0.024791	0.489206564	0.061489	0	0	0.393293	0
A	TOG_RESTL	0.028067	0.053388	0.054637	0.062343	0.000904	0.000457	0.00018	9.87177E-07	0.000483	1.3E-05	0.964052	0.000292	0.192731
A	TOG_RUNEX	0.007149	0.016504	0.013895	0.015681	0.099279	0.120104	0.017205	0.076057465	0.027322	1.776895	2.697331	0.090583	0.068739
A	TOG_RUNLS	0.185854	0.473603	0.387491	0.396121	0.458804	0.204792	0.087699	0.000396674	0.180023	0.001452	1.752085	0.040739	1.014315
A	TOG_STREX	0.175893	0.243867	0.266113	0.307959	0.065324	0.035131	0.04886	2.52926E-06	0.09102	0.00806	2.081516	0.033451	0.09254

CalEEMod EMFAC2017 Emission Factors Input 2020

Season	EmissionType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
A	CH4_IDLEX	0	0	0	0	0.005686	0.003544	0.003302	0.025130628	0.007601	0	0	0.044219	0
A	CH4_RUNEX	0.003061	0.006556	0.00449	0.006172	0.011225	0.008793	0.013196	0.056648183	0.009943	1.380213	0.333827	0.007125	0.016859
A	CH4_STREX	0.06158	0.084069	0.081711	0.101413	0.019191	0.01103	0.009803	4.87779E-07	0.018855	0.00258	0.259776	0.004209	0.026132
A	CO_IDLEX	0	0	0	0	0.19047	0.142792	0.364797	5.381310661	0.565144	0	0	1.894787	0
A	CO_RUNEX	0.742675	1.362456	1.01183	1.242441	1.023891	0.771004	0.928211	0.756605562	0.900725	10.36097	19.99611	0.582408	2.050114
A	CO_STREX	2.382259	2.635734	3.099926	3.709349	1.229225	0.750524	1.267857	0.006205206	2.017869	0.139137	8.946242	0.637133	2.498592
A	CO2_NBIO_IDLEX	0	0	0	0	9.126201	14.25716	78.16002	1078.526034	99.74072	0	0	347.2943	0
A	CO2_NBIO_RUNEX	264.6828	314.0482	346.9281	420.5959	837.4163	809.3153	1180.288	1581.525685	1402.55	1606.707	210.5269	1091.129	1611.867
A	CO2_NBIO_STREX	56.06856	67.50385	74.99767	90.34237	12.75434	8.627124	9.18131	0.061222853	15.97991	1.640734	62.14697	3.524483	20.50394
A	NOX_IDLEX	0	0	0	0	0.062989	0.110446	0.732466	6.026695246	0.693057	0	0	3.763152	0
A	NOX_RUNEX	0.051286	0.12349	0.099615	0.13594	1.045086	1.287405	3.388912	4.619755776	2.309783	0.732277	1.158904	5.497143	1.598227
A	NOX_STREX	0.21937	0.294614	0.352885	0.441069	0.373271	0.217312	1.058606	1.728993809	0.915821	0.01786	0.270251	0.6899	0.250367
A	PM10_IDLEX	0	0	0	0	0.00077	0.001378	0.002606	0.012264788	0.00297	0	0	0.004807	0
A	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.08918	0.13034	0.060814617	0.13034	0.069383	0.01176	0.7448	0.13034
A	PM10_PMTW	0.008	0.008	0.008	0.008	0.009622	0.010676	0.012	0.035452864	0.012	0.033326	0.004	0.011007	0.013038
A	PM10_RUNEX	0.00158	0.002266	0.001566	0.001783	0.012284	0.017883	0.093391	0.072838445	0.04036	0.005278	0.001841	0.035337	0.028863
A	PM10_STREX	0.001981	0.002771	0.001931	0.002244	0.000305	0.000161	0.00013	1.28049E-06	0.000144	1.65E-06	0.003262	3.77E-05	0.000352
A	PM25_IDLEX	0	0	0	0	0.000737	0.001319	0.002493	0.011734219	0.002841	0	0	0.004599	0
A	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.03822	0.05586	0.026063407	0.05586	0.029736	0.00504	0.3192	0.05586
A	PM25_PMTW	0.002	0.002	0.002	0.002	0.002406	0.002669	0.003	0.008863216	0.003	0.008332	0.001	0.002752	0.00326
A	PM25_RUNEX	0.001456	0.002086	0.001441	0.001645	0.011699	0.01708	0.089345	0.069687459	0.038603	0.005049	0.001725	0.033796	0.027559
A	PM25_STREX	0.001822	0.002548	0.001776	0.002065	0.000281	0.000148	0.000119	1.17737E-06	0.000133	1.51E-06	0.00308	3.46E-05	0.000325
A	ROG_DIURN	0.049897	0.109593	0.067317	0.079133	0.002403	0.001364	0.000548	5.09091E-06	0.001092	0.000154	1.82709	0.000441	0.958556
A	ROG_HTSK	0.113581	0.205918	0.13728	0.158308	0.08972	0.05265	0.023627	0.000224773	0.016019	0.002351	0.72916	0.004227	0.078921
A	ROG_IDLEX	0	0	0	0	0.023424	0.017391	0.021795	0.437617719	0.059533	0	0	0.21059	0
A	ROG_RESTL	0.042415	0.083541	0.061521	0.073424	0.001179	0.000655	0.000261	2.79696E-06	0.00047	9.66E-05	1.008845	0.00017	0.31908
A	ROG_RUNEX	0.012464	0.029268	0.018784	0.028623	0.108818	0.124819	0.239523	0.171746984	0.126474	0.020121	2.281256	0.095562	0.102406
A	ROG_RUNLS	0.232821	0.742986	0.454221	0.498325	0.61609	0.372566	0.139895	0.001407463	0.170318	0.016034	2.208467	0.031837	1.931362
A	ROG_STREX	0.287888	0.428986	0.392576	0.519889	0.098309	0.05613	0.055312	2.55603E-06	0.098741	0.011044	1.981452	0.024031	0.116998
A	SO2_IDLEX	0	0	0	0	8.87E-05	0.000136	0.000741	0.01004173	0.000947	0	0	0.003302	0
A	SO2_RUNEX	8.68E-05	0.002561	0.011242	0.004158	0.008186	0.007822	0.011242	0.014529534	0.013507	0.011284	0.002083	0.010406	0.015831
A	SO2_STREX	0	0	9.09E-05	0.000894	0.000126	8.54E-05	9.09E-05	6.0585E-07	0.000158	1.62E-05	0.000615	3.49E-05	0.000203
A	TOG_DIURN	0.049897	0.109593	0.067317	0.079133	0.002403	0.001364	0.000548	5.09091E-06	0.001092	0.000154	1.82709	0.000441	0.958556
A	TOG_HTSK	0.113581	0.205918	0.13728	0.158308	0.08972	0.05265	0.023627	0.000224773	0.016019	0.002351	0.72916	0.004227	0.078921
A	TOG_IDLEX	0	0	0	0	0.033219	0.02368	0.028395	0.503029188	0.074788	0	0	0.299749	0
A	TOG_RESTL	0.042415	0.083541	0.061521	0.073424	0.001179	0.000655	0.000261	2.79696E-06	0.00047	9.66E-05	1.008845	0.00017	0.31908
A	TOG_RUNEX	0.018127	0.042626	0.027358	0.040223	0.136216	0.14774	0.277027	0.244583604	0.151881	1.409072	2.798146	0.114307	0.138289
A	TOG_RUNLS	0.232821	0.742986	0.454221	0.498325	0.61609	0.372566	0.139895	0.001407463	0.170318	0.016034	2.208467	0.031837	1.931362
A	TOG_STREX	0.315199	0.46968	0.42982	0.569149	0.107621	0.061456	0.06056	2.79853E-06	0.108081	0.012092	2.155713	0.026311	0.128055

CalEEMod EMFAC2017 Fleet Mix Input - El Paseo Eductaion Option 1 2026

FleetMixLandUseSubType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Elementary School	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Enclosed Parking with Ele	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Parking Lot	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Strip Mall	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742

CalEEMod EMFAC2017 Fleet Mix Input - El Paseo No Education Option 2 2026

FleetMixLa	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartment	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Enclosed P	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
General Of	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Medical Of	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Parking Lot	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Strip Mall	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742

CalEEMod EMFAC2017 Fleet Mix Input - Saratoga 2026

FleetMixLandUseSubType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Enclosed Parking with Ele\	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742
Strip Mall	0.593877	0.053382	0.174267	0.106373	0.020945	0.005401	0.013559	0.022807	0.001528	0.001225	0.004979	0.000915	0.000742

CalEEMod EMFAC2017 Fleet Mix Input - El Paseo Existing 2020

FleetMixLa	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Strip Mall	0.585494	0.052026	0.183432	0.108306	0.021147	0.005027	0.013218	0.021288	0.001747	0.001302	0.005307	0.000926	0.000779

CalEEMod EMFAC2017 Fleet Mix Input - Saratoga Existing 2020

FleetMixLa	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Of	0.585494	0.052026	0.183432	0.108306	0.021147	0.005027	0.013218	0.021288	0.001747	0.001302	0.005307	0.000926	0.000779

EMFAC2017 (v1.0.2) Emission Rates
Region Type: County
Region: SANTA CLARA
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN. Note 'day' in the unit is operation day.

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	NOx_RUNE	NOx_IDLE	NOx_STRE	PM2.5_RU	PM2.5_IDL	PM2.5_STR	PM2.5_PMB	PM2.5_PMT	PM10_RUN	PM10_IDLE	PM10_STR	PM10_PMB	PM10_PMT	CO2_RUNE	CO2_IDLEX	CO2_STRE	CH4_RUNE	CH4_IDLEX	CH4_STRE	N2O_RUNE	N2O_IDLE	N2O_STRE	ROG_RUNI	ROG_IDLE	ROG_STRE	ROG_HOTS	ROG_RUNI	ROG_REST	ROG_DIUR	TOG_RUNE	TOG_IDLEX	TOG_STRE	TOG_HOTS	TOG_RUNI	TOG_RESTI	TOG_DIUR	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
SANTA CLA	2026	HHDT	Aggregate	Aggregate	GAS	5.454157	461.7244	109.1268	4.595106	0	0.461846	0.001415	0	0.000918	0.005	0.02646	0.001538	0	0.000998	0.02	0.06174	2099.2	0	47.72822	0.130924	0	0.00038	0.160224	0	0.014885	0.701269	0	0.001993	0.175229	1.097232	0.043627	0.079407	1.02329	0	0.002182	0.175229	1.097232	0.043627	0.079407	34.94003	0	4.837466	0.020773	0	0.000472
SANTA CLA	2026	HHDT	Aggregate	Aggregate	DSL	7877.582	964354.9	83712.03	4.653326	64.18689	1.756506	0.070592	0.125161	0	0.008863	0.026058	0.073784	0.13082	0	0.035453	0.060802	1558.482	11478.67	0	0.007952	0.219409	0	0.244972	1.804287	0	0.1712	4.723818	0	0	0	0	0	0.194899	5.377707	0	0	0	0	0	0	0.607093	57.23999	0	0.014724	0.108445	0
SANTA CLA	2026	HHDT	Aggregate	Aggregate	NG	321.0495	13089.69	1252.093	2.147438	22.03115	0	0.00544	0.03832	0	0.009	0.02646	0.005686	0.040052	0	0.036	0.06174	3260.989	4141.271	0	3.641629	1.2756	0	0.664774	0.844225	0	0.193344	0.053875	0	0	0	0	0	3.877558	1.342462	0	0	0	0	0	10.5658	21.46988	0	0	0	0
SANTA CLA	2026	LDA	Aggregate	Aggregate	GAS	698042.7	25845511	3282091	0.052251	0	0.228221	0.001418	0	0.0019	0.002	0.01575	0.001542	0	0.002066	0.008	0.03675	273.4802	0	58.46482	0.003178	0	0.064212	0.005385	0	0.028913	0.012784	0	0.299593	0.11801	0.242238	0.207351	0.243537	0.018643	0	0.328014	0.11801	0.242238	0.207351	0.243537	0.764393	0	2.463624	0.002706	0	0.000579
SANTA CLA	2026	LDA	Aggregate	Aggregate	DSL	6184.557	240044.1	29354.99	0.107242	0	0	0	0.008955	0	0	0.002	0.01575	0.00936	0	0	0.008	0.03675	210.6156	0	0	0.000806	0	0	0.033106	0	0	0.017356	0	0	0	0	0.019759	0	0	0	0	0	0	0.225399	0	0	0.001991	0	0
SANTA CLA	2026	LDA	Aggregate	Aggregate	ELEC	22473.42	810004.1	110915.4	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0	0	0	0	0	0	0	0
SANTA CLA	2026	LDT1	Aggregate	Aggregate	GAS	69721.49	2375892	321741.7	0.123478	0	0.295728	0.002019	0	0.002564	0.002	0.01575	0.002196	0	0.002788	0.008	0.03675	315.7555	0	67.91493	0.006591	0	0.084581	0.009083	0	0.031348	0.029304	0	0.430736	0.20669	0.74587	0.386988	0.507605	0.042703	0	0.471597	0.20669	0.74587	0.386988	0.507605	1.358752	0	2.629956	0.003125	0	0.000672
SANTA CLA	2026	LDT1	Aggregate	Aggregate	DSL	43.66329	798.9465	144.0473	1.349075	0	0	0.17911	0	0	0.002	0.01575	0.187208	0	0	0.008	0.03675	418.8885	0	0	0.010742	0	0	0.065843	0	0	0.231262	0	0	0	0	0	0.263276	0	0	0	0	0	0	1.310548	0	0	0.00396	0	0
SANTA CLA	2026	LDT1	Aggregate	Aggregate	ELEC	369.4975	13183.41	1815.271	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0	0	0	0	0	0	0	0
SANTA CLA	2026	LDT2	Aggregate	Aggregate	GAS	24322.06	8316073	1134014	0.100404	0	0.356877	0.001412	0	0.0018	0.002	0.01575	0.001536	0	0.001957	0.008	0.03675	349.609	0	76.02052	0.004545	0	0.082826	0.007876	0	0.037051	0.018898	0	0.397136	0.138809	0.459405	0.290082	0.317324	0.027555	0	0.434812	0.138809	0.459405	0.290082	0.317324	1.01599	0	3.116338	0.00346	0	0.000752
SANTA CLA	2026	LDT2	Aggregate	Aggregate	DSL	1369.793	54854.29	6755.454	0.045407	0	0	0.005269	0	0	0.002	0.01575	0.005508	0	0	0.008	0.03675	290.3292	0	0	0.000681	0	0	0.045636	0	0	0.014666	0	0	0	0	0	0.016696	0	0	0	0	0	0	0.121994	0	0	0.002745	0	0
SANTA CLA	2026	LDT2	Aggregate	Aggregate	ELEC	1730.361	55312.35	8710.739	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0	0	0	0	0	0	0	0
SANTA CLA	2026	LHDT1	Aggregate	Aggregate	GAS	16555.41	577439.5	246650.9	0.290892	0.040327	0.565743	0.002241	0	0.000426	0.002	0.03276	0.002437	0	0.000462	0.008	0.07644	1026.458	122.8059	19.33092	0.013497	0.125286	0.029087	0.01735	0.003165	0.04316	0.067069	0.461894	0.149	0.135983	0.933768	0.026613	0.054263	0.097103	0.673796	0.163115	0.135983	0.933768	0.026613	0.054263	1.233256	3.745335	1.863056	0.010158	0.001215	0.000191
SANTA CLA	2026	LHDT1	Aggregate	Aggregate	DSL	10110.85	393873.1	127181.7	2.150496	2.262878	0	0.02556	0.027243	0	0.003	0.03276	0.026716	0.028474	0	0.012	0.07644	560.3418	136.3456	0	0.007897	0.005098	0	0.088078	0.021432	0	0.170009	0.10976	0	0	0	0	0	0.193544	0.124954	0	0	0	0	0	0.717028	0.909745	0	0.005297	0.001289	0
SANTA CLA	2026	LHDT2	Aggregate	Aggregate	GAS	2187.183	76423.21	32585.77	0.307728	0.040005	0.552323	0.002171	0	0.000376	0.002	0.03822	0.002362	0	0.000408	0.008	0.08918	1171.483	141.2238	21.9268	0.01152	0.124887	0.028035	0.018823	0.003093	0.04168	0.053155	0.458136	0.142662	0.133816	0.946919	0.024806	0.051632	0.077563	0.66851	0.156197	0.133816	0.946919	0.024806	0.051632	0.970066	3.74589	1.907541	0.011593	0.001398	0.000217
SANTA CLA	2026	LHDT2	Aggregate	Aggregate	DSL	3993.611	154520.5	50234.6	1.771936	2.268541	0	0.024454	0.02735	0	0.003	0.03822	0.02556	0.028587	0	0.012	0.08918	630.1933	218.324	0	0.007444	0.005098	0	0.099058	0.034317	0	0.160263	0.10976	0	0	0	0	0	0.182448	0.124954	0	0	0	0	0	0.672552	0.909745	0	0.005958	0.002064	0
SANTA CLA	2026	MCY	Aggregate	Aggregate	GAS	31290.02	237504.4	62580.05	1.158904	0	0.270251	0.001725	0	0.00308	0.001	0.00504	0.001841	0	0.003262	0.004	0.01176	210.5269	0	62.14697	0.333827	0	0.259776	0.066618	0	0.015324	2.281256	0	1.981452	0.72916	2.208467	1.008845	1.82709	2.798146	0	2.155713	0.72916	2.208467	1.008845	1.82709	19.99611	0	8.946242	0.002083	0	0.000615
SANTA CLA	2026	MDV	Aggregate	Aggregate	GAS	147007.3	4842885	678227.2	0.138086	0	0.451213	0.001551	0	0.002118	0.002	0.01575	0.001686	0	0.002301	0.008	0.03675	422.6557	0	92.63264	0.006327	0	0.103984	0.010054	0	0.041175	0.029052	0	0.532005	0.161952	0.509836	0.346558	0.373474	0.040904	0	0.582412	0.161952	0.509836	0.346558	0.373474	1.261079	0	3.772077	0.004183	0	0.000917
SANTA CLA	2026	MDV	Aggregate	Aggregate	DSL	3125.67	120041.7	15311.38	0.050338	0	0	0.00501	0	0	0.002	0.01575	0.005237	0	0	0.008	0.03675	380.532	0	0	0.000552	0	0	0.059814	0	0	0.011886	0	0	0	0	0	0.013531	0	0	0	0	0	0	0.19376	0	0	0.003597	0	0
SANTA CLA	2026	MDV	Aggregate	Aggregate	ELEC	370.1586	12282.83	1882.383	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0	0	0	0	0	0	0	0
SANTA CLA	2026	MH	Aggregate	Aggregate	GAS	2976.086	26488.39	297.7276	0.544993	0	0.330219	0.001864	0	0.000428	0.003	0.05586	0.002026	0	0.000465	0.012	0.13034	1811.031	0	27.04347	0.02088	0	0.034467	0.030991	0	0.032948	0.097652	0	0.154313	0.104092	2.547352	0.042102	0.126478	0.140485	0	0.168896	0.104092	2.547352	0.042102	0.126478	2.621629	0	3.295495	0.017922	0	0.000268
SANTA CLA	2026	MH	Aggregate	Aggregate	DSL	949.5743	9283.956	94.95743	4.603246	0	0	0.100871	0	0	0.004	0.05586	0.105432	0	0	0.016	0.13034	1043.624	0	0	0.005387	0	0	0.164043	0	0	0.11597	0	0	0	0	0	0.132024	0	0	0	0	0	0	0.419503	0	0	0.009866	0	0
SANTA CLA	2026	MHDT	Aggregate	Aggregate	GAS	1370.703	69099.33	27425.03	0.740158	0.087871	0.401862	0.001419	0	0.000535	0.003	0.05586	0.001543	0	0.000582	0.012	0.13034	1784.26	546.1591	41.21744	0.023732	0.252237	0.044009	0.033549	0.006868	0.028526	0.119137	1.003541	0.248311	0.10607	0.628029	0.023455	0.049258	0.173844	1.464365	0.27187	0.10607	0.628029	0.023455	0.049258	2.780775	15.01001	5.691764	0.017657	0.005405	0.000408
SANTA CLA	2026	MHDT	Aggregate	Aggregate	DSL	9404.156	538077.2	95693.52	3.729062	9.576591	1.246823	0.100636	0.032642	0	0.003	0.05586	0.105186	0.034118	0	0.012	0.13034	1102.727	943.66	0	0.011843	0.006459	0	0.173333	0.14833	0	0.254982	0.139062	0	0	0	0	0	0.290278	0.158311	0	0	0	0	0	0.690307	2.588109	0	0.010418	0.008915	0
SANTA CLA	2026	OBUS	Aggregate	Aggregate	GAS	501.5159	25277.35	10034.33	0.560046	0.065077	0.335277	0.000884	0	0.000227	0.003	0.05586	0.000961	0	0.000246	0.012	0.13034	1816.323	384.4828	27.22532	0.016639	0.199522	0.032123	0.027436	0.00552	0.026549	0.08007	0.746829	0.168227	0.027292	0.290175	0.016007	0.037216	0.116238	1.089302	0.18414	0.027292	0.290175	0.016007	0.037216	1.820912	5.776085	3.437889	0.017974	0.003805	0.000269
SANTA CLA	2026	OBUS	Aggregate	Aggregate	DSL	769.5105	54989.62	7061.383	3.114093	15.35477	1.740784	0.055941	0.063126	0	0.003	0.05586	0.05847	0.065981	0	0.012	0.13034	1212.348	1965.294	0	0.006865	0.038824	0	0.190564	0.308917	0	0.147805	0.835877	0	0	0	0	0	0.168265	0.951582	0	0	0	0	0	0.477737	8.79096	0	0.011454	0.018567	0
SANTA CLA	2026	SBUS	Aggregate	Aggregate	GAS	221.419	10559.16	885.676	0.478212	0.923504	0.556173	0.001216	0	0.00049	0.002	0.3192	0.001322	0	0.000533	0.008	0.7448	880.8126	2623.742	49.91302	0.014043	2.443005	0.059604	0.026286	0.087927	0.052384	0.069301	10.59704	0.340318	0.059859	0.450864	0.009627	0.024964	1.101124	15.46317	0.372605	0.059859	0.450864	0.009627	0.024964	1.495719	81.97134	9.022951	0.008716	0.025964	0.000494
SANTA CLA	2026	SBUS	Aggregate	Aggregate	DSL	1010.158	31993.5	11657.09	7.153595	46.52324	0.700061	0.044549	0.057105	0	0.003	0.3192	0.046563	0.059687	0	0.012	0.7448	1160.542	3737.121	0	0.004841	0.013564	0	0.182421	0.587423	0	0.10423	0.292035	0	0	0	0	0	0.118658	0.332459	0	0	0	0	0	0.280978	5.559383	0	0.010964	0.035306	0
SANTA CLA	2026	UBUS	Aggregate	Aggregate	GAS	8.411742	1058.886	33.64697	0.434773	0	1.136366	0.000326	0	9.63E-05	0.003	0.05586	0.000354	0	0.000105	0.012	0.13034	2352.115	0	104.3917	0.006825	0	0.164166	0.033346	0	0.087368	0.022728	0	0.702663	0.149587	1.020187	0.024585	0.039313	0.033164	0	0.769327	0.149587	1.020187	0.024585	0.039313	0.482676	0	8.852622	0.023276	0	0.001033
SANTA CLA	2026	UBUS	Aggregate	Aggregate	DSL	422.8944	46444.08	1691.578	0.803452	0	0	0.005651	0	0	0.008415	0.029326	0.005907	0	0	0.03366	0.068427	1481.144	0	0	0.077358	0	0	0.232815	0	0	0.001105	0	0	0	0	0	0.078949	0	0	0	0	0	0	0.131304	0	0	0.014002	0	0
SANTA CLA	2026	UBUS	Aggregate	Aggregate	NG	103.8909	12310.53	415.5637	0.489342	0	0	0.003183	0	0	0.008475	0.029034	0.003327	0	0	0.033899	0.067745	2016.307	0	0	6.413641	0	0	0.411037	0	0	0.091638	0	0	0	0	0	6.545591	0	0	0	0	0	0	49.80427	0	0	0	0	0

Source: EMFAC2017 (v1.0.3) Emission Rates
Region Type: County
Region: Santa Clara
Calendar Year: 2021
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX, RESTLOSS and DIURN

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	NOx_RUNE	NOx_IDLE	NOx_STRE	PM2.5_RU	PM2.5_IDL	PM2.5_STR	PM2.5_PMB	PM2.5_PMT	PM10_RUP	PM10_IDLE	PM10_STR	PM10_PMB	PM10_PMT	CO2_RUNE	CO2_IDLEX	CO2_STRE	CH4_RUNE	CH4_IDLEX	CH4_STRE	N2O_RUNE	N2O_IDLE	N2O_STRE	ROG_RUNI	ROG_IDLE	ROG_STRE	ROG_HOTS	ROG_RUNI	ROG_REST	ROG_DIUR	TOG_RUNE	TOG_IDLE	TOG_STRE	TOG_HOTS	TOG_RUNI	TOG_REST	TOG_DIUR	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
Santa Clara	2021	HHDT	Aggregate	Aggregate	Gasoline	5.162845	484.6824	103.2982	4.062598	0	0.407731	0.001311	0	0.000823	0.005	0.02646	0.001426	0	0.000895	0.02	0.06174	2025.269	0	47.29512	0.112325	0	0.000414	0.149526	0	0.012575	0.585782	0	0.002169	0.156953	0.96912	0.038977	0.070674	0.854771	0	0.002374	0.156953	0.96912	0.038977	0.070674	32.05552	0	5.02137	0.020042	0	0.000468
Santa Clara	2021	HHDT	Aggregate	Aggregate	Diesel	8105.749	988266.7	86260.08	4.147844	63.6365	1.887942	0.058758	0.087222	0	0.008868	0.026073	0.061415	0.091165	0	0.035473	0.060837	1528.481	11606.57	0	0.006422	0.218177	0	0.240256	1.824391	0	0.138263	4.697294	0	0	0	0	0	0.157402	5.347512	0	0	0	0	0	0.5229	60.00634	0	0.01444	0.109653	0
Santa Clara	2021	HHDT	Aggregate	Aggregate	Natural Ga	336.2009	13706.54	1311.183	1.939434	21.5699	0	0.005088	0.034407	0	0.009	0.02646	0.005318	0.035962	0	0.036	0.06174	3233.282	4101.533	0	3.57235	1.261083	0	0.659126	0.836124	0	0.176593	0.0496	0	0	0	0	0	3.788896	1.323011	0	0	0	0	0	10.63714	21.51231	0	0	0	0
Santa Clara	2021	LDA	Aggregate	Aggregate	Gasoline	715693.3	26189161	3369392	0.044609	0	0.21159	0.001358	0	0.001822	0.002	0.01575	0.001477	0	0.001981	0.008	0.03675	266.3197	0	56.92202	0.002711	0	0.058853	0.004863	0	0.027764	0.010662	0	0.269366	0.108645	0.230465	0.191774	0.221801	0.015551	0	0.294921	0.108645	0.230465	0.191774	0.221801	0.690036	0	2.392069	0.002635	0	0.000563
Santa Clara	2021	LDA	Aggregate	Aggregate	Diesel	6670.999	255156.4	31695.34	0.087271	0	0	0.007648	0	0	0.002	0.01575	0.007994	0	0	0.008	0.03675	205.4073	0	0	0.000708	0	0	0.032287	0	0	0.015244	0	0	0	0	0	0	0.017354	0	0	0	0	0	0.210705	0	0	0.001942	0	0
Santa Clara	2021	LDA	Aggregate	Aggregate	Electricity	24022.27	869835.7	117842.5	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
Santa Clara	2021	LDT1	Aggregate	Aggregate	Gasoline	71628.15	2413668	331256	0.105802	0	0.272111	0.001862	0	0.002385	0.002	0.01575	0.002025	0	0.002594	0.008	0.03675	308.1227	0	66.19689	0.005661	0	0.076866	0.008066	0	0.03002	0.024911	0	0.384911	0.189186	0.681609	0.358705	0.461608	0.036311	0	0.421425	0.189186	0.681609	0.358705	0.461608	1.200263	0	2.537143	0.003049	0	0.000655
Santa Clara	2021	LDT1	Aggregate	Aggregate	Diesel	39.89374	725.5582	131.2284	1.268412	0	0	0.168474	0	0	0.002	0.01575	0.176091	0	0	0.008	0.03675	413.9966	0	0	0.010139	0	0	0.065074	0	0	0.218297	0	0	0	0	0	0	0.248517	0	0	0	0	0	1.237222	0	0	0.003914	0	0
Santa Clara	2021	LDT1	Aggregate	Aggregate	Electricity	483.8807	18039.76	2391.303	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
Santa Clara	2021	LDT2	Aggregate	Aggregate	Gasoline	246759.9	8311704	1150425	0.087782	0	0.326789	0.001356	0	0.001737	0.002	0.01575	0.001475	0	0.001889	0.008	0.03675	338.518	0	73.70907	0.004072	0	0.077467	0.007118	0	0.035187	0.01674	0	0.36702	0.133338	0.446757	0.285742	0.307995	0.024414	0	0.40184	0.133338	0.446757	0.285742	0.307995	0.930639	0	3.014399	0.00335	0	0.000729
Santa Clara	2021	LDT2	Aggregate	Aggregate	Diesel	1518.218	59025.65	7458.416	0.041668	0	0	0.004904	0	0	0.002	0.01575	0.005126	0	0	0.008	0.03675	282.8504	0	0	0.000657	0	0	0.04446	0	0	0.01415	0	0	0	0	0	0	0.016109	0	0	0	0	0	0.12212	0	0	0.002674	0	0
Santa Clara	2021	LDT2	Aggregate	Aggregate	Electricity	2166.546	67548.49	10876.24	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
Santa Clara	2021	LHDT1	Aggregate	Aggregate	Gasoline	16540.61	571642.7	246430.4	0.262338	0.03949	0.549198	0.002191	0	0.000401	0.002	0.03276	0.002383	0	0.000436	0.008	0.07644	1017.255	122.0379	19.14342	0.012124	0.123606	0.02716	0.015765	0.003154	0.042297	0.059375	0.45228	0.137987	0.130258	0.89758	0.02599	0.052227	0.08664	0.659966	0.151079	0.130258	0.89758	0.02599	0.052227	1.086844	3.748723	1.811769	0.010067	0.001208	0.000189
Santa Clara	2021	LHDT1	Aggregate	Aggregate	Diesel	10609.08	409397.3	133448.8	1.862203	2.152154	0	0.023297	0.02704	0	0.003	0.03276	0.02435	0.028263	0	0.012	0.07644	552.5074	134.745	0	0.007585	0.005098	0	0.086846	0.02118	0	0.163311	0.10976	0	0	0	0	0	0.185919	0.124954	0	0	0	0	0	0.686231	0.909745	0	0.005223	0.001274	0
Santa Clara	2021	LHDT2	Aggregate	Aggregate	Gasoline	2219.575	77018.29	33068.36	0.272207	0.039035	0.535592	0.002122	0	0.00036	0.002	0.03822	0.002307	0	0.000392	0.008	0.08918	1160.22	140.2323	21.7453	0.010038	0.122897	0.026292	0.016913	0.003077	0.040901	0.045762	0.447168	0.133103	0.127611	0.884759	0.023996	0.048928	0.066776	0.652507	0.145731	0.127611	0.884759	0.023996	0.048928	0.835401	3.750559	1.839341	0.011481	0.001388	0.000215
Santa Clara	2021	LHDT2	Aggregate	Aggregate	Diesel	4214.571	160661.6	53014	1.542154	2.158821	0	0.022944	0.027219	0	0.003	0.03822	0.023981	0.02845	0	0.012	0.08918	621.5562	215.9968	0	0.007204	0.005098	0	0.0977	0.033952	0	0.155094	0.10976	0	0	0	0	0	0.176564	0.124954	0	0	0	0	0	0.650931	0.909745	0	0.005876	0.002042	0
Santa Clara	2021	MCY	Aggregate	Aggregate	Gasoline	32119.63	239436.8	64239.26	1.15497	0	0.270443	0.001772	0	0.00303	0.001	0.00504	0.001893	0	0.003213	0.004	0.01176	210.3906	0	61.75755	0.33122	0	0.25818	0.066438	0	0.015338	2.253066	0	1.967635	0.716612	2.132348	1.002545	1.822873	2.774349	0	2.14098	0.716612	2.132348	1.002545	1.822873	19.56337	0	8.976601	0.002082	0	0.000611
Santa Clara	2021	MDV	Aggregate	Aggregate	Gasoline	149542.9	4865312	690430.3	0.11839	0	0.410054	0.001476	0	0.002019	0.002	0.01575	0.001604	0	0.002194	0.008	0.03675	409.4409	0	89.81723	0.005494	0	0.095775	0.008922	0	0.03884	0.024634	0	0.48393	0.15482	0.49034	0.340146	0.361645	0.034949	0	0.529797	0.15482	0.49034	0.340146	0.361645	1.127252	0	3.59329	0.004052	0	0.000889
Santa Clara	2021	MDV	Aggregate	Aggregate	Diesel	3426.389	128242	16726.03	0.044109	0	0	0.004602	0	0	0.002	0.01575	0.00481	0	0	0.008	0.03675	370.3019	0	0	0.000514	0	0	0.058206	0	0	0.011068	0	0	0	0	0	0	0.0126	0	0	0	0	0	0.188966	0	0	0.003501	0	0
Santa Clara	2021	MDV	Aggregate	Aggregate	Electricity	687.5446	22639.78	3509.471	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
Santa Clara	2021	MH	Aggregate	Aggregate	Gasoline	2931.22	26379	293.2393	0.474084	0	0.332292	0.001724	0	0.000381	0.003	0.05586	0.001875	0	0.000414	0.012	0.13034	1782.907	0	26.40751	0.017557	0	0.033119	0.028008	0	0.03399	0.078746	0	0.143103	0.096257	2.347589	0.039223	0.115979	0.114906	0	0.15668	0.096257	2.347589	0.039223	0.115979	2.065959	0	3.165436	0.017643	0	0.000261
Santa Clara	2021	MH	Aggregate	Aggregate	Diesel	984.446	9504.941	98.4446	4.382014	0	0	0.092722	0	0	0.004	0.05586	0.096914	0	0	0.016	0.13034	1031.304	0	0	0.005198	0	0	0.162107	0	0	0.111901	0	0	0	0	0	0	0.127391	0	0	0	0	0	0.400207	0	0	0.00975	0	0
Santa Clara	2021	MHDT	Aggregate	Aggregate	Gasoline	1410.134	72248.39	28213.97	0.591018	0.088168	0.389628	0.001358	0	0.000497	0.003	0.05586	0.001477	0	0.00054	0.012	0.13034	1752.404	539.4334	40.1358	0.018696	0.257865	0.042095	0.027833	0.0072	0.028931	0.092815	1.007884	0.233354	0.09611	0.563096	0.020857	0.043005	0.135436	1.470848	0.255494	0.09611	0.563096	0.020857	0.043005	2.155492	15.06152	5.301778	0.017341	0.005338	0.000397
Santa Clara	2021	MHDT	Aggregate	Aggregate	Diesel	9487.148	545455.1	96101.91	3.194916	8.74953	1.398943	0.080969	0.02675	0	0.003	0.05586	0.08463	0.02796	0	0.012	0.13034	1081.992	930.4887	0	0.009431	0.005843	0	0.170074	0.14626	0	0.203046	0.125806	0	0	0	0	0	0.231153	0.143221	0	0	0	0	0	0.573058	2.609835	0	0.010222	0.008791	0
Santa Clara	2021	OBUS	Aggregate	Aggregate	Gasoline	502.2127	24696.47	10048.27	0.501682	0.065104	0.329488	0.000916	0	0.000212	0.003	0.05586	0.000996	0	0.00023	0.012	0.13034	1793.018	381.4064	26.74037	0.014791	0.200187	0.030949	0.025044	0.005583	0.026445	0.070359	0.746923	0.159737	0.026848	0.294072	0.016083	0.036997	0.102667	1.089908	0.174892	0.026848	0.294072	0.016083	0.036997	1.576822	5.778528	3.351004	0.017743	0.003774	0.000265
Santa Clara	2021	OBUS	Aggregate	Aggregate	Diesel	767.9729	54443.73	7049.223	2.779706	13.63199	1.84	0.044765	0.045778	0	0.003	0.05586	0.046789	0.047848	0	0.012	0.13034	1202.163	1945.083	0	0.005321	0.035079	0	0.188963	0.30574	0	0.114561	0.755235	0	0	0	0	0	0.130419	0.859777	0	0	0	0	0	0.397353	8.822131	0	0.011357	0.018376	0
Santa Clara	2021	SBUS	Aggregate	Aggregate	Gasoline	235.3456	11037.57	941.3825	0.448701	0.923977	0.560273	0.001205	0	0.000494	0.002	0.3192	0.001311	0	0.000537	0.008	0.7448	872.735	2601.946	49.24562	0.012804	2.443216	0.058897	0.025163	0.088108	0.05292	0.063019	10.60409	0.336056	0.060254	0.423958	0.009983	0.025	0.091957	15.47346	0.367939	0.060254	0.423958	0.009983	0.025	1.371308	82.01386	8.8054	0.008636	0.025748	0.000487
Santa Clara	2021	SBUS	Aggregate	Aggregate	Diesel	1013.214	32006.31	11692.35	6.970742	45.79682	0.74176	0.043352	0.053733	0	0.003	0.3192	0.045313	0.056163	0	0.012	0.7448	1153.149	3727.733	0	0.004763	0.013307	0	0.181259	0.585948	0	0.102551	0.286497	0	0	0	0	0	0.116746	0.326154	0	0	0	0	0	0.279558	5.707206	0	0.010894	0.035218	0
Santa Clara	2021	UBUS	Aggregate	Aggregate	Gasoline	8.415569	1059.368	33.66228	0.456042	0	1.173674	0.000327	0	9.66E-05	0.003	0.05586	0.000355	0	0.000105	0.012	0.13034	2351.957	0	104.4673	0.006811	0	0.169572	0.0345	0	0.088962	0.022728	0	0.727258	0.171351	1.189018	0.028073	0.044636	0.033164	0	0.796256	0.171351	1.189018	0.028073	0.044636	0.499495	0	8.852622	0.023275	0	0.001034
Santa Clara	2021	UBUS	Aggregate	Aggregate	Diesel	423.0651	46463.12	1692.26	0.803452	0	0	0.005651	0	0	0.008415	0.029326	0.005907	0	0	0.03366	0.068427	1481.161	0	0	0.077358	0	0	0.232818	0	0	0.001105	0	0	0	0	0	0	0.078949	0	0	0	0	0	0.131304	0	0	0.014002	0	0
Santa Clara	2021	UBUS	Aggregate	Aggregate	Natural Ga	103.9599	12318.22	415.8396	0.489341	0	0	0.003183	0	0	0.008475	0.029034	0.003327	0	0	0.033899	0.067745	2016.304	0	0	6.413624	0	0	0.411037	0	0	0.091638	0	0	0	0	0	0	6.545574	0	0	0	0	0	49.80412	0	0	0	0	0

Source: EMFAC2017 (v1.0.3) Emission Rates
Region Type: County
Region: Santa Clara
Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX, RESTLOSS and DIURN

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	NOx_RUNE	NOx_IDLE	NOx_STRE	PM2.5_RU	PM2.5_IDL	PM2.5_STR	PM2.5_PMB	PM2.5_PMT	PM10_RUP	PM10_IDL	PM10_STR	PM10_PMB	PM10_PMT	CO2_RUNE	CO2_IDLEX	CO2_STRE	CH4_RUNE	CH4_IDLEX	CH4_STRE	N2O_RUNE	N2O_IDLE	N2O_STRE	ROG_RUNI	ROG_IDLE	ROG_STRE	ROG_HOTS	ROG_RUNI	ROG_REST	ROG_DIUR	TOG_RUNE	TOG_IDLEX	TOG_STRE	TOG_HOTS	TOG_RUNI	TOG_REST	TOG_DIUR	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
Santa Clara	2022	HHDT	Aggregate	Aggregate	Gasoline	4.973172	516.9338	99.50323	3.654204	0	0.338391	0.001236	0	0.000744	0.005	0.02646	0.001344	0	0.00081	0.02	0.06174	1964.961	0	46.86739	0.097725	0	0.00044	0.140899	0	0.010576	0.494672	0	0.002301	0.136891	0.830556	0.033943	0.061166	0.721824	0	0.00252	0.136891	0.830556	0.033943	0.061166	30.00648	0	5.27737	0.019445	0	0.000464
Santa Clara	2022	HHDT	Aggregate	Aggregate	Diesel	8277.463	1011013	88031.26	3.535499	63.08378	2.080194	0.033949	0.03347	0	0.008873	0.026088	0.035484	0.034983	0	0.035494	0.060872	1486.606	11783.13	0	0.003901	0.215524	0	0.233674	1.852143	0	0.08399	4.640183	0	0	0	0	0	0.095616	5.282495	0	0	0	0	0	0.366847	63.30293	0	0.014045	0.111321	0
Santa Clara	2022	HHDT	Aggregate	Aggregate	Natural Ga	348.7902	14223.14	1360.282	1.755776	21.14752	0	0.004789	0.030991	0	0.009	0.02646	0.005006	0.032392	0	0.036	0.06174	3203.692	4060.116	0	3.511574	1.248503	0	0.653093	0.827681	0	0.161697	0.045805	0	0	0	0	0	3.710887	1.306054	0	0	0	0	0	10.70122	21.55662	0	0	0	0
Santa Clara	2022	LDA	Aggregate	Aggregate	Gasoline	733557.7	26453304	3456649	0.03872	0	0.197227	0.001299	0	0.001748	0.002	0.01575	0.001413	0	0.001902	0.008	0.03675	259.2126	0	55.39361	0.002345	0	0.054199	0.004449	0	0.026685	0.009015	0	0.243726	0.100881	0.22086	0.178182	0.20337	0.013151	0	0.266848	0.100881	0.22086	0.178182	0.20337	0.63218	0	2.325265	0.002565	0	0.000548
Santa Clara	2022	LDA	Aggregate	Aggregate	Diesel	7146.668	268335.1	33963.02	0.071556	0	0	0.006579	0	0	0.002	0.01575	0.006877	0	0	0.008	0.03675	200.3149	0	0	0.000626	0	0	0.031487	0	0	0.013485	0	0	0	0	0	0	0.015352	0	0	0	0	0	0.198488	0	0	0.001894	0	0
Santa Clara	2022	LDA	Aggregate	Aggregate	Electricity	25894.61	943282.8	126428	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0
Santa Clara	2022	LDT1	Aggregate	Aggregate	Gasoline	73556.92	2443329	340743.8	0.091156	0	0.251292	0.001724	0	0.002226	0.002	0.01575	0.001875	0	0.002421	0.008	0.03675	300.527	0	64.49485	0.004882	0	0.070027	0.007217	0	0.028775	0.021236	0	0.344801	0.173613	0.628849	0.332831	0.420667	0.030964	0	0.377511	0.173613	0.628849	0.332831	0.420667	1.068397	0	2.450832	0.002974	0	0.000638
Santa Clara	2022	LDT1	Aggregate	Aggregate	Diesel	36.8388	667.9121	121.0603	1.185315	0	0	0.157566	0	0	0.002	0.01575	0.164691	0	0	0.008	0.03675	408.3259	0	0	0.009501	0	0	0.064183	0	0	0.204561	0	0	0	0	0	0	0.232879	0	0	0	0	0	1.159574	0	0	0.00386	0	0
Santa Clara	2022	LDT1	Aggregate	Aggregate	Electricity	624.8771	24059.07	3099.469	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0
Santa Clara	2022	LDT2	Aggregate	Aggregate	Gasoline	250455.4	8295824	1167439	0.077278	0	0.299792	0.001307	0	0.001684	0.002	0.01575	0.001421	0	0.001831	0.008	0.03675	327.6413	0	71.42656	0.003665	0	0.072415	0.006473	0	0.033384	0.014906	0	0.339292	0.128171	0.436499	0.281495	0.299507	0.021744	0	0.371482	0.128171	0.436499	0.281495	0.299507	0.860463	0	2.923834	0.003242	0	0.000707
Santa Clara	2022	LDT2	Aggregate	Aggregate	Diesel	1663.513	62652.21	8136.947	0.039252	0	0	0.004754	0	0	0.002	0.01575	0.004969	0	0	0.008	0.03675	275.5741	0	0	0.000647	0	0	0.043316	0	0	0.013935	0	0	0	0	0	0	0.015864	0	0	0	0	0	0.123161	0	0	0.002605	0	0
Santa Clara	2022	LDT2	Aggregate	Aggregate	Electricity	2695.96	82111.52	13502.44	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0
Santa Clara	2022	LHDT1	Aggregate	Aggregate	Gasoline	16536.9	566343.8	246375.2	0.235238	0.038471	0.530556	0.002161	0	0.000388	0.002	0.03276	0.00235	0	0.000422	0.008	0.07644	1006.569	121.1222	18.98971	0.01086	0.121305	0.025473	0.014262	0.003125	0.041267	0.052874	0.440699	0.129054	0.125369	0.861898	0.025267	0.050121	0.077153	0.643067	0.141298	0.125369	0.861898	0.025267	0.050121	0.97349	3.751848	1.764958	0.009961	0.001199	0.000188
Santa Clara	2022	LHDT1	Aggregate	Aggregate	Diesel	11104.44	423266.4	139679.8	1.613919	2.033114	0	0.021273	0.026869	0	0.003	0.03276	0.022235	0.028084	0	0.012	0.07644	544.3042	133.047	0	0.007318	0.005098	0	0.085557	0.020913	0	0.157544	0.10976	0	0	0	0	0	0.179353	0.124954	0	0	0	0	0	0.661457	0.909745	0	0.005146	0.001258	0
Santa Clara	2022	LHDT2	Aggregate	Aggregate	Gasoline	2253.3	77523.96	33570.81	0.240034	0.037891	0.516259	0.002078	0	0.000346	0.002	0.03822	0.00226	0	0.000377	0.008	0.08918	1147.291	139.0737	21.54397	0.008737	0.120275	0.024583	0.015135	0.003045	0.039911	0.039365	0.434196	0.123837	0.121118	0.819863	0.023133	0.046225	0.057441	0.633578	0.135586	0.121118	0.819863	0.023133	0.046225	0.722025	3.75488	1.776904	0.011353	0.001376	0.000213
Santa Clara	2022	LHDT2	Aggregate	Aggregate	Diesel	4438.985	166319.5	55836.85	1.346918	2.041795	0	0.021771	0.027131	0	0.003	0.03822	0.022756	0.028358	0	0.012	0.08918	612.5422	213.4891	0	0.007003	0.005098	0	0.096283	0.033558	0	0.150761	0.10976	0	0	0	0	0	0.171631	0.124954	0	0	0	0	0	0.634383	0.909745	0	0.005791	0.002018	0
Santa Clara	2022	MCY	Aggregate	Aggregate	Gasoline	32925.36	241011	65850.71	1.151611	0	0.270649	0.001812	0	0.002978	0.001	0.00504	0.001937	0	0.003161	0.004	0.01176	210.2729	0	61.39967	0.328946	0	0.256691	0.06628	0	0.015352	2.228751	0	1.954835	0.704215	2.060677	0.995009	1.817765	2.753726	0	2.127328	0.704215	2.060677	0.995009	1.817765	19.18808	0	9.0045	0.002081	0	0.000608
Santa Clara	2022	MDV	Aggregate	Aggregate	Gasoline	151961.1	4876240	702265.7	0.099589	0	0.371177	0.001397	0	0.001912	0.002	0.01575	0.001519	0	0.002079	0.008	0.03675	396.236	0	86.90417	0.004621	0	0.087878	0.007887	0	0.036541	0.019446	0	0.437645	0.147462	0.472734	0.331376	0.347901	0.028322	0	0.479161	0.147462	0.472734	0.331376	0.347901	0.980018	0	3.406111	0.003921	0	0.00086
Santa Clara	2022	MDV	Aggregate	Aggregate	Diesel	3721.225	135478.8	18101.22	0.038775	0	0	0.004203	0	0	0.002	0.01575	0.004393	0	0	0.008	0.03675	360.3121	0	0	0.000478	0	0	0.056636	0	0	0.010285	0	0	0	0	0	0	0.011709	0	0	0	0	0	0.184421	0	0	0.003406	0	0
Santa Clara	2022	MDV	Aggregate	Aggregate	Electricity	1080.167	34834.41	5508.057	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0
Santa Clara	2022	MH	Aggregate	Aggregate	Gasoline	2891.835	26265.33	289.2991	0.413359	0	0.334516	0.001633	0	0.000362	0.003	0.05586	0.001776	0	0.000394	0.012	0.13034	1756.095	0	25.97914	0.015124	0	0.032419	0.025426	0	0.034963	0.066433	0	0.137518	0.088945	2.156488	0.036513	0.106238	0.096939	0	0.150564	0.088945	2.156488	0.036513	0.106238	1.697423	0	3.037213	0.017378	0	0.000257
Santa Clara	2022	MH	Aggregate	Aggregate	Diesel	1019.353	9712.32	101.9353	4.184918	0	0	0.085576	0	0	0.004	0.05586	0.089445	0	0	0.016	0.13034	1018.587	0	0	0.005027	0	0	0.160108	0	0	0.108225	0	0	0	0	0	0	0.123206	0	0	0	0	0	0.382773	0	0	0.009629	0	0
Santa Clara	2022	MHDT	Aggregate	Aggregate	Gasoline	1456.112	75284.48	29133.88	0.474932	0.088412	0.377896	0.001319	0	0.000449	0.003	0.05586	0.001435	0	0.00051	0.012	0.13034	1722.789	532.6547	39.05903	0.014881	0.262553	0.04023	0.023376	0.007484	0.029181	0.072945	1.011617	0.219187	0.087649	0.506692	0.018903	0.038182	0.106442	1.47615	0.239982	0.087649	0.506692	0.018903	0.038182	1.680953	15.10368	4.939745	0.017048	0.005271	0.000287
Santa Clara	2022	MHDT	Aggregate	Aggregate	Diesel	9430.024	551923.8	94917.85	2.277066	7.413096	1.687822	0.039812	0.015538	0	0.003	0.05586	0.041612	0.01624	0	0.012	0.13034	1050.628	914.98	0	0.004378	0.004667	0	0.165144	0.143822	0	0.094265	0.100481	0	0	0	0	0	0.107314	0.11439	0	0	0	0	0	0.32147	2.58681	0	0.009926	0.008644	0
Santa Clara	2022	OBUS	Aggregate	Aggregate	Gasoline	501.9655	24150.25	10043.33	0.443255	0.065137	0.32561	0.000952	0	0.000213	0.003	0.05586	0.001035	0	0.000232	0.012	0.13034	1767.375	377.9272	26.38965	0.013022	0.200837	0.030332	0.022732	0.005646	0.026387	0.061436	0.747416	0.156088	0.026802	0.295531	0.015889	0.036065	0.089647	1.090627	0.170897	0.026802	0.295531	0.015889	0.036065	1.365657	5.781487	3.261978	0.01749	0.00374	0.000261
Santa Clara	2022	OBUS	Aggregate	Aggregate	Diesel	762.3964	53839.19	6991.348	2.314382	10.4182	2.005848	0.021086	0.015288	0	0.003	0.05586	0.02204	0.015979	0	0.012	0.13034	1185.916	1892.098	0	0.002538	0.027964	0	0.18641	0.297411	0	0.054653	0.602048	0	0	0	0	0	0.062218	0.685386	0	0	0	0	0	0.239321	8.657847	0	0.011204	0.017876	0
Santa Clara	2022	SBUS	Aggregate	Aggregate	Gasoline	249.3134	11500.83	997.2534	0.430325	0.924415	0.566946	0.001196	0	0.000498	0.002	0.3192	0.001301	0	0.000541	0.008	0.7448	865.5448	2582.545	48.67377	0.011856	2.442701	0.058309	0.024366	0.088243	0.053528	0.058325	10.61061	0.332747	0.061157	0.415506	0.010413	0.025261	0.085108	15.48298	0.364316	0.061157	0.415506	0.010413	0.025261	1.259002	82.05319	8.624782	0.008565	0.025556	0.000482
Santa Clara	2022	SBUS	Aggregate	Aggregate	Diesel	1014.086	31965.96	11702.42	6.765334	45.00081	0.786274	0.042018	0.05033	0	0.003	0.3192	0.043917	0.052605	0	0.012	0.7448	1145.085	3716.49	0	0.004669	0.013069	0	0.179991	0.584181	0	0.100532	0.281366	0	0	0	0	0	0.114448	0.320314	0	0	0	0	0	0.27746	5.867721	0	0.010818	0.035112	0
Santa Clara	2022	UBUS	Aggregate	Aggregate	Gasoline	8.419396	1059.849	33.67758	0.491737	0	1.236285	0.000328	0	9.7E-05	0.003	0.05586	0.000356	0	0.000105	0.012	0.13034	2351.817	0	104.599	0.006789	0	0.178596	0.036386	0	0.091633	0.022728	0	0.768536	0.190076	1.35875	0.031079	0.049249	0.033164	0	0.84145	0.190076	1.35875	0.031079	0.049249	0.527722	0	8.852622	0.023273	0	0.001035
Santa Clara	2022	UBUS	Aggregate	Aggregate	Diesel	423.2358	46482.16	1692.943	0.803453	0	0	0.005651	0	0	0.008415	0.029326	0.005907	0	0	0.033661	0.068427	1481.178	0	0	0.077358	0	0	0.232821	0	0	0.001105	0	0	0	0	0	0	0.078949	0	0	0	0	0	0.131304	0	0	0.014002	0	0
Santa Clara	2022	UBUS	Aggregate	Aggregate	Natural Ga	104.0289	12325.91	416.1154	0.48934	0	0	0.003183	0	0	0.008475	0.029034	0.003327	0	0	0.033899	0.067746	2016.3	0	0	6.413607	0	0	0.411036	0	0	0.091638	0	0	0	0	0	0	6.545556	0	0	0	0	0	49.80397	0	0	0	0	0

Source: EMFAC2017 (v1.0.3) Emission Rates
Region Type: County
Region: Santa Clara
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX, RESTLOSS and DIURN

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	NOx_RUNE	NOx_IDLE	NOx_STRE	PM2.5_RU	PM2.5_IDL	PM2.5_STR	PM2.5_PMB	PM2.5_PMT	PM10_RUP	PM10_IDL	PM10_STR	PM10_PMB	PM10_PMT	CO2_RUNE	CO2_IDLEX	CO2_STRE	CH4_RUNE	CH4_IDLEX	CH4_STRE	N2O_RUNE	N2O_IDLE	N2O_STRE	ROG_RUNI	ROG_IDLE	ROG_STRE	ROG_HOTS	ROG_RUNI	ROG_REST	ROG_DIUR	TOG_RUNE	TOG_IDLE	TOG_STRE	TOG_HOTS	TOG_RUNL	TOG_REST	TOG_DIUR	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
Santa Clara	2023	HHDT	Aggregate	Aggregate	Gasoline	4.815448	553.4124	96.34748	3.178298	0	0.254165	0.001157	0	0.000623	0.005	0.02646	0.001259	0	0.000677	0.02	0.06174	1915.642	0	46.38676	0.084318	0	0.000462	0.130889	0	0.008571	0.409676	0	0.002416	0.109047	0.558691	0.026465	0.047808	0.597798	0	0.002645	0.109047	0.558691	0.026465	0.047808	27.8207	0	5.57125	0.018957	0	0.000459
Santa Clara	2023	HHDT	Aggregate	Aggregate	Diesel	8401.79	1034051	89180.29	2.696198	57.80539	2.360147	0.023887	0.026373	0	0.008879	0.026103	0.024967	0.027565	0	0.035514	0.060907	1411.729	11326.45	0	0.001106	0.214953	0	0.221904	1.78036	0	0.023817	4.627869	0	0	0	0	0	0.027114	5.268477	0	0	0	0	0	0.233741	67.52667	0	0.013337	0.107007	0
Santa Clara	2023	HHDT	Aggregate	Aggregate	Natural Ga	360.3246	14693.25	1405.266	1.588314	20.76108	0	0.004529	0.028055	0	0.009	0.02646	0.004734	0.029323	0	0.036	0.06174	3174.275	4018.428	0	3.456549	1.237751	0	0.647097	0.819183	0	0.148044	0.042416	0	0	0	0	0	3.64007	1.291393	0	0	0	0	0	10.76049	21.60789	0	0	0	0
Santa Clara	2023	LDA	Aggregate	Aggregate	Gasoline	751359.6	26739811	3542534	0.034059	0	0.184615	0.001247	0	0.001682	0.002	0.01575	0.001356	0	0.001829	0.008	0.03675	252.091	0	53.87356	0.002048	0	0.050071	0.004113	0	0.025656	0.007696	0	0.221504	0.094205	0.212597	0.166193	0.187545	0.011228	0	0.242518	0.094205	0.212597	0.166193	0.187545	0.586148	0	2.259775	0.002495	0	0.000533
Santa Clara	2023	LDA	Aggregate	Aggregate	Diesel	7591.987	280497.7	36090.42	0.058679	0	0	0	0.005598	0	0	0.002	0.01575	0.005851	0	0	0.008	0.03675	195.1926	0	0	0.000552	0	0	0.030682	0	0	0.011887	0	0	0	0	0.013532	0	0	0	0	0	0	0.188023	0	0	0.001845	0	0
Santa Clara	2023	LDA	Aggregate	Aggregate	Electricity	28074.67	1034348	136585.9	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
Santa Clara	2023	LDT1	Aggregate	Aggregate	Gasoline	75517.84	2475367	350251	0.078745	0	0.232751	0.001604	0	0.002087	0.002	0.01575	0.001745	0	0.00227	0.008	0.03675	292.8794	0	62.80265	0.004214	0	0.063907	0.006493	0	0.02759	0.018087	0	0.309393	0.159698	0.584022	0.309209	0.384203	0.026384	0	0.338746	0.159698	0.584022	0.309209	0.384203	0.955745	0	2.366858	0.002898	0	0.000621
Santa Clara	2023	LDT1	Aggregate	Aggregate	Diesel	34.1777	620.5176	112.4335	1.098891	0	0	0.146297	0	0	0.002	0.01575	0.152912	0	0	0.008	0.03675	401.6268	0	0	0.008837	0	0	0.06313	0	0	0.190256	0	0	0	0	0	0	0.216594	0	0	0	0	0	1.080107	0	0	0.003797	0	0
Santa Clara	2023	LDT1	Aggregate	Aggregate	Electricity	788.4144	31182.48	3917.01	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
Santa Clara	2023	LDT2	Aggregate	Aggregate	Gasoline	254167.5	8294772	1184412	0.06837	0	0.275999	0.001263	0	0.001639	0.002	0.01575	0.001374	0	0.001783	0.008	0.03675	316.8848	0	69.17216	0.003305	0	0.067695	0.00592	0	0.031692	0.013288	0	0.313842	0.123254	0.427158	0.276975	0.291298	0.019387	0	0.343617	0.123254	0.427158	0.276975	0.291298	0.800025	0	2.837237	0.003136	0	0.000685
Santa Clara	2023	LDT2	Aggregate	Aggregate	Diesel	1802.688	66004.69	8781.203	0.037098	0	0	0.004581	0	0	0.002	0.01575	0.004788	0	0	0.008	0.03675	268.3329	0	0	0.000636	0	0	0.042178	0	0	0.01369	0	0	0	0	0	0	0.015585	0	0	0	0	0	0.124122	0	0	0.002537	0	0
Santa Clara	2023	LDT2	Aggregate	Aggregate	Electricity	3304.555	98384.64	16510.28	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
Santa Clara	2023	LHDT1	Aggregate	Aggregate	Gasoline	16555.13	562142	246646.7	0.210457	0.037398	0.511224	0.002137	0	0.000377	0.002	0.03276	0.002324	0	0.00041	0.008	0.07644	994.5276	120.0678	18.82225	0.009676	0.118805	0.02387	0.012895	0.003089	0.040194	0.046707	0.428491	0.120584	0.120359	0.829144	0.024473	0.047994	0.068155	0.625253	0.132025	0.120359	0.829144	0.024473	0.047994	0.867722	3.754766	1.724	0.009842	0.001188	0.000186
Santa Clara	2023	LHDT1	Aggregate	Aggregate	Diesel	11594.64	435998.6	145846	1.400562	1.919948	0	0.019496	0.026734	0	0.003	0.03276	0.020378	0.027943	0	0.012	0.07644	535.8142	131.265	0	0.007088	0.005098	0	0.084223	0.020633	0	0.152594	0.10976	0	0	0	0	0	0.173718	0.124954	0	0	0	0	0	0.641529	0.909745	0	0.005065	0.001241	0
Santa Clara	2023	LHDT2	Aggregate	Aggregate	Gasoline	2285.018	77947.41	34043.37	0.21093	0.036728	0.496392	0.002042	0	0.000334	0.002	0.03822	0.00222	0	0.000363	0.008	0.08918	1132.921	137.76	21.32176	0.007566	0.117557	0.022949	0.013529	0.00301	0.038884	0.03359	0.420989	0.114958	0.114086	0.752468	0.022171	0.043386	0.049014	0.614306	0.125864	0.114086	0.752468	0.022171	0.043386	0.620201	3.758932	1.718516	0.011211	0.001363	0.000211
Santa Clara	2023	LHDT2	Aggregate	Aggregate	Diesel	4660.728	171541.4	58626.09	1.17888	1.93121	0	0.020832	0.02707	0	0.003	0.03822	0.021774	0.028294	0	0.012	0.08918	603.2432	210.8377	0	0.00683	0.005098	0	0.094821	0.033141	0	0.147052	0.10976	0	0	0	0	0	0.167409	0.124954	0	0	0	0	0	0.621451	0.909745	0	0.005703	0.001993	0
Santa Clara	2023	MCY	Aggregate	Aggregate	Gasoline	33683.49	242470.7	67366.97	1.148719	0	0.270672	0.00184	0	0.002859	0.001	0.00504	0.001969	0	0.003039	0.004	0.01176	210.1672	0	61.03922	0.326994	0	0.255241	0.066143	0	0.01536	2.208057	0	1.941958	0.689105	1.969445	0.985054	1.809555	2.736079	0	2.11358	0.689105	1.969445	0.985054	1.809555	18.86893	0	9.034026	0.00208	0	0.000604
Santa Clara	2023	MDV	Aggregate	Aggregate	Gasoline	154431.4	4896063	714241.1	0.085683	0	0.336488	0.001332	0	0.001823	0.002	0.01575	0.001448	0	0.001982	0.008	0.03675	383.1839	0	84.08131	0.004049	0	0.08064	0.007039	0	0.034344	0.016817	0	0.396565	0.140569	0.457303	0.323766	0.336538	0.024505	0	0.434185	0.140569	0.457303	0.323766	0.336538	0.891357	0	3.240031	0.003792	0	0.000832
Santa Clara	2023	MDV	Aggregate	Aggregate	Diesel	4004.429	142223.9	19410.39	0.034292	0	0	0.003829	0	0	0.002	0.01575	0.004002	0	0	0.008	0.03675	350.448	0	0	0.000445	0	0	0.055086	0	0	0.009578	0	0	0	0	0	0	0.010904	0	0	0	0	0	0.180483	0	0	0.003313	0	0
Santa Clara	2023	MDV	Aggregate	Aggregate	Electricity	1532.638	48234.63	7794.674	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
Santa Clara	2023	MH	Aggregate	Aggregate	Gasoline	2857.04	26157.03	285.8182	0.361451	0	0.336127	0.001555	0	0.000345	0.003	0.05586	0.001691	0	0.000375	0.012	0.13034	1731.827	0	25.56622	0.013045	0	0.031746	0.02323	0	0.035777	0.05596	0	0.132332	0.081683	1.97006	0.033844	0.096831	0.081657	0	0.144887	0.081683	1.97006	0.033844	0.096831	1.390474	0	2.91812	0.017138	0	0.000253
Santa Clara	2023	MH	Aggregate	Aggregate	Diesel	1053.778	9907.819	105.3778	4.0099	0	0	0.079211	0	0	0.004	0.05586	0.082793	0	0	0.016	0.13034	1007.175	0	0	0.004873	0	0	0.158314	0	0	0.104917	0	0	0	0	0	0	0.119441	0	0	0	0	0	0.367033	0	0	0.009521	0	0
Santa Clara	2023	MHDT	Aggregate	Aggregate	Gasoline	1507.68	78317.15	30165.67	0.385258	0.088623	0.367592	0.001293	0	0.000446	0.003	0.05586	0.001406	0	0.000485	0.012	0.13034	1697.438	526.34	38.16999	0.011942	0.266499	0.038604	0.019927	0.007724	0.029367	0.057622	1.014767	0.206928	0.080059	0.455824	0.017154	0.033931	0.084081	1.480746	0.22656	0.080059	0.455824	0.017154	0.033931	1.316681	15.14023	4.623501	0.016798	0.005209	0.000378
Santa Clara	2023	MHDT	Aggregate	Aggregate	Diesel	9262.822	558718.8	92583.75	1.59247	5.703996	2.12952	0.007398	0.005414	0	0.003	0.05586	0.007733	0.005658	0	0.012	0.13034	1010.629	886.4048	0	0.000529	0.003602	0	0.158857	0.13933	0	0.011387	0.077551	0	0	0	0	0	0.012963	0.088286	0	0	0	0	0	0.113094	2.687765	0	0.009548	0.008374	0
Santa Clara	2023	OBUS	Aggregate	Aggregate	Gasoline	503.4572	23697.77	10073.17	0.401971	0.065148	0.321785	0.000992	0	0.000219	0.003	0.05586	0.001079	0	0.000239	0.012	0.13034	1743.614	374.6133	26.08015	0.011771	0.201157	0.029667	0.020963	0.005691	0.026276	0.05538	0.74759	0.152323	0.027045	0.299878	0.01619	0.03654	0.080811	1.090882	0.166775	0.027045	0.299878	0.01619	0.03654	1.211154	5.782545	3.193149	0.017254	0.003707	0.000258
Santa Clara	2023	OBUS	Aggregate	Aggregate	Diesel	753.4001	53354.33	6899.877	1.902854	8.28017	2.210652	0.009253	0.002588	0	0.003	0.05586	0.009671	0.002705	0	0.012	0.13034	1163.247	1820.683	0	0.000567	0.024706	0	0.182846	0.286186	0	0.012205	0.533913	0	0	0	0	0	0.013895	0.605542	0	0	0	0	0	0.141032	9.053135	0	0.01099	0.017201	0
Santa Clara	2023	SBUS	Aggregate	Aggregate	Gasoline	263.5229	11968.77	1054.092	0.420713	0.924728	0.578334	0.001201	0	0.000506	0.002	0.3192	0.001307	0	0.00055	0.008	0.7448	859.0893	2565.057	48.16666	0.011122	2.441451	0.057864	0.023879	0.088232	0.054355	0.054742	10.61517	0.330464	0.063152	0.426847	0.010977	0.026004	0.07988	15.48964	0.361817	0.063152	0.426847	0.010977	0.026004	1.167899	82.08092	8.465591	0.008501	0.025383	0.000477
Santa Clara	2023	SBUS	Aggregate	Aggregate	Diesel	1013.614	31894.7	11696.96	6.544978	44.13946	0.832887	0.040645	0.046993	0	0.003	0.3192	0.042483	0.049118	0	0.012	0.7448	1136.76	3703.284	0	0.004568	0.012858	0	0.178683	0.582105	0	0.098352	0.27682	0	0	0	0	0	0.111967	0.315138	0	0	0	0	0	0.275014	6.038953	0	0.01074	0.034987	0
Santa Clara	2023	UBUS	Aggregate	Aggregate	Gasoline	8.423223	1060.331	33.69289	0.150806	0	0.638272	0.002209	0	0.000888	0.003	0.05586	0.002402	0	0.000966	0.012	0.13034	1956.542	0	88.49758	0.007038	0	0.09018	0.015696	0	0.066738	0.022728	0	0.374288	0.008476	0.037646	0.001991	0.00493	0.033164	0	0.409798	0.008476	0.037646	0.001991	0.00493	0.258128	0	8.852622	0.019362	0	0.000876
Santa Clara	2023	UBUS	Aggregate	Aggregate	Diesel	430.5287	46874.38	1722.115	0.802545	0	0	0.005646	0	0	0.008399	0.029403	0.005901	0	0	0.033598	0.068607	1480.062	0	0	0.077245	0	0	0.232645	0	0	0.001104	0	0	0	0	0	0	0.078834	0	0	0	0	0	0.131094	0	0	0.013992	0	0
Santa Clara	2023	UBUS	Aggregate	Aggregate	Natural Ga	96.97562	11960.41	387.9025	0.491564	0	0	0.003197	0	0	0.008538	0.028723	0.003341	0	0	0.034153	0.06702	2024.074	0	0	6.451045	0	0	0.412621	0	0	0.092173	0	0	0	0	0	0	6.583765	0	0	0	0	0	50.12464	0	0	0	0	0

Source: EMFAC2017 (v1.0.3) Emission Rates
Region Type: County
Region: Santa Clara
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX, RESTLOSS and DIURN

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	NOx_RUNE	NOx_IDLEX	NOx_STREX	PM2.5_RU	PM2.5_IDL	PM2.5_STR	PM2.5_PMB	PM2.5_PMT	PM10_RUN	PM10_IDLE	PM10_STR	PM10_PMB	PM10_PMT	CO2_RUNE	CO2_IDLEX	CO2_STREX	CH4_RUNE	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTS	ROG_RUNL	ROG_RESTL	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_HOTS	TOG_RUNL	TOG_RESTL	TOG_DIUR	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
Santa Clara	2024	HHDT	Aggregate	Aggregate	Gasoline	4.841478	594.9439	96.86829	3.020299	0	0.189099	0.00112	0	0.000551	0.005	0.02646	0.001219	0	0.0006	0.02	0.06174	1864.547	0	45.62595	0.076898	0	0.000429	0.12764	0	0.006341	0.362275	0	0.002245	0.090273	0.457367	0.02213	0.039608	0.528631	0	0.002458	0.090273	0.457367	0.02213	0.039608	27.06461	0	5.743732	0.018451	0	0.000452
Santa Clara	2024	HHDT	Aggregate	Aggregate	Diesel	8656.54	1058418	92089.71	2.703911	57.44438	2.359952	0.02415	0.025633	0	0.008883	0.026117	0.025242	0.026792	0	0.035534	0.06094	1388.989	11174.98	0	0.001112	0.214832	0	0.21833	1.756551	0	0.023933	4.625274	0	0	0	0	0.027246	5.265522	0	0	0	0	0	0.237639	67.56762	0	0.013122	0.105576	0
Santa Clara	2024	HHDT	Aggregate	Aggregate	Natural Ga	370.7651	15119.11	1445.984	1.4401	20.42228	0	0.004303	0.025442	0	0.009	0.02646	0.004498	0.026593	0	0.036	0.06174	3139.748	3971.23	0	3.408101	1.228196	0	0.640058	0.809561	0	0.135992	0.039404	0	0	0	0	3.577682	1.278365	0	0	0	0	0	10.81294	21.6569	0	0	0	0
Santa Clara	2024	LDA	Aggregate	Aggregate	Gasoline	768835.9	26997720	3625782	0.030395	0	0.173438	0.0012	0	0.001624	0.002	0.01575	0.001305	0	0.001766	0.008	0.03675	244.9997	0	52.35424	0.001806	0	0.046341	0.003843	0	0.024653	0.006637	0	0.202005	0.088504	0.205724	0.155728	0.174002	0.54881	0	0.22117	0.088504	0.205724	0.155728	0.174002	0.54881	0	2.188955	0.002424	0	0.000518
Santa Clara	2024	LDA	Aggregate	Aggregate	Diesel	8011.408	291515.9	38101.09	0.048102	0	0	0.004683	0	0	0.002	0.01575	0.004895	0	0	0.008	0.03675	190.0661	0	0	0.000484	0	0	0.029876	0	0	0.010417	0	0	0	0	0	0.011859	0	0	0	0	0	0	0.179098	0	0	0.001797	0	0
Santa Clara	2024	LDA	Aggregate	Aggregate	Electricity	30564.28	1142137	148311.4	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
Santa Clara	2024	LDT1	Aggregate	Aggregate	Gasoline	77491.49	2505905	359687.4	0.068518	0	0.216191	0.0015	0	0.001965	0.002	0.01575	0.001632	0	0.002137	0.008	0.03675	285.2357	0	61.12483	0.003656	0	0.0584	0.005889	0	0.026446	0.015495	0	0.278192	0.147313	0.544925	0.287739	0.351787	0.022607	0	0.304585	0.147313	0.544925	0.287739	0.351787	0.864479	0	2.286362	0.002823	0	0.000605
Santa Clara	2024	LDT1	Aggregate	Aggregate	Diesel	31.54053	577.7803	104.3445	1.003934	0	0	0.132094	0	0	0.002	0.01575	0.138066	0	0	0.008	0.03675	393.8059	0	0	0.007979	0	0	0.061901	0	0	0.171786	0	0	0	0	0	0.195567	0	0	0	0	0	0	0.993473	0	0	0.003723	0	0
Santa Clara	2024	LDT1	Aggregate	Aggregate	Electricity	971.3075	39285.07	4827.402	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
Santa Clara	2024	LDT2	Aggregate	Aggregate	Gasoline	257922.1	8298132	1201453	0.060942	0	0.254985	0.001226	0	0.001602	0.002	0.01575	0.001333	0	0.001742	0.008	0.03675	306.3042	0	66.94798	0.002992	0	0.063272	0.005453	0	0.030095	0.011904	0	0.290499	0.118569	0.418242	0.272186	0.28339	0.017369	0	0.31806	0.118569	0.418242	0.272186	0.28339	0.750324	0	2.754987	0.003031	0	0.000663
Santa Clara	2024	LDT2	Aggregate	Aggregate	Diesel	1933.864	68985.44	9385.607	0.034803	0	0	0.004306	0	0	0.002	0.01575	0.004501	0	0	0.008	0.03675	261.017	0	0	0.000618	0	0	0.041028	0	0	0.013297	0	0	0	0	0	0.015138	0	0	0	0	0	0	0.124646	0	0	0.002468	0	0
Santa Clara	2024	LDT2	Aggregate	Aggregate	Electricity	3976.567	115838.7	19819.4	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
Santa Clara	2024	LHDT1	Aggregate	Aggregate	Gasoline	16595.29	558796.3	247245.2	0.188441	0.036329	0.492017	0.002119	0	0.000367	0.002	0.03276	0.002304	0	0.0004	0.008	0.07644	981.413	118.8928	18.64229	0.008635	0.116255	0.022385	0.011684	0.00305	0.039132	0.041266	0.416309	0.11274	0.115621	0.802453	0.023685	0.04598	0.060215	0.607477	0.123436	0.115621	0.802453	0.023685	0.04598	0.775411	3.757388	1.688646	0.009712	0.001177	0.000184
Santa Clara	2024	LHDT1	Aggregate	Aggregate	Diesel	12077.34	447738.5	151917.7	1.216004	1.816109	0	0.017946	0.026621	0	0.003	0.03276	0.018757	0.027824	0	0.012	0.07644	527.1415	129.4169	0	0.006889	0.005098	0	0.082859	0.020343	0	0.148312	0.10976	0	0	0	0	0.168843	0.124954	0	0	0	0	0	0.625521	0.909745	0	0.004983	0.001223	0
Santa Clara	2024	LHDT2	Aggregate	Aggregate	Gasoline	2318.351	78374.99	34539.98	0.186009	0.035621	0.477152	0.002016	0	0.000324	0.002	0.03822	0.002192	0	0.000352	0.008	0.08918	1117.473	136.319	21.08444	0.006588	0.114918	0.021458	0.012162	0.002973	0.037878	0.028759	0.40841	0.106844	0.107467	0.691039	0.021248	0.040757	0.041965	0.595951	0.11698	0.107467	0.691039	0.021248	0.040757	0.534699	3.762482	1.666987	0.011058	0.001349	0.000209
Santa Clara	2024	LHDT2	Aggregate	Aggregate	Diesel	4877.312	176304.8	61350.45	1.033956	1.829953	0	0.02008	0.027033	0	0.003	0.03822	0.020988	0.028255	0	0.012	0.08918	593.7458	208.0708	0	0.006684	0.005098	0	0.093329	0.032706	0	0.143898	0.10976	0	0	0	0	0.163818	0.124954	0	0	0	0	0	0.61131	0.909745	0	0.005613	0.001967	0
Santa Clara	2024	MCY	Aggregate	Aggregate	Gasoline	34431.37	243797	68862.74	1.146289	0	0.270709	0.001865	0	0.002752	0.001	0.00504	0.001997	0	0.00293	0.004	0.01176	210.0772	0	60.71341	0.325313	0	0.253919	0.066025	0	0.015366	2.190481	0	1.930344	0.676373	1.887358	0.97629	1.802995	2.721006	0	2.101179	0.676373	1.887358	0.97629	1.802995	18.59611	0	9.061179	0.002079	0	0.000601
Santa Clara	2024	MDV	Aggregate	Aggregate	Gasoline	156824.5	4915330	725874.3	0.073555	0	0.30496	0.001269	0	0.001735	0.002	0.01575	0.00138	0	0.001887	0.008	0.03675	370.2473	0	81.24522	0.003533	0	0.07385	0.006301	0	0.032254	0.014431	0	0.358405	0.133918	0.442951	0.315236	0.324744	0.021047	0	0.392407	0.133918	0.442951	0.315236	0.324744	0.809607	0	3.072017	0.003664	0	0.000804
Santa Clara	2024	MDV	Aggregate	Aggregate	Diesel	4279.344	148384.4	20665.8	0.030793	0	0	0.003552	0	0	0.002	0.01575	0.003712	0	0	0.008	0.03675	340.7089	0	0	0.00042	0	0	0.053555	0	0	0.009041	0	0	0	0	0	0.010293	0	0	0	0	0	0	0.1773	0	0	0.003221	0	0
Santa Clara	2024	MDV	Aggregate	Aggregate	Electricity	2041.893	62655.19	10349.93	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
Santa Clara	2024	MH	Aggregate	Aggregate	Gasoline	2827.424	26048.95	282.8555	0.319474	0	0.337369	0.001496	0	0.000332	0.003	0.05586	0.001627	0	0.000361	0.012	0.13034	1698.665	0	25.10838	0.011423	0	0.03111	0.021443	0	0.036462	0.047898	0	0.127627	0.075126	1.794574	0.031457	0.088456	0.069892	0	0.139736	0.075126	1.794574	0.031457	0.088456	1.158649	0	2.813821	0.01681	0	0.000248
Santa Clara	2024	MH	Aggregate	Aggregate	Diesel	1087.572	10089.67	108.7572	3.8575	0	0	0.073619	0	0	0.004	0.05586	0.076948	0	0	0.016	0.13034	992.182	0	0	0.004739	0	0	0.155957	0	0	0.102018	0	0	0	0	0	0.116141	0	0	0	0	0	0	0.353157	0	0	0.00938	0	0
Santa Clara	2024	MHDT	Aggregate	Aggregate	Gasoline	1564.857	81219.94	31309.66	0.31759	0.088787	0.357983	0.00128	0	0.000432	0.003	0.05586	0.001392	0	0.000469	0.012	0.13034	1664.466	518.4053	37.21256	0.009834	0.269491	0.03713	0.017321	0.007911	0.029454	0.046731	1.017203	0.195989	0.074177	0.415581	0.016077	0.031122	0.06819	1.484301	0.214584	0.074177	0.415581	0.016077	0.031122	1.055715	15.16855	4.34781	0.016471	0.00513	0.000368
Santa Clara	2024	MHDT	Aggregate	Aggregate	Diesel	9624.848	566389.2	95988.07	1.610171	5.459844	2.136352	0.007492	0.004673	0	0.003	0.05586	0.00783	0.004884	0	0.012	0.13034	997.0565	869.0377	0	0.000527	0.003515	0	0.156723	0.136601	0	0.01135	0.075674	0	0	0	0	0.012921	0.086149	0	0	0	0	0	0.114514	2.701556	0	0.00942	0.00821	0
Santa Clara	2024	OBUS	Aggregate	Aggregate	Gasoline	504.7356	23300.26	10098.75	0.360432	0.065159	0.318556	0.00103	0	0.000226	0.003	0.05586	0.00112	0	0.000245	0.012	0.13034	1712.694	370.3334	25.70448	0.010554	0.201432	0.02907	0.019268	0.00573	0.026194	0.04937	0.747749	0.148852	0.027254	0.303972	0.016446	0.036927	0.07204	1.091114	0.162974	0.027254	0.303972	0.016446	0.036927	1.073358	5.783505	3.116445	0.016948	0.003665	0.000254
Santa Clara	2024	OBUS	Aggregate	Aggregate	Diesel	763.9429	53010.14	7005.878	1.952588	8.368625	2.211523	0.009711	0.002619	0	0.003	0.05586	0.01015	0.002738	0	0.012	0.13034	1156.149	1829.903	0	0.000579	0.025071	0	0.181731	0.287635	0	0.01246	0.539782	0	0	0	0	0.014185	0.6145	0	0	0	0	0	0.143603	9.166694	0	0.010923	0.017288	0
Santa Clara	2024	SBUS	Aggregate	Aggregate	Gasoline	277.2219	12408.76	1108.888	0.391846	0.925198	0.582393	0.001195	0	0.000512	0.002	0.3192	0.0013	0	0.000557	0.008	0.7448	849.9257	2540.147	47.46214	0.010004	2.441578	0.057304	0.022787	0.088525	0.054796	0.049026	10.62205	0.32698	0.063489	0.424105	0.011364	0.026144	0.071538	15.49967	0.358002	0.063489	0.424105	0.011364	0.026144	1.061031	82.12266	8.250612	0.008411	0.025137	0.00047
Santa Clara	2024	SBUS	Aggregate	Aggregate	Diesel	1011.343	31782.11	11670.76	6.305713	43.19427	0.882346	0.039225	0.043673	0	0.003	0.3192	0.040998	0.045648	0	0.012	0.7448	1127.045	3685.79	0	0.004462	0.012671	0	0.177156	0.579355	0	0.09606	0.272808	0	0	0	0	0.109357	0.310572	0	0	0	0	0	0.272311	6.223874	0	0.010648	0.034822	0
Santa Clara	2024	UBUS	Aggregate	Aggregate	Gasoline	8.427049	1060.813	33.7082	0.179651	0	0.688867	0.002209	0	0.000888	0.003	0.05586	0.002402	0	0.000966	0.012	0.13034	1956.507	0	88.60685	0.007013	0	0.097882	0.017812	0	0.068509	0.022728	0	0.407643	0.01024	0.051815	0.002284	0.005364	0.033164	0	0.446318	0.01024	0.051815	0.002284	0.005364	0.280937	0	8.852622	0.019361	0	0.000877
Santa Clara	2024	UBUS	Aggregate	Aggregate	Diesel	430.6994	46893.42	1722.798	0.802546	0	0	0.005646	0	0	0.008399	0.029403	0.005901	0	0	0.033598	0.068607	1480.079	0	0	0.077245	0	0	0.232648	0	0	0.001104	0	0	0	0	0	0.078834	0	0	0	0	0	0	0.131094	0	0	0.013992	0	0
Santa Clara	2024	UBUS	Aggregate	Aggregate	Natural Ga	97.04458	11968.1	388.1783	0.491562	0	0	0.003197	0	0	0.008538	0.028723	0.003341	0	0	0.034153	0.06702	2024.066	0	0	6.451003	0	0	0.412619	0	0	0.092172	0	0	0	0	0	6.583722	0	0	0	0	0	0	50.12428	0	0	0	0	0

Source: EMFAC2017 (v1.0.3) Emission Rates
Region Type: County
Region: Santa Clara
Calendar Year: 2025
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX, RESTLOSS and DIURN

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	NOx_RUNE	NOx_IDLE	NOx_STRE	PM2.5_RU	PM2.5_IDL	PM2.5_STR	PM2.5_PM	PM2.5_PM	PM10_RUP	PM10_IDLI	PM10_STR	PM10_PM	PM10_PM	CO2_RUNE	CO2_IDLEX	CO2_STRE	CH4_RUNE	CH4_IDLEX	CH4_STRE	N2O_RUNE	N2O_IDLEX	N2O_STRE	ROG_RUNI	ROG_IDLEX	ROG_STRE	ROG_HOTS	ROG_RUNI	ROG_REST	ROG_DIUR	TOG_RUNE	TOG_IDLEX	TOG_STRE	TOG_HOTS	TOG_RUNI	TOG_REST	TOG_DIUR	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
Santa Clara	2025	HHDT	Aggregate	Aggregate	Gasoline	5.092026	640.9591	101.8812	2.919948	0	0.157583	0.001116	0	0.00053	0.005	0.02646	0.001214	0	0.000577	0.02	0.06174	1825.867	0	44.49464	0.073801	0	0.000415	0.125671	0	0.005317	0.342518	0	0.00217	0.080914	0.407773	0.020048	0.035638	0.499802	0	0.002375	0.080914	0.407773	0.020048	0.035638	27.21952	0	5.566613	0.018068	0	0.00044
Santa Clara	2025	HHDT	Aggregate	Aggregate	Diesel	8817.731	1079688	94137.56	2.689248	57.21961	2.360479	0.024147	0.025022	0	0.008888	0.026131	0.025239	0.026153	0	0.035552	0.060971	1361.701	11015.05	0	0.001109	0.21503	0	0.21404	1.731413	0	0.02388	4.629535	0	0	0	0.027185	5.270373	0	0	0	0	0	0	0.239469	67.69892	0	0.012865	0.104065	0
Santa Clara	2025	HHDT	Aggregate	Aggregate	Natural Ga	379.6544	15481.95	1480.652	1.307834	20.11278	0	0.004103	0.023104	0	0.009	0.02646	0.004289	0.024149	0	0.036	0.06174	3103.536	3922.175	0	3.364949	1.219652	0	0.632676	0.799561	0	0.12525	0.036711	0	0	0	3.522105	1.266717	0	0	0	0	0	0	10.85973	21.70548	0	0	0	0
Santa Clara	2025	LDA	Aggregate	Aggregate	Gasoline	786105.4	27236278	3706855	0.027552	0	0.163324	0.001159	0	0.001575	0.002	0.01575	0.001261	0	0.001713	0.008	0.03675	237.9166	0	50.83268	0.001606	0	0.042879	0.003629	0	0.023647	0.00579	0	0.184593	0.083639	0.200535	0.147048	0.163063	0.517934	0	2.110104	0.002354	0	0.000503
Santa Clara	2025	LDA	Aggregate	Aggregate	Diesel	8408.263	301340.6	39989.41	0.039798	0	0	0.004032	0	0	0.002	0.01575	0.004215	0	0	0.008	0.03675	184.9022	0	0	0.000435	0	0	0.029064	0	0	0.009373	0	0	0	0	0.01067	0	0	0	0	0	0	0.171859	0	0	0.001748	0	0
Santa Clara	2025	LDA	Aggregate	Aggregate	Electricity	33370.49	1267724	161634.6	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2025	LDT1	Aggregate	Aggregate	Gasoline	79443.86	2534356	368884.5	0.060086	0	0.20134	0.001411	0	0.00186	0.002	0.01575	0.001534	0	0.002022	0.008	0.03675	277.5553	0	59.43963	0.003183	0	0.053371	0.005387	0	0.025325	0.013318	0	0.250415	0.136457	0.510963	0.268896	0.323671	0.019433	0	0.274173	0.136457	0.510963	0.268896	0.323671	0.787157	0	2.198178	0.002747	0	0.000588
Santa Clara	2025	LDT1	Aggregate	Aggregate	Diesel	29.01082	540.1586	96.9227	0.906563	0	0	0.119117	0	0	0.002	0.01575	0.124503	0	0	0.008	0.03675	384.823	0	0	0.007233	0	0	0.060489	0	0	0.155733	0	0	0	0	0.177292	0	0	0	0	0	0	0.910026	0	0	0.003638	0	0
Santa Clara	2025	LDT1	Aggregate	Aggregate	Electricity	1175.118	48439.55	5836.574	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2025	LDT2	Aggregate	Aggregate	Gasoline	261669.8	8305167	1218340	0.05477	0	0.236657	0.001191	0	0.001569	0.002	0.01575	0.001296	0	0.001707	0.008	0.03675	295.8626	0	64.74241	0.002718	0	0.05916	0.005064	0	0.028625	0.010701	0	0.269168	0.114065	0.408613	0.267022	0.275618	0.707429	0	2.670232	0.002928	0	0.000641
Santa Clara	2025	LDT2	Aggregate	Aggregate	Diesel	2060.035	71668.54	9958.002	0.033505	0	0	0.004246	0	0	0.002	0.01575	0.004438	0	0	0.008	0.03675	253.7132	0	0	0.000614	0	0	0.03988	0	0	0.013214	0	0	0	0	0.015043	0	0	0	0	0	0	0.125847	0	0	0.002399	0	0
Santa Clara	2025	LDT2	Aggregate	Aggregate	Electricity	4719.984	134602.3	23464.47	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2025	LHDT1	Aggregate	Aggregate	Gasoline	16670.08	556704.7	248359.3	0.169211	0.035277	0.472669	0.002107	0	0.00036	0.002	0.03276	0.002292	0	0.000391	0.008	0.07644	967.3498	117.6043	18.45036	0.007764	0.113694	0.021006	0.010624	0.003009	0.03807	0.036731	0.404312	0.10545	0.111143	0.778995	0.023007	0.044168	0.053598	0.589971	0.115454	0.111143	0.778995	0.023007	0.044168	0.699373	3.75965	1.658867	0.009573	0.001164	0.000183
Santa Clara	2025	LHDT1	Aggregate	Aggregate	Diesel	12557.44	458805.3	157956.8	1.056459	1.720637	0	0.016591	0.026543	0	0.003	0.03276	0.017341	0.027743	0	0.012	0.07644	518.3028	127.5135	0	0.006718	0.005098	0	0.08147	0.020043	0	0.144635	0.10976	0	0	0	0.164657	0.124954	0	0	0	0	0	0	0.612677	0.909745	0	0.0049	0.001205	0
Santa Clara	2025	LHDT2	Aggregate	Aggregate	Gasoline	2350.687	78766.4	35021.74	0.164861	0.034559	0.458423	0.002001	0	0.000317	0.002	0.03822	0.002176	0	0.000345	0.008	0.08918	1101.004	134.7497	20.83503	0.005841	0.112336	0.020064	0.010996	0.002935	0.0369	0.025143	0.396329	0.099263	0.101257	0.638691	0.020438	0.03848	0.036689	0.578322	0.10868	0.101257	0.638691	0.020438	0.03848	0.471051	3.765359	1.622672	0.010895	0.001333	0.000206
Santa Clara	2025	LHDT2	Aggregate	Aggregate	Diesel	5093.542	180822.6	64070.35	0.910052	1.737542	0	0.01951	0.027031	0	0.003	0.03822	0.020392	0.028253	0	0.012	0.08918	584.1014	205.2058	0	0.006561	0.005098	0	0.091813	0.032255	0	0.141257	0.10976	0	0	0	0.160811	0.124954	0	0	0	0	0	0	0.603673	0.909745	0	0.005522	0.00194	0
Santa Clara	2025	MCY	Aggregate	Aggregate	Gasoline	35193.54	245144.5	70387.08	1.144207	0	0.270585	0.001897	0	0.002751	0.001	0.00504	0.002031	0	0.00293	0.004	0.01176	210.0048	0	60.42942	0.323881	0	0.252792	0.065921	0	0.015365	2.175798	0	1.920785	0.666814	1.818229	0.96962	1.799017	18.36541	0	9.087517	0.002078	0	0.000598
Santa Clara	2025	MDV	Aggregate	Aggregate	Gasoline	159353.4	4938255	737907	0.063986	0	0.27705	0.001219	0	0.001669	0.002	0.01575	0.001325	0	0.001816	0.008	0.03675	357.5234	0	78.47795	0.003117	0	0.067735	0.005703	0	0.030326	0.012553	0	0.324637	0.127905	0.429181	0.308843	0.316083	0.018315	0	0.355437	0.127905	0.429181	0.308843	0.316083	0.747249	0	2.926745	0.003538	0	0.000777
Santa Clara	2025	MDV	Aggregate	Aggregate	Diesel	4539.599	153903.5	21844.52	0.027748	0	0	0.003286	0	0	0.002	0.01575	0.003434	0	0	0.008	0.03675	330.9311	0	0	0.000397	0	0	0.052018	0	0	0.008545	0	0	0	0	0.009728	0	0	0	0	0	0	0.174315	0	0	0.003128	0	0
Santa Clara	2025	MDV	Aggregate	Aggregate	Electricity	2605.246	77957.64	13157.39	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara	2025	MH	Aggregate	Aggregate	Gasoline	2804.725	25962.4	280.5847	0.284441	0	0.338374	0.00145	0	0.000322	0.003	0.05586	0.001577	0	0.00035	0.012	0.13034	1667.641	0	24.6655	0.010137	0	0.030504	0.019937	0	0.037073	0.041598	0	0.123275	0.069134	1.619836	0.029331	0.080979	0.060699	0	0.134971	0.069134	1.619836	0.029331	0.080979	0.981783	0	2.72063	0.016503	0	0.000244
Santa Clara	2025	MH	Aggregate	Aggregate	Diesel	1120.152	10258.27	112.0152	3.721278	0	0	0.068611	0	0	0.004	0.05586	0.071713	0	0	0.016	0.13034	977.5306	0	0	0.004617	0	0	0.153654	0	0	0.099404	0	0	0	0	0.113165	0	0	0	0	0	0	0.340592	0	0	0.009241	0	0
Santa Clara	2025	MHDT	Aggregate	Aggregate	Gasoline	1625.583	84052.77	32524.67	0.265984	0.088924	0.349428	0.001273	0	0.000421	0.003	0.05586	0.001385	0	0.000457	0.012	0.13034	1634.243	510.7588	36.34684	0.008233	0.271859	0.035906	0.015329	0.00806	0.029502	0.038458	1.019238	0.186917	0.069212	0.381699	0.015194	0.028782	0.056117	1.48727	0.204651	0.069212	0.381699	0.015194	0.028782	0.857049	15.19219	4.114665	0.016172	0.005054	0.00036
Santa Clara	2025	MHDT	Aggregate	Aggregate	Diesel	9962.606	572190	99142.65	1.623143	5.250027	2.142411	0.007557	0.004081	0	0.003	0.05586	0.007898	0.004265	0	0.012	0.13034	982.4191	853.0081	0	0.000524	0.003447	0	0.154423	0.134081	0	0.011292	0.074218	0	0	0	0.012855	0.084492	0	0	0	0	0	0	0.115604	2.715124	0	0.009281	0.008059	0
Santa Clara	2025	OBUS	Aggregate	Aggregate	Gasoline	506.3512	22978.17	10131.07	0.327074	0.065168	0.315008	0.001066	0	0.000232	0.003	0.05586	0.00116	0	0.000252	0.012	0.13034	1681.342	365.8664	25.34402	0.009574	0.201653	0.02851	0.017866	0.005766	0.026079	0.044553	0.747887	0.145668	0.027385	0.307778	0.016648	0.037216	0.065012	1.091315	0.159488	0.027385	0.307778	0.016648	0.037216	0.954434	5.784337	3.055397	0.016638	0.003621	0.000251
Santa Clara	2025	OBUS	Aggregate	Aggregate	Diesel	782.1911	52548.02	7198.345	1.95709	8.598349	2.212905	0.009792	0.0027	0	0.003	0.05586	0.010235	0.002822	0	0.012	0.13034	1138.746	1851.156	0	0.000581	0.026021	0	0.178995	0.290976	0	0.012519	0.560218	0	0	0	0.014252	0.637766	0	0	0	0	0	0	0.144046	9.461612	0	0.010758	0.017489	0
Santa Clara	2025	SBUS	Aggregate	Aggregate	Gasoline	290.9191	12845.38	1163.676	0.367517	0.925641	0.585868	0.001189	0	0.000518	0.002	0.3192	0.001293	0	0.000563	0.008	0.7448	841.5393	2517.353	46.87031	0.099128	2.441397	0.056689	0.021807	0.088923	0.055087	0.04463	10.62852	0.323186	0.063718	0.42144	0.011749	0.026293	0.965124	15.50911	0.353848	0.063718	0.42144	0.011749	0.026293	0.960805	82.16193	8.088543	0.008328	0.024911	0.000464
Santa Clara	2025	SBUS	Aggregate	Aggregate	Diesel	1007.891	31639.37	11630.92	6.052423	42.15267	0.934599	0.037784	0.040436	0	0.003	0.3192	0.039493	0.042264	0	0.012	0.7448	1116.779	3665.356	0	0.004348	0.012518	0	0.175542	0.576143	0	0.093618	0.269508	0	0	0	0.106577	0.306814	0	0	0	0	0	0	0.269189	6.423201	0	0.010551	0.034628	0
Santa Clara	2025	UBUS	Aggregate	Aggregate	Gasoline	8.430876	1061.294	33.7235	0.211238	0	0.744273	0.002209	0	0.000888	0.003	0.05586	0.002402	0	0.000966	0.012	0.13034	1956.474	0	88.72677	0.006987	0	0.106267	0.020012	0	0.070643	0.022728	0	0.44417	0.012793	0.070677	0.002709	0.005994	0.033164	0	0.48631	0.012793	0.070677	0.002709	0.005994	0.305915	0	8.852622	0.019361	0	0.000878
Santa Clara	2025	UBUS	Aggregate	Aggregate	Diesel	410.7255	44103.54	1642.902	0.800339	0	0	0.005633	0	0	0.008361	0.02959	0.005887	0	0	0.033445	0.069044	1523.804	0	0	0.076969	0	0	0.239521	0	0	0.0011	0	0	0	0	0.078552	0	0	0	0	0	0	0.130582	0	0	0.014405	0	0
Santa Clara	2025	UBUS	Aggregate	Aggregate	Natural Ga	117.2581	14784.71	469.0324	0.494633	0	0	0.003215	0	0	0.008626	0.028293	0.00336	0	0	0.034503	0.066018	2034.799	0	0	6.502692	0	0	0.414807	0	0	0.092911	0	0	0	0	6.636474	0	0	0	0	0	0	50.56702	0	0	0	0	0

EMFAC2017 (v1.0.2) Emission Rates
Region Type: County
Region: SANTA CLARA
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN. Note 'day' in the unit is operation day.

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	NOx_RUNE	NOx_IDLEX	NOx_STREX	PM2.5_RU	PM2.5_IDL	PM2.5_STR	PM2.5_TWP	PM2.5_PMP	PM10_RUP	PM10_IDLE	PM10_STR	PM10_TWP	PM10_PMP	CO2_RUNE	CO2_IDLEX	CO2_STREX	CH4_RUNE	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNI	ROG_IDLEX	ROG_STREX	ROG_HOTS	ROG_RUNL	ROG_RESTL	ROG_DIUR	TOG_RUNE	TOG_IDLEX	TOG_STREX	TOG_HOTS	TOG_RUNL	TOG_RESTL	TOG_DIUR	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
SANTA CLA	2026	HHDT	Aggregate	Aggregate	GAS	5.364051	687.2244	107.3239	2.901553	0	0.123525	0.001111	0	0.000507	0.005	0.02646	0.001208	0	0.000551	0.02	0.06174	1793.744	0	43.34586	0.071804	0	0.000401	0.125752	0	0.004225	0.328519	0	0.002095	0.071383	0.359736	0.017912	0.031562	0.479375	0	0.002294	0.071383	0.359736	0.017912	0.031562	27.34619	0	5.359666	0.017751	0	0.000429
SANTA CLA	2026	HHDT	Aggregate	Aggregate	DSL	8924.437	1100302	95711.65	2.666493	57.09144	2.360255	0.024019	0.024355	0	0.008892	0.026143	0.025105	0.025456	0	0.035569	0.061	1333.335	10856.43	0	0.001103	0.215452	0	0.209582	1.70648	0	0.02374	4.638633	0	0	0	0.027027	5.28073	0	0	0	0	0	0	0.240406	67.90439	0	0.012597	0.102566	0
SANTA CLA	2026	HHDT	Aggregate	Aggregate	NG	387.4411	15797.92	1511.02	1.192172	19.8411	0	0.00393	0.021114	0	0.009	0.02646	0.004107	0.022069	0	0.036	0.06174	3065.609	3870.947	0	3.327201	1.212401	0	0.624944	0.789118	0	0.11581	0.034377	0	0	0	3.473439	1.256776	0	0	0	0	0	0	10.90096	21.7521	0	0	0	0
SANTA CLA	2026	LDA	Aggregate	Aggregate	GAS	803316.6	27422437	3786948	0.025361	0	0.154822	0.001114	0	0.001523	0.002	0.01575	0.001211	0	0.001657	0.008	0.03675	231.4803	0	49.42279	0.001444	0	0.039822	0.003461	0	0.022774	0.005111	0	0.169499	0.079374	0.196051	0.139366	0.153495	0.493181	0	2.036512	0.002291	0	0.000489
SANTA CLA	2026	LDA	Aggregate	Aggregate	DSL	8761.921	309411.2	41704.47	0.032668	0	0	0.003405	0	0	0.002	0.01575	0.003558	0	0	0.008	0.03675	180.2059	0	0	0.00039	0	0	0.028326	0	0	0.008395	0	0	0	0	0.009557	0	0	0	0	0	0	0.1654	0	0	0.001704	0	0
SANTA CLA	2026	LDA	Aggregate	Aggregate	ELEC	36166.94	1348329	174853.1	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
SANTA CLA	2026	LDT1	Aggregate	Aggregate	GAS	81395.88	2557716	377984.9	0.053242	0	0.188746	0.001327	0	0.001762	0.002	0.01575	0.001443	0	0.001916	0.008	0.03675	270.6234	0	57.88564	0.002789	0	0.048967	0.004978	0	0.02436	0.011517	0	0.226362	0.126829	0.481219	0.251831	0.29879	0.016805	0	0.247838	0.126829	0.481219	0.251831	0.29879	0.722924	0	2.115706	0.002678	0	0.000573
SANTA CLA	2026	LDT1	Aggregate	Aggregate	DSL	24.30234	480.229	84.15979	0.751234	0	0	0.097028	0	0	0.002	0.01575	0.101415	0	0	0.008	0.03675	372.5093	0	0	0.005976	0	0	0.058553	0	0	0.128651	0	0	0	0	0.14646	0	0	0	0	0	0	0.792282	0	0	0.003522	0	0
SANTA CLA	2026	LDT1	Aggregate	Aggregate	ELEC	1379.343	55720.71	6839.142	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
SANTA CLA	2026	LDT2	Aggregate	Aggregate	GAS	265561.6	8306944	1235817	0.049643	0	0.220704	0.001151	0	0.001529	0.002	0.01575	0.001251	0	0.001663	0.008	0.03675	286.3694	0	62.68706	0.002482	0	0.055421	0.00474	0	0.027321	0.009671	0	0.249939	0.109665	0.398388	0.261316	0.267778	0.014111	0	0.273652	0.109665	0.398388	0.261316	0.267778	0.671341	0	2.592866	0.002834	0	0.00062
SANTA CLA	2026	LDT2	Aggregate	Aggregate	DSL	2179.627	73932.77	10496.07	0.032487	0	0	0.004202	0	0	0.002	0.01575	0.004392	0	0	0.008	0.03675	247.1738	0	0	0.000611	0	0	0.038852	0	0	0.013153	0	0	0	0	0.014974	0	0	0	0	0	0	0.127038	0	0	0.002337	0	0
SANTA CLA	2026	LDT2	Aggregate	Aggregate	ELEC	5458.528	152393.5	27053.7	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
SANTA CLA	2026	LHDT1	Aggregate	Aggregate	GAS	16770.98	556033.5	249862.6	0.151754	0.034252	0.4537	0.002099	0	0.000353	0.002	0.03276	0.002282	0	0.000384	0.008	0.07644	952.5009	116.2163	18.24638	0.006932	0.111178	0.019754	0.009676	0.002968	0.037044	0.032329	0.392624	0.098793	0.106906	0.759705	0.022308	0.042351	0.047175	0.572916	0.108166	0.106906	0.759705	0.022308	0.042351	0.625576	3.761779	1.633174	0.009426	0.00115	0.000181
SANTA CLA	2026	LHDT1	Aggregate	Aggregate	DSL	13027.47	469567.8	163869.1	0.916096	1.632082	0	0.01538	0.026486	0	0.003	0.03276	0.016075	0.027684	0	0.012	0.07644	509.3228	125.5551	0	0.006568	0.005098	0	0.080058	0.019736	0	0.141402	0.10976	0	0	0	0.160976	0.124954	0	0	0	0	0	0	0.602151	0.909745	0	0.004815	0.001187	0
SANTA CLA	2026	LHDT2	Aggregate	Aggregate	GAS	2384.455	79271.91	35524.83	0.145318	0.033553	0.440969	0.001987	0	0.00031	0.002	0.03822	0.002161	0	0.000337	0.008	0.08918	1083.731	133.0723	20.57258	0.005077	0.109892	0.018805	0.009942	0.002898	0.036006	0.021298	0.384876	0.092353	0.095204	0.589436	0.019579	0.036144	0.031078	0.56161	0.101115	0.095204	0.589436	0.019579	0.036144	0.403421	3.768218	1.582332	0.010724	0.001317	0.000204
SANTA CLA	2026	LHDT2	Aggregate	Aggregate	DSL	5304.447	185191.7	66723.26	0.80174	1.652316	0	0.01903	0.027033	0	0.003	0.03822	0.01989	0.028255	0	0.012	0.08918	574.2945	202.2523	0	0.006455	0.005098	0	0.090271	0.031791	0	0.138973	0.10976	0	0	0	0.158212	0.124954	0	0	0	0	0	0	0.59759	0.909745	0	0.005429	0.001912	0
SANTA CLA	2026	MCY	Aggregate	Aggregate	GAS	35953.12	246713	71906.25	1.142407	0	0.270461	0.001924	0	0.002748	0.001	0.00504	0.002061	0	0.002929	0.004	0.01176	209.9417	0	60.16678	0.322636	0	0.251748	0.06583	0	0.015364	2.163162	0	1.911911	0.658739	1.752085	0.964052	1.796069	2.697331	0	2.081516	0.658739	1.752085	0.964052	1.796069	18.16544	0	9.112103	0.002078	0	0.000595
SANTA CLA	2026	MDV	Aggregate	Aggregate	GAS	162018.4	4957363	750433	0.056427	0	0.253115	0.001168	0	0.001607	0.002	0.01575	0.001271	0	0.001748	0.008	0.03675	345.9595	0	75.91844	0.002781	0	0.062361	0.005221	0	0.028648	0.011068	0	0.29528	0.122339	0.415764	0.302987	0.308674	0.016149	0	0.323295	0.122339	0.415764	0.302987	0.308674	0.699315	0	2.804675	0.003424	0	0.000751
SANTA CLA	2026	MDV	Aggregate	Aggregate	DSL	4789.871	158691.3	22971.85	0.025016	0	0	0.003022	0	0	0.002	0.01575	0.003159	0	0	0.008	0.03675	322.1951	0	0	0.000375	0	0	0.050645	0	0	0.008076	0	0	0	0	0.009194	0	0	0	0	0	0	0.17154	0	0	0.003046	0	0
SANTA CLA	2026	MDV	Aggregate	Aggregate	ELEC	3176.215	92681.92	15973.91	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0.004888	0	0.00456	0.017501	0	0	0	0	0	0
SANTA CLA	2026	MH	Aggregate	Aggregate	GAS	2786.201	25915.09	278.7315	0.25296	0	0.339641	0.001408	0	0.000312	0.003	0.05586	0.001531	0	0.00034	0.012	0.13034	1639.481	0	24.24107	0.008941	0	0.029975	0.018592	0	0.037661	0.035657	0	0.119443	0.063018	1.433405	0.027247	0.073774	0.05203	0	0.130775	0.063018	1.433405	0.027247	0.073774	0.815894	0	2.636102	0.016224	0	0.00024
SANTA CLA	2026	MH	Aggregate	Aggregate	DSL	1151.648	10425.3	115.1648	3.596484	0	0	0.063829	0	0	0.004	0.05586	0.066715	0	0	0.016	0.13034	964.1862	0	0	0.004499	0	0	0.151557	0	0	0.096864	0	0	0	0	0.110273	0	0	0	0	0	0	0.328457	0	0	0.009115	0	0
SANTA CLA	2026	MHDT	Aggregate	Aggregate	GAS	1687.725	86801.44	33768.01	0.226062	0.089038	0.342531	0.00127	0	0.000413	0.003	0.05586	0.001382	0	0.000449	0.012	0.13034	1607.82	503.7098	35.57567	0.007011	0.273723	0.034894	0.013789	0.008178	0.029559	0.032131	1.02093	0.179349	0.064867	0.352453	0.014504	0.026884	0.046886	1.489739	0.196365	0.064867	0.352453	0.014504	0.026884	0.704545	15.21187	3.914871	0.015911	0.004985	0.000352
SANTA CLA	2026	MHDT	Aggregate	Aggregate	DSL	10254.12	577160.2	101941.7	1.628767	5.068172	2.147618	0.007577	0.00351	0	0.003	0.05586	0.007919	0.003668	0	0.012	0.13034	967.4707	838.5754	0	0.00052	0.003382	0	0.152073	0.131812	0	0.011192	0.072819	0	0	0	0.012741	0.082899	0	0	0	0	0	0	0.116231	2.729189	0	0.00914	0.007922	0
SANTA CLA	2026	OBUS	Aggregate	Aggregate	GAS	507.9074	22731.23	10162.21	0.292264	0.065184	0.313239	0.001097	0	0.000236	0.003	0.05586	0.001193	0	0.000256	0.012	0.13034	1652.302	361.5422	24.97816	0.008515	0.201911	0.028115	0.016502	0.005795	0.026094	0.039151	0.748116	0.143279	0.027364	0.310267	0.016664	0.036978	0.057129	1.09165	0.156872	0.027364	0.310267	0.016664	0.036978	0.834386	5.785715	2.984205	0.016351	0.003578	0.000247
SANTA CLA	2026	OBUS	Aggregate	Aggregate	DSL	796.7643	52087.07	7352.266	1.959254	8.776183	2.213983	0.009877	0.002762	0	0.003	0.05586	0.010324	0.002887	0	0.012	0.13034	1122.18	1865.346	0	0.000584	0.026755	0	0.176391	0.293206	0	0.012574	0.576038	0	0	0	0.014314	0.655776	0	0	0	0	0	0	0.144399	9.689916	0	0.010602	0.017623	0
SANTA CLA	2026	SBUS	Aggregate	Aggregate	GAS	305.0164	13306.38	1220.066	0.347767	0.925925	0.597767	0.00119	0	0.000524	0.002	0.3192	0.001294	0	0.00057	0.008	0.7448	833.8886	2496.465	46.34384	0.008421	2.440565	0.056313	0.021096	0.088976	0.055917	0.041057	10.63268	0.320756	0.065141	0.427694	0.012263	0.026924	0.059911	15.51518	0.351188	0.065141	0.427694	0.012263	0.026924	0.883814	82.1872	7.947598	0.008252	0.024705	0.000459
SANTA CLA	2026	SBUS	Aggregate	Aggregate	DSL	1004.235	31497.44	11588.73	5.783794	41.00653	0.989807	0.036341	0.03731	0	0.003	0.3192	0.037984	0.038997	0	0.012	0.7448	1106.109	3641.859	0	0.004224	0.012401	0	0.173865	0.57245	0	0.090951	0.266981	0	0	0	0.10354	0.303937	0	0	0	0	0	0	0.265493	6.63799	0	0.01045	0.034406	0
SANTA CLA	2026	UBUS	Aggregate	Aggregate	GAS	8.434703	1061.776	33.73881	0.23219	0	0.781025	0.002209	0	0.000888	0.003	0.05586	0.002402	0	0.000966	0.012	0.13034	1956.429	0	88.80542	0.006971	0	0.111797	0.02141	0	0.072132	0.022728	0	0.468399	0.016436	0.092409	0.003318	0.006895	0.033164	0	0.512838	0.016436	0.092409	0.003318	0.006895	0.322483	0	8.852622	0.01936	0	0.000879
SANTA CLA	2026	UBUS	Aggregate	Aggregate	DSL	404.8528	43393.97	1619.411	0.799803	0	0	0.005629	0	0	0.008352	0.029636	0.005884	0	0	0.033407	0.06915	1509.977	0	0	0.076902	0	0	0.237347	0	0	0.001099	0	0	0	0	0.078484	0	0	0	0	0	0	0.130458	0	0	0.014275	0	0
SANTA CLA	2026	UBUS	Aggregate	Aggregate	NG	123.3704	15521.01	493.4817	0.495108	0	0	0.003218	0	0	0.008639	0.028227	0.003363	0	0	0.034558	0.065863	2036.46	0	0	6.510688	0	0	0.415146	0	0	0.093025	0	0	0	0	6.644635	0	0	0	0	0	0	50.63551	0	0	0	0	0

Attachment 4: Project Construction and Operation Dispersion Modeling Inputs and Risk Calculations

Construction Emissions and Health Risks

El Paseo Education Option 1 with Saratoga Site

El Paseo Option 1 Education & Saratoga, San Jose

Land Use	Year	Unmitigated DPM	DPM EMFAC2017	Unmitigated Emissions	Mitigated DPM	DPM EMFAC2017	Mitigated Emissions
El Paseo Option 1	2021	0.044	0.002	0.046	0.002	0.002	0.005
	2022	0.124	0.006	0.130	0.004	0.006	0.009
	2023	0.240	0.042	0.281	0.005	0.042	0.047
	2024	0.213	0.039	0.252	0.004	0.039	0.043
	2025	0.026	0.026	0.052	0.000	0.026	0.026
Saratoga	2021	0.033	0.002	0.035	0.002	0.002	0.004
	2022	0.038	0.005	0.043	0.002	0.005	0.007
	2023	0.037	0.004	0.042	0.001	0.004	0.006
	2024	0.016	0.003	0.019	0.001	0.003	0.004

Land Use	Year	Unmitigated Fug PM2.5	Fug PM2.5 EMFAC2017	Unmitigated Emissions	Mitigated Fug PM2.5	Fug PM2.5 EMFAC2017	Mitigated Emissions
El Paseo Option 1	2021	0.010	0.001	0.011	0.002	0.001	0.003
	2022	0.002	0.003	0.005	0.000	0.003	0.003
	2023	0.000	0.030	0.030	0.000	0.030	0.030
	2024	0.000	0.028	0.028	0.000	0.028	0.028
	2025	0.000	0.019	0.019	0.000	0.019	0.019
Saratoga	2021	0.007	0.001	0.008	0.001	0.001	0.002
	2022	0.006	0.003	0.009	0.001	0.003	0.004
	2023	0.000	0.003	0.003	0.000	0.003	0.003
	2024	0.000	0.002	0.002	0.000	0.002	0.002

El Paseo Option 1 Education & Saratoga, San Jose, CA

DPM Emissions and Modeling Emission Rates - Without Mitigation

Construction Year	Construction Activity	DPM (ton/year)	Source Type	No. Sources	DPM Emissions (lb/yr)	DPM Emissions (lb/hr)	DPM Emissions (g/s)	Emissions per Point Source (g/s)
2021	El Paseo Opt 1	0.0461	Point	312	92.2	0.02106	2.65E-03	8.50E-06
2021	Saratoga	0.0347	Point	139	69.4	0.02112	2.66E-03	1.91E-05
2022	El Paseo Opt 1	0.1299	Point	312	259.8	0.05932	7.47E-03	2.40E-05
2022	Saratoga	0.0430	Point	139	86.0	0.02618	3.30E-03	2.37E-05
2023	El Paseo Opt 1	0.2812	Point	312	562.4	0.12840	1.62E-02	5.19E-05
2023	Saratoga	0.0417	Point	139	83.3	0.02537	3.20E-03	2.30E-05
2024	El Paseo Opt 1	0.2521	Point	312	504.1	0.11510	1.45E-02	4.65E-05
2024	Saratoga	0.0185	Point	139	37.1	0.01129	1.42E-03	1.02E-05
2025	El Paseo Opt 1	0.0519	Point	312	103.9	0.02371	2.99E-03	9.58E-06
Total		***0.8991***			***1798.3***	***0.4315***	***0.0544***	

El Paseo Opt 1 Ed Construction Hours			*Saratoga Construction Hours*		
hr/day =	12	(7am - 7pm)	hr/day =	9	(8am - 5pm)
days/yr =	365		days/yr =	365	
hours/year =	4380		hours/year =	3285	

El Paseo Option 1 Education & Saratoga, San Jose, CA

PM2.5 Fugitive Dust Emissions for Modeling - Without Mitigation

Construction Year	Construction Activity	Area Source	PM2.5 Emissions (ton/year)	PM2.5 Emissions (lb/yr)	PM2.5 Emissions (lb/hr)	PM2.5 Emissions (g/s)	Modeled Area (m^2)	PM2.5 Emission Rate $g/s/m^2$
2021	El Paseo Opt 1	FUG_EP1	0.0107	21.4	0.0049	6.15E-04	30,964	**1.99E-08**
2021	Saratoga	FUG_SAR	0.0080	16.0	0.0049	6.14E-04	7,006	**8.76E-08**
2022	El Paseo Opt 1	FUG_EP1	0.0051	10.3	0.0024	2.96E-04	30,964	**9.57E-09**
2022	Saratoga	FUG_SAR	0.0087	17.5	0.0053	6.70E-04	7,006	**9.56E-08**
2023	El Paseo Opt 1	FUG_EP1	0.0296	59.2	0.0135	1.70E-03	30,964	**5.50E-08**
2023	Saratoga	FUG_SAR	0.0030	6.0	0.0018	2.30E-04	7,006	**3.29E-08**
2024	El Paseo Opt 1	FUG_EP1	0.0284	56.7	0.0129	1.63E-03	30,964	**5.27E-08**
2024	Saratoga	FUG_SAR	0.0020	4.0	0.0012	1.55E-04	7,006	**2.22E-08**
2025	El Paseo Opt 1	FUG_EP1	0.0185	37.0	0.0085	1.07E-03	30,964	**3.44E-08**
Total			***0.1141***	***228.1***	***0.0554***	***0.0070***		

El Paseo Opt 1 Ed Construction Hours			*Saratoga Construction Hours*		
hr/day =	12	(7am - 7pm)	hr/day =	9	(8am - 5pm)
days/yr =	365		days/yr =	365	
hours/year =	4380		hours/year =	3285	

DPM Emissions and Modeling Emission Rates - Unmitigated

Construction Year	Construction Activity	DPM (ton/year)	Source Type	No. Sources	DPM Emissions (lb/yr)	DPM Emissions (lb/hr)	DPM Emissions (g/s)	Emissions per Point Source (g/s)
2021	El Paseo Opt 1	0.0045	Point	312	9.1	0.00207	2.61E-04	8.37E-07
2021	Saratoga	0.0037	Point	139	7.4	0.00226	2.85E-04	2.05E-06
2022	El Paseo Opt 1	0.0095	Point	312	19.0	0.00433	5.45E-04	1.75E-06
2022	Saratoga	0.0067	Point	139	13.3	0.00406	5.11E-04	3.68E-06
2023	El Paseo Opt 1	0.0469	Point	312	93.8	0.02141	2.70E-03	8.65E-06
2023	Saratoga	0.0055	Point	139	11.1	0.00337	4.24E-04	3.05E-06
2024	El Paseo Opt 1	0.0427	Point	312	85.3	0.01948	2.45E-03	7.87E-06
2024	Saratoga	0.0035	Point	139	7.1	0.00215	2.71E-04	1.95E-06
2025	El Paseo Opt 1	0.0259	Point	312	51.7	0.01181	1.49E-03	4.77E-06
Total		***0.1489***			***297.8***	***0.0709***	***0.0089***	

El Paseo Opt 1 Ed Construction Hours

hr/day =	12	(7am - 7pm)
days/yr =	365	
hours/year =	4380	

Saratoga Construction Hours

hr/day =	9	(8am - 5pm)
days/yr =	365	
hours/year =	3285	

PM2.5 Fugitive Dust Emissions for Modeling - Unmitigated

Construction Year	Construction Area	Area Source	PM2.5 Emissions (ton/year)	PM2.5 Emissions (lb/yr)	PM2.5 Emissions (lb/hr)	PM2.5 Emissions (g/s)	Modeled Area (m^2)	PM2.5 Emission Rate $g/s/m^2$
2021	El Paseo Opt 1	FUG_EP1	0.0028	5.7	0.0013	1.64E-04	30,964	**5.29E-09**
2021	Saratoga	FUG_SAR	0.0024	4.7	0.0014	1.81E-04	7,006	**2.59E-08**
2022	El Paseo Opt 1	FUG_EP1	0.0033	6.6	0.0015	1.89E-04	30,964	**6.09E-09**
2022	Saratoga	FUG_SAR	0.0041	8.2	0.0025	3.16E-04	7,006	**4.51E-08**
2023	El Paseo Opt 1	FUG_EP1	0.0296	59.2	0.0135	1.70E-03	30,964	**5.50E-08**
2023	Saratoga	FUG_SAR	0.0030	6.0	0.0018	2.30E-04	7,006	**3.29E-08**
2024	El Paseo Opt 1	FUG_EP1	0.0284	56.7	0.0129	1.63E-03	30,964	**5.27E-08**
2024	Saratoga	FUG_SAR	0.0020	4.0	0.0012	1.55E-04	7,006	**2.22E-08**
2025	El Paseo Opt 1	FUG_EP1	0.0185	37.0	0.0085	1.07E-03	30,964	**3.44E-08**
Total			***0.09410***	***188.2***	***0.0447***	***0.0056***		

El Paseo Opt 1 Ed Construction Hours

hr/day =	12	(7am - 7pm)
days/yr =	365	
hours/year =	4380	

Saratoga Construction Hours

hr/day =	9	(8am - 5pm)
days/yr =	365	
hours/year =	3285	

El Paseo Option 1 Education & Saratoga, San Jose, CA - Construction Health Impact Sum

Maximum Impacts at MEI Location - Without Mitigation

Emissions Year	Maximum Concentrations: Exhaust PM10/DPM (µg/m^3)	Maximum Concentrations: Fugitive PM2.5 (µg/m^3)	Cancer Risk (per million): Infant/Child	Cancer Risk (per million): Adult	Hazard Index (-)	Maximum Annual PM2.5 Concentration (µg/m^3)
2023	0.1982	0.0342	29.97	0.57	0.04	0.23
2024	0.1750	0.0326	24.43	0.50	0.04	0.21
2025	0.0355	0.0212	0.66	0.10	0.01	0.06
Total	-	-	**55.06**	**1.17**	-	-
Maximum	0.1982	0.0342	**-**	**-**	**0.04**	**0.23**

Maximum Impacts at MEI Location - With Mitigation

Emissions Year	Maximum Concentrations: Exhaust PM10/DPM (µg/m^3)	Maximum Concentrations: Fugitive PM2.5 (µg/m^3)	Cancer Risk (per million): Infant/Child	Cancer Risk (per million): Adult	Hazard Index (-)	Maximum Annual PM2.5 Concentration (µg/m^3)
2023	0.0329	0.0342	4.97	0.09	0.01	0.07
2024	0.0297	0.0326	4.14	0.09	0.01	0.06
2025	0.0177	0.0211	0.33	0.05	0.00	0.04
Total	-	-	**9.44**	**0.23**	-	-
Maximum	0.0329	0.0342	**-**	**-**	**0.01**	**0.07**

- Enhanced BMPs, Tier 4 Final Engine, and Electric Crane, Aerial Lifts, and Portable Equipment Mitigation

El Paseo Option 1 Education & Saratoga, San Jose, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction 2021-2025
Impacts at Off-Site MEI Location - 1.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information				Adult - Exposure Information						
							Modeled				Maximum		
Exposure	Exposure Duration		DPM Conc (ug/m3)		Age Sensitivity	Infant/Child Cancer Risk	DPM Conc (ug/m3)		Age Sensitivity	Adult Cancer Risk	Hazard	Fugitive	Total
Year	(years)	Age	Year	Annual	Factor	(per million)	Year	Annual	Factor	(per million)	Index	PM2.5	PM2.5
0	1	-0.25 - 0*	2021	0.0365	10	1.69	2021	0.0365	-	-			
1	1	0 - 1	2021	0.0365	10	5.09	2021	0.0365	1	0.10	0.0073	0.0134	0.0498
2	1	1 - 2	2022	0.0950	10	13.26	2022	0.0950	1	0.27	0.0190	0.0073	0.1022
3	1	2 - 3	2023	0.1982	3	3.69	2023	0.1982	1	0.57	0.0396	0.0342	0.2319
4	1	3 - 4	2024	0.1750	3	3.26	2024	0.1750	1	0.50	0.0350	0.0326	0.2071
5	1	4 - 5	2025	0.0355	3	0.66	2025	0.0355	1	0.10	0.0071	0.0212	0.0562
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						**27.7**				**1.55**			

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction 2023-2025 - Maximum Risk
Impacts at Off-Site MEI Location - 1.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information				Adult - Exposure Information						
							Modeled				Maximum		
Exposure	Exposure Duration		DPM Conc (ug/m3)		Age Sensitivity	Infant/Child Cancer Risk	DPM Conc (ug/m3)		Age Sensitivity	Adult Cancer Risk	Hazard	Fugitive	Total
Year	(years)	Age	Year	Annual	Factor	(per million)	Year	Annual	Factor	(per million)	Index	PM2.5	PM2.5
0	0.25	-0.25 - 0*	2023	0.1982	10	2.29	2023	0.1982	-	-			
1	1	0 - 1	2023	0.1982	10	27.68	2023	0.1982	1	0.57	0.0396	0.0342	0.2319
2	1	1 - 2	2024	0.1750	10	24.43	2024	0.1750	1	0.50	0.0350	0.0326	0.2071
3	1	2 - 3	2025	0.0355	3	0.66	2025	0.0355	1	0.10	0.0071	0.0212	0.0562
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						**55.1**				**1.17**			

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Construction Impacts - With Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction 2021-2025
Impacts at Off-Site MEI Location - 1.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information				Adult - Exposure Information				Maximum		
						Infant/Child		Modeled		Adult			
Exposure	Exposure		DPM Conc (ug/m3)		Age	Cancer	DPM Conc (ug/m3)		Age	Cancer	Hazard	Fugitive	Total
Year	Duration (years)	Age	Year	Annual	Sensitivity Factor	Risk (per million)	Year	Annual	Sensitivity Factor	Risk (per million)	Index	PM2.5	PM2.5
0	1	-0.25 - 0*	2021	0.0036	10	0.17	2021	0.0036	-	-			
1	1	0 - 1	2021	0.0036	10	0.51	2021	0.0036	1	0.01	0.001	0.0036	0.0072
2	1	1 - 2	2022	0.0074	10	1.04	2022	0.0074	1	0.02	0.001	0.0044	0.0118
3	1	2 - 3	2023	0.0329	3	0.61	2023	0.0329	1	0.09	0.007	0.0342	0.0665
4	1	3 - 4	2024	0.0297	3	0.55	2024	0.0297	1	0.09	0.006	0.0326	0.0618
5	1	4 - 5	2025	0.0177	3	0.33	2025	0.0177	1	0.05	0.004	0.0211	0.0384
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						**3.2**				**0.26**			

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Construction Impacts - With Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction 2023-2025 - Maximum Risk Impacts at Off-Site MEI Location - 1.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information				Adult - Exposure Information				Maximum		
			DPM Conc (ug/m3)		Age	Infant/Child	Modeled DPM Conc (ug/m3)		Age	Adult			
Exposure Year	Exposure Duration (years)	Age	Year	Annual	Sensitivity Factor	Cancer Risk (per million)	Year	Annual	Sensitivity Factor	Cancer Risk (per million)	Hazard Index	Fugitive PM2.5	Total PM2.5
0	0.25	-0.25 - 0*	2023	0.0329	10	0.38	2023	0.0329	-	-			
1	1	0 - 1	2023	0.0329	10	4.59	2023	0.0329	1	0.09	0.007	0.0342	0.0665
2	1	1 - 2	2024	0.0297	10	4.14	2024	0.0297	1	0.09	0.006	0.0326	0.0618
3	1	2 - 3	2025	0.0177	3	0.33	2025	0.0177	1	0.05	0.004	0.0211	0.0384
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						**9.4**				**0.23**			

* Third trimester of pregnancy

El Paseo Non-Education Option 2 with Saratoga Site

El Paseo Option 2 No Education & Saratoga, San Jose

Land Use	Year	Unmitigated DPM	DPM EMFAC2017	Unmitigated Emissions	Mitigated DPM	DPM EMFAC2017	Mitigated Emissions
El Paseo Option 1	2021	0.036	0.002	0.038	0.002	0.002	0.004
	2022	0.067	0.019	0.086	0.003	0.019	0.021
	2023	0.221	0.027	0.248	0.005	0.027	0.032
	2024	0.120	0.023	0.143	0.002	0.023	0.025
	2025	0.058	0.017	0.075	0.000	0.017	0.018
Saratoga	2021	0.033	0.002	0.035	0.002	0.002	0.004
	2022	0.038	0.005	0.043	0.002	0.005	0.007
	2023	0.037	0.004	0.042	0.001	0.004	0.006
	2024	0.016	0.003	0.019	0.001	0.003	0.004

Land Use	Year	Unmitigated Fug PM2.5	Fug PM2.5 EMFAC2017	Unmitigated Emissions	Mitigated Fug PM2.5	Fug PM2.5 EMFAC2017	Mitigated Emissions
El Paseo Option 1	2021	0.010	0.001	0.011	0.002	0.001	0.003
	2022	0.003	0.012	0.015	0.001	0.012	0.012
	2023	0.000	0.019	0.019	0.000	0.019	0.019
	2024	0.000	0.017	0.017	0.000	0.017	0.017
	2025	0.000	0.013	0.013	0.000	0.013	0.013
Saratoga	2021	0.007	0.001	0.008	0.001	0.001	0.002
	2022	0.006	0.003	0.009	0.001	0.003	0.004
	2023	0.000	0.003	0.003	0.000	0.003	0.003
	2024	0.000	0.002	0.002	0.000	0.002	0.002

El Paseo Option 2 No Education & Saratoga, San Jose, CA

DPM Emissions and Modeling Emission Rates - Without Mitigation

Construction Year	Construction Activity	DPM (ton/year)	Source Type	No. Sources	DPM Emissions (lb/yr)	(lb/hr)	(g/s)	Emissions per Point Source (g/s)
2021	El Paseo Opt 2	0.0383	Point	312	76.6	0.02331	2.94E-03	9.41E-06
2021	Saratoga	0.0347	Point	139	69.4	0.02112	2.66E-03	1.91E-05
2022	El Paseo Opt 2	0.0856	Point	312	171.2	0.05211	6.57E-03	2.10E-05
2022	Saratoga	0.0430	Point	139	86.0	0.02618	3.30E-03	2.37E-05
2023	El Paseo Opt 2	0.2475	Point	312	495.0	0.15069	1.90E-02	6.09E-05
2023	Saratoga	0.0417	Point	139	83.3	0.02537	3.20E-03	2.30E-05
2024	El Paseo Opt 2	0.1427	Point	312	285.4	0.08689	1.09E-02	3.51E-05
2024	Saratoga	0.0185	Point	139	37.1	0.01129	1.42E-03	1.02E-05
2025	El Paseo Opt 2	0.0748	Point	312	149.7	0.04556	5.74E-03	1.84E-05
Total		***0.7268***			***1453.6***	***0.4425***	***0.0558***	

El Paseo Opt 2 No Ed Construction Hours			*Saratoga Construction Hours*		
hr/day =	9	(8am - 5pm)	hr/day =	9	(8am - 5pm)
days/yr =	365		days/yr =	365	
hours/year =	3285		hours/year =	3285	

El Paseo Option 2 No Education & Saratoga, San Jose, CA

PM2.5 Fugitive Dust Emissions for Modeling - Without Mitigation

Construction Year	Construction Activity	Area Source	PM2.5 Emissions (ton/year)	(lb/yr)	(lb/hr)	(g/s)	Modeled Area (m^2)	PM2.5 Emission Rate g/s/m^2
2021	El Paseo Opt 2	FUG_EP1	0.0112	22.3	0.0068	8.57E-04	30,964	**2.77E-08**
2021	Saratoga	FUG_SAR	0.0080	16.0	0.0049	6.14E-04	7,006	**8.76E-08**
2022	El Paseo Opt 2	FUG_EP1	0.0147	29.4	0.0089	1.13E-03	30,964	**3.64E-08**
2022	Saratoga	FUG_SAR	0.0087	17.5	0.0053	6.70E-04	7,006	**9.56E-08**
2023	El Paseo Opt 2	FUG_EP1	0.0189	37.9	0.0115	1.45E-03	30,964	**4.69E-08**
2023	Saratoga	FUG_SAR	0.0030	6.0	0.0018	2.30E-04	7,006	**3.29E-08**
2024	El Paseo Opt 2	FUG_EP1	0.0170	34.0	0.0104	1.31E-03	30,964	**4.22E-08**
2024	Saratoga	FUG_SAR	0.0020	4.0	0.0012	1.55E-04	7,006	**2.22E-08**
2025	El Paseo Opt 2	FUG_EP1	0.0128	25.7	0.0078	9.84E-04	30,964	**3.18E-08**
Total			***0.0964***	***192.8***	***0.0587***	***0.0074***		

El Paseo Opt 2 No Ed Construction Hours			*Saratoga Construction Hours*		
hr/day =	9	(8am - 5pm)	hr/day =	9	(8am - 5pm)
days/yr =	365		days/yr =	365	
hours/year =	3285		hours/year =	3285	

DPM Emissions and Modeling Emission Rates - Unmitigated

Construction Year	Construction Activity	DPM (ton/year)	Source Type	No. Sources	DPM Emissions (lb/yr)	DPM Emissions (lb/hr)	DPM Emissions (g/s)	Emissions per Point Source (g/s)
2021	El Paseo Opt 2	0.0041	Point	312	8.1	0.00248	3.12E-04	1.00E-06
2021	Saratoga	0.0037	Point	139	7.4	0.00226	2.85E-04	2.05E-06
2022	El Paseo Opt 2	0.0214	Point	312	42.9	0.01305	1.64E-03	5.27E-06
2022	Saratoga	0.0067	Point	139	13.3	0.00406	5.11E-04	3.68E-06
2023	El Paseo Opt 2	0.0315	Point	312	63.0	0.01919	2.42E-03	7.75E-06
2023	Saratoga	0.0055	Point	139	11.1	0.00337	4.24E-04	3.05E-06
2024	El Paseo Opt 2	0.0251	Point	312	50.2	0.01530	1.93E-03	6.18E-06
2024	Saratoga	0.0035	Point	139	7.1	0.00215	2.71E-04	1.95E-06
2025	El Paseo Opt 2	0.0178	Point	312	35.6	0.01084	1.37E-03	4.38E-06
Total		***0.1194***			***238.8***	***0.0727***	***0.0092***	

El Paseo Opt 2 No Ed Construction Hours

hr/day =	9	(8am - 5pm)
days/yr =	365	
hours/year =	3285	

Saratoga Construction Hours

hr/day =	9	(8am - 5pm)
days/yr =	365	
hours/year =	3285	

PM2.5 Fugitive Dust Emissions for Modeling - Unmitigated

Construction Year	Construction Area	Area Source	PM2.5 Emissions (ton/year)	PM2.5 Emissions (lb/yr)	PM2.5 Emissions (lb/hr)	PM2.5 Emissions (g/s)	Modeled Area (m^2)	PM2.5 Emission Rate $g/s/m^2$
2021	El Paseo Opt 2	FUG_EP1	0.0029	5.7	0.0017	2.20E-04	30,964	**7.10E-09**
2021	Saratoga	FUG_SAR	0.0024	4.7	0.0014	1.81E-04	7,006	**2.59E-08**
2022	El Paseo Opt 2	FUG_EP1	0.0124	24.8	0.0075	9.51E-04	30,964	**3.07E-08**
2022	Saratoga	FUG_SAR	0.0041	8.2	0.0025	3.16E-04	7,006	**4.51E-08**
2023	El Paseo Opt 2	FUG_EP1	0.0189	37.9	0.0115	1.45E-03	30,964	**4.69E-08**
2023	Saratoga	FUG_SAR	0.0030	6.0	0.0018	2.30E-04	7,006	**3.29E-08**
2024	El Paseo Opt 2	FUG_EP1	0.0170	34.0	0.0104	1.31E-03	30,964	**4.22E-08**
2024	Saratoga	FUG_SAR	0.0020	4.0	0.0012	1.55E-04	7,006	**2.22E-08**
2025	El Paseo Opt 2	FUG_EP1	0.0128	25.7	0.0078	9.84E-04	30,964	**3.18E-08**
Total			***0.07556***	***151.1***	***0.0460***	***0.0058***		

El Paseo Opt 2 No Ed Construction Hours

hr/day =	9	(8am - 5pm)
days/yr =	365	
hours/year =	3285	

Saratoga Construction Hours

hr/day =	9	(8am - 5pm)
days/yr =	365	
hours/year =	3285	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Construction Health Impact Su

Maximum Impacts at MEI Location - Without Mitigation

Emissions Year	Maximum Concentrations: Exhaust PM10/DPM ($\mu g/m^3$)	Maximum Concentrations: Fugitive PM2.5 ($\mu g/m^3$)	Cancer Risk (per million): Infant/Child	Cancer Risk (per million): Adult	Hazard Index (-)	Maximum Annual PM2.5 Concentration ($\mu g/m^3$)
2023	0.1514	0.0182	22.89	0.43	0.03	0.17
2024	0.0865	0.0163	12.08	0.25	0.02	0.10
2025	0.0440	0.0120	0.82	0.13	0.01	0.06
Total	-	-	**35.79**	**0.81**	-	-
Maximum	0.1514	0.0182	**-**	**-**	**0.03**	**0.17**

Maximum Impacts at MEI Location - With Mitigation

Emissions Year	Maximum Concentrations: Exhaust PM10/DPM ($\mu g/m^3$)	Maximum Concentrations: Fugitive PM2.5 ($\mu g/m^3$)	Cancer Risk (per million): Infant/Child	Cancer Risk (per million): Adult	Hazard Index (-)	Maximum Annual PM2.5 Concentration ($\mu g/m^3$)
2023	0.0193	0.0182	2.92	0.06	0.004	0.04
2024	0.0153	0.0163	2.13	0.04	0.003	0.03
2025	0.0105	0.0120	0.19	0.03	0.002	0.02
Total	-	-	**5.25**	**0.13**	-	-
Maximum	0.0193	0.0182	**-**	**-**	**0.004**	**0.04**

- Enhanced BMPs, Tier 4 Final Engine, and Electric Crane, Aerial Lifts, and Portable Equipment Mitigation

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction 2021-2025
Impacts at Off-Site MEI Location - 1.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information				Adult - Exposure Information						
							Modeled				Maximum		
Exposure	Exposure Duration		DPM Conc (ug/m3)		Age Sensitivity	Infant/Child Cancer Risk	DPM Conc (ug/m3)		Age Sensitivity	Adult Cancer Risk	Hazard	Fugitive	Total
Year	(years)	Age	Year	Annual	Factor	(per million)	Year	Annual	Factor	(per million)	Index	PM2.5	PM2.5
0	1	-0.25 - 0*	2021	0.0275	10	1.27	2021	0.0275	-	-			
1	1	0 - 1	2021	0.0275	10	3.83	2021	0.0275	1	0.08	0.0055	0.0116	0.0389
2	1	1 - 2	2022	0.0565	10	7.88	2022	0.0565	1	0.16	0.0113	0.0150	0.0712
3	1	2 - 3	2023	0.1514	3	2.82	2023	0.1514	1	0.43	0.0303	0.0182	0.1691
4	1	3 - 4	2024	0.0865	3	1.61	2024	0.0865	1	0.25	0.0173	0.0163	0.1023
5	1	4 - 5	2025	0.0440	3	0.82	2025	0.0440	1	0.13	0.0088	0.0120	0.0556
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						**18.2**				**1.05**			

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction 2023-2025 - Maximum Risk Impacts at Off-Site MEI Location - 1.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information				Adult - Exposure Information						
						Infant/Child		Modeled		Adult	Adult	Maximum		
Exposure	Exposure Duration		DPM Conc (ug/m3)		Age Sensitivity	Cancer Risk	DPM Conc (ug/m3)		Age Sensitivity	Cancer Risk	Hazard	Fugitive	Total
Year	(years)	Age	Year	Annual	Factor	(per million)	Year	Annual	Factor	(per million)	Index	PM2.5	PM2.5
0	0.25	-0.25 - 0*	2023	0.1514	10	1.75	2023	0.1514	-	-			
1	1	0 - 1	2023	0.1514	10	21.14	2023	0.1514	1	0.43	0.0303	0.0182	0.1691
2	1	1 - 2	2024	0.0865	10	12.08	2024	0.0865	1	0.25	0.0173	0.0163	0.1023
3	1	2 - 3	2025	0.0440	3	0.82	2025	0.0440	1	0.13	0.0088	0.0120	0.0556
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						**35.8**				**0.81**			

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Construction Impacts - With Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction 2021-2025
Impacts at Off-Site MEI Location - 1.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information: DPM Conc (ug/m3) Year	DPM Conc (ug/m3) Annual	Age Sensitivity Factor	Infant/Child Cancer Risk (per million)	Adult - Exposure Information: Modeled DPM Conc (ug/m3) Year	DPM Conc (ug/m3) Annual	Age Sensitivity Factor	Adult Cancer Risk (per million)	Maximum Hazard Index	Maximum Fugitive PM2.5	Maximum Total PM2.5
0	1	-0.25 - 0*	2021	0.0029	10	0.14	2021	0.0029	-	-			
1	1	0 - 1	2021	0.0029	10	0.41	2021	0.0029	1	0.01	0.001	0.0030	0.0059
2	1	1 - 2	2022	0.0136	10	1.89	2022	0.0136	1	0.04	0.003	0.0122	0.0255
3	1	2 - 3	2023	0.0193	3	0.36	2023	0.0193	1	0.06	0.004	0.0182	0.0370
4	1	3 - 4	2024	0.0153	3	0.28	2024	0.0153	1	0.04	0.003	0.0163	0.0311
5	1	4 - 5	2025	0.0105	3	0.19	2025	0.0105	1	0.03	0.002	0.0120	0.0222
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						**3.3**				**0.18**			

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Construction Impacts - With Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction 2023-2025 - Maximum Risk Impacts at Off-Site MEI Location - 1.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information				Adult - Exposure Information				Maximum		
			DPM Conc (ug/m3)		Age	Infant/Child	Modeled DPM Conc (ug/m3)		Age	Adult			
Exposure Year	Exposure Duration (years)	Age	Year	Annual	Sensitivity Factor	Cancer Risk (per million)	Year	Annual	Sensitivity Factor	Cancer Risk (per million)	Hazard Index	Fugitive PM2.5	Total PM2.5
0	0.25	-0.25 - 0*	2023	0.0193	10	0.22	2023	0.0193	-	-			
1	1	0 - 1	2023	0.0193	10	2.70	2023	0.0193	1	0.06	0.004	0.0182	0.0370
2	1	1 - 2	2024	0.0153	10	2.13	2024	0.0153	1	0.04	0.003	0.0163	0.0311
3	1	2 - 3	2025	0.0105	3	0.19	2025	0.0105	1	0.03	0.002	0.0120	0.0222
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						**5.2**				**0.13**			

* Third trimester of pregnancy

Project Traffic Emissions and Health Risks

CT-EMFAC2017 Emission Factors - 2026

File Name: El Paseo Project Operation - Santa Clara (SF) - 2026 - Annual.EF
CT-EMFAC2017 Version: 1.0.2.27401
Run Date: 3/12/2021 12:13
Area: Santa Clara (SF)
Analysis Year: 2026
Season: Annual

Vehicle Category	VMT Fraction Across Category	Diesel VMT Fraction Within Category	Gas VMT Fraction Within Category
Truck 1	0.015	0.508	0.492
Truck 2	0.02	0.935	0.049
Non-Truck	0.965	0.015	0.949

Road Type: Major/Collector
Silt Loading Factor: CARB 0.032 g/m2
Precipitation Correction: CARB P = 64 day: N = 365 days

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph
PM2.5	0.008121	0.005263	0.003569	0.002552	0.001935	0.001561	0.001341	0.001228	0.001194	0.001227	0.001321
TOG	0.164195	0.107707	0.072399	0.051278	0.038871	0.031092	0.026106	0.02299	0.021228	0.020554	0.02088
Diesel PM	0.000735	0.000612	0.000478	0.000385	0.000334	0.000314	0.000317	0.000341	0.000385	0.000449	0.000531

Fleet Average Running Loss Emission Factors (grams/veh-hour)

Pollutant Name	Emission Factor
TOG	1.210741

Fleet Average Tire Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.002109

Fleet Average Brake Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.016799

Fleet Average Road Dust Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.014818

==========END==========

El Paseo Education Option 1 with Saratoga Site

El Paseo Option 1 Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Lawrence Expressway/Quito Road
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2026 16.9728

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
DPM_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	55.7	3.4	Varied	1,340	19,558	210,518	2.548E-10	1.879E-10	6.8	3.16
DPM_SB_LAW	Lawrence Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	55.7	3.4	Varied	1,340	19,281	207,540	2.548E-10	1.879E-10	6.8	3.16
									Total	2,679						

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle (g/VMT)	0.00045	0.000341		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - DPM_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	53	4.76E-06	9	6.44%	86	5.85E-06	17	5.53%	74	5.02E-06
2	2.67%	36	3.19E-06	10	7.40%	99	8.85E-06	18	3.14%	42	2.85E-06
3	2.84%	38	3.40E-06	11	6.32%	85	7.55E-06	19	2.35%	31	2.81E-06
4	3.30%	44	3.94E-06	12	6.88%	92	8.23E-06	20	0.86%	12	1.03E-06
5	2.16%	29	2.58E-06	13	6.27%	84	7.50E-06	21	3.08%	41	3.68E-06
6	3.30%	44	3.94E-06	14	6.21%	83	7.43E-06	22	4.21%	56	5.04E-06
7	6.03%	81	7.21E-06	15	5.13%	69	6.14E-06	23	2.62%	35	3.14E-06
8	4.56%	61	4.15E-06	16	3.88%	52	4.64E-06	24	0.85%	11	1.02E-06
								Total		1,340	

2026 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.98%	53	4.69E-06	9	6.44%	86	5.77E-06	17	5.53%	74	4.95E-06
2	2.67%	36	3.15E-06	10	7.40%	99	8.72E-06	18	3.14%	42	2.81E-06
3	2.84%	38	3.35E-06	11	6.32%	85	7.45E-06	19	2.35%	31	2.77E-06
4	3.30%	44	3.89E-06	12	6.88%	92	8.12E-06	20	0.86%	12	1.02E-06
5	2.16%	29	2.55E-06	13	6.27%	84	7.39E-06	21	3.08%	41	3.63E-06
6	3.30%	44	3.89E-06	14	6.21%	83	7.32E-06	22	4.21%	56	4.97E-06
7	6.03%	81	7.11E-06	15	5.13%	69	6.05E-06	23	2.62%	35	3.09E-06
8	4.56%	61	4.09E-06	16	3.88%	52	4.58E-06	24	0.85%	11	1.01E-06
								Total		1,340	

El Paseo Option 1 Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Lawrence Expressway/Quito Road
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
PM2.5_NB_LAW	Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	1,340	19,558	210,518	6.964E-10	5.135E-10	2.6	1.21
PM2.5_SB_LAW	Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	1,340	19,281	207,540	6.964E-10	5.135E-10	2.6	1.21
									Total	2,679						

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle (g/VMT)	0.001227	0.00123		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - PM2.5_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	15	3.76E-06	9	7.11%	95	2.33E-05	17	7.38%	99	2.42E-05
2	0.42%	6	1.37E-06	10	4.39%	59	1.43E-05	18	8.18%	110	2.67E-05
3	0.41%	5	1.33E-06	11	4.66%	62	1.52E-05	19	5.70%	76	1.86E-05
4	0.26%	3	8.52E-07	12	5.89%	79	1.92E-05	20	4.27%	57	1.40E-05
5	0.50%	7	1.63E-06	13	6.15%	82	2.01E-05	21	3.26%	44	1.07E-05
6	0.90%	12	2.96E-06	14	6.04%	81	1.97E-05	22	3.30%	44	1.08E-05
7	3.79%	51	1.24E-05	15	7.01%	94	2.29E-05	23	2.46%	33	8.05E-06
8	7.76%	104	2.54E-05	16	7.14%	96	2.33E-05	24	1.87%	25	6.10E-06
								Total		1,340	

2026 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM2.5_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	15	3.70E-06	9	7.11%	95	2.29E-05	17	7.38%	99	2.38E-05
2	0.42%	6	1.36E-06	10	4.39%	59	1.41E-05	18	8.18%	110	2.64E-05
3	0.41%	5	1.31E-06	11	4.66%	62	1.50E-05	19	5.70%	76	1.84E-05
4	0.26%	3	8.40E-07	12	5.89%	79	1.90E-05	20	4.27%	57	1.38E-05
5	0.50%	7	1.61E-06	13	6.15%	82	1.98E-05	21	3.26%	44	1.05E-05
6	0.90%	12	2.91E-06	14	6.04%	81	1.95E-05	22	3.30%	44	1.06E-05
7	3.79%	51	1.22E-05	15	7.01%	94	2.26E-05	23	2.46%	33	7.94E-06
8	7.76%	104	2.50E-05	16	7.14%	96	2.30E-05	24	1.87%	25	6.02E-06
								Total		1,340	

El Paseo Option 1 Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Lawrence Expressway/Quito Road
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEXH_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	1,340	19,558	210,518	1.167E-08	8.602E-09	2.6	1.21
TEXH_SB_LAW	Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	1,340	19,281	207,540	1.167E-08	8.602E-09	2.6	1.21
									Total	2,679						

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle (g/VMT)	0.02055	0.02299		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	15	6.29E-05	9	7.11%	95	4.36E-04	17	7.38%	99	4.52E-04
2	0.42%	6	2.30E-05	10	4.39%	59	2.40E-04	18	8.18%	110	5.01E-04
3	0.41%	5	2.22E-05	11	4.66%	62	2.55E-04	19	5.70%	76	3.12E-04
4	0.26%	3	1.43E-05	12	5.89%	79	3.22E-04	20	4.27%	57	2.34E-04
5	0.50%	7	2.73E-05	13	6.15%	82	3.37E-04	21	3.26%	44	1.78E-04
6	0.90%	12	4.95E-05	14	6.04%	81	3.31E-04	22	3.30%	44	1.81E-04
7	3.79%	51	2.07E-04	15	7.01%	94	3.84E-04	23	2.46%	33	1.35E-04
8	7.76%	104	4.75E-04	16	7.14%	96	3.91E-04	24	1.87%	25	1.02E-04
								Total		1,340	

2026 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	15	6.21E-05	9	7.11%	95	4.29E-04	17	7.38%	99	4.46E-04
2	0.42%	6	2.27E-05	10	4.39%	59	2.37E-04	18	8.18%	110	4.94E-04
3	0.41%	5	2.19E-05	11	4.66%	62	2.52E-04	19	5.70%	76	3.08E-04
4	0.26%	3	1.41E-05	12	5.89%	79	3.18E-04	20	4.27%	57	2.31E-04
5	0.50%	7	2.69E-05	13	6.15%	82	3.32E-04	21	3.26%	44	1.76E-04
6	0.90%	12	4.88E-05	14	6.04%	81	3.26E-04	22	3.30%	44	1.78E-04
7	3.79%	51	2.04E-04	15	7.01%	94	3.79E-04	23	2.46%	33	1.33E-04
8	7.76%	104	4.69E-04	16	7.14%	96	3.85E-04	24	1.87%	25	1.01E-04
								Total		1,340	

El Paseo Option 1 Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Lawrence Expressway/Quito Road
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEVAP_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	1,340	19,558	210,518	1.374E-08	1.013E-08	2.6	1.21
TEVAP_SB_LAW	Lawrence Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	1,340	19,281	207,540	1.374E-08	1.013E-08	2.6	1.21
									Total	2,679						

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle per Hour (g/hour)	1.21074	1.21074		
Emissions per Vehicle per Mile (g/VMT)	0.02421	0.03027		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	15	7.42E-05	9	7.11%	95	5.74E-04	17	7.38%	99	5.95E-04
2	0.42%	6	2.71E-05	10	4.39%	59	2.83E-04	18	8.18%	110	6.59E-04
3	0.41%	5	2.62E-05	11	4.66%	62	3.01E-04	19	5.70%	76	3.68E-04
4	0.26%	3	1.68E-05	12	5.89%	79	3.80E-04	20	4.27%	57	2.76E-04
5	0.50%	7	3.22E-05	13	6.15%	82	3.97E-04	21	3.26%	44	2.10E-04
6	0.90%	12	5.83E-05	14	6.04%	81	3.89E-04	22	3.30%	44	2.13E-04
7	3.79%	51	2.44E-04	15	7.01%	94	4.52E-04	23	2.46%	33	1.59E-04
8	7.76%	104	6.26E-04	16	7.14%	96	4.61E-04	24	1.87%	25	1.20E-04
								Total		1,340	

2026 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	15	7.31E-05	9	7.11%	95	5.65E-04	17	7.38%	99	5.87E-04
2	0.42%	6	2.68E-05	10	4.39%	59	2.79E-04	18	8.18%	110	6.50E-04
3	0.41%	5	2.58E-05	11	4.66%	62	2.97E-04	19	5.70%	76	3.62E-04
4	0.26%	3	1.66E-05	12	5.89%	79	3.75E-04	20	4.27%	57	2.72E-04
5	0.50%	7	3.17E-05	13	6.15%	82	3.91E-04	21	3.26%	44	2.07E-04
6	0.90%	12	5.75E-05	14	6.04%	81	3.84E-04	22	3.30%	44	2.10E-04
7	3.79%	51	2.41E-04	15	7.01%	94	4.46E-04	23	2.46%	33	1.57E-04
8	7.76%	104	6.17E-04	16	7.14%	96	4.54E-04	24	1.87%	25	1.19E-04
								Total		1,340	

El Paseo Option 1 Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Lawrence Expressway/Quito Road
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
FUG_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	1,340	19,558	210,518	1.914E-08	1.411E-08	2.6	1.21
FUG_SB_LAW	Lawrence Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	1,340	19,281	207,540	1.914E-08	1.411E-08	2.6	1.21
									Total	2,679						

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211	0.00211		
Brake Wear - Emissions per Vehicle (g/VMT)	0.01680	0.01680		
Road Dust - Emissions per Vehicle (g/VMT)	0.01482	0.01482		
otal Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03373	0.03373		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	15	1.03E-04	9	7.11%	95	6.39E-04	17	7.38%	99	6.63E-04
2	0.42%	6	3.78E-05	10	4.39%	59	3.94E-04	18	8.18%	110	7.35E-04
3	0.41%	5	3.64E-05	11	4.66%	62	4.19E-04	19	5.70%	76	5.12E-04
4	0.26%	3	2.34E-05	12	5.89%	79	5.29E-04	20	4.27%	57	3.84E-04
5	0.50%	7	4.48E-05	13	6.15%	82	5.53E-04	21	3.26%	44	2.93E-04
6	0.90%	12	8.12E-05	14	6.04%	81	5.42E-04	22	3.30%	44	2.97E-04
7	3.79%	51	3.40E-04	15	7.01%	94	6.30E-04	23	2.46%	33	2.21E-04
8	7.76%	104	6.98E-04	16	7.14%	96	6.41E-04	24	1.87%	25	1.68E-04
								Total		1,340	

2026 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	15	1.02E-04	9	7.11%	95	6.30E-04	17	7.38%	99	6.54E-04
2	0.42%	6	3.73E-05	10	4.39%	59	3.89E-04	18	8.18%	110	7.24E-04
3	0.41%	5	3.59E-05	11	4.66%	62	4.13E-04	19	5.70%	76	5.05E-04
4	0.26%	3	2.31E-05	12	5.89%	79	5.22E-04	20	4.27%	57	3.78E-04
5	0.50%	7	4.42E-05	13	6.15%	82	5.45E-04	21	3.26%	44	2.89E-04
6	0.90%	12	8.01E-05	14	6.04%	81	5.35E-04	22	3.30%	44	2.92E-04
7	3.79%	51	3.35E-04	15	7.01%	94	6.21E-04	23	2.46%	33	2.18E-04
8	7.76%	104	6.88E-04	16	7.14%	96	6.32E-04	24	1.87%	25	1.65E-04
								Total		1,340	

El Paseo Option 1 Education & Saratoga, San Jose, CA - Lawrence Expressway Traffic - TACs & PM2.
AERMOD Risk Modeling Parameters and Maximum Concentrations - Project Traffic
at Construction MEI Receptor (1.5 meter receptor height)

Emission Year	2026
Receptor Information	Construction MEI receptor
Number of Receptors	1
Receptor Height	1.5 meters
Receptor Distances	At Construction MEI location
Meteorological Conditions	
BAQMD San Jose Airport Met Data	2013-2017
Land Use Classification	Urban
Wind Speed	Variable
Wind Direction	Variable

Construction MEI Cancer Risk Maximum Concentrations

Meteorological Data Years	Concentration (µg/m3)*		
	DPM	Exhaust TOG	Evaporative TOG
2013-2017	0.0001	0.0047	0.0057

Construction MEI PM2.5 Maximum Concentrations

Meteorological Data Years	PM2.5 Concentration (µg/m3)*		
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5
2013-2017	0.0077	0.0074	0.00028

El Paseo Option 1 Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at Construction MEI - 1.5 meter receptor height
27 Year Residential Exposure - Project Traffic

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2023	10	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.00
1	1	0 - 1	2023	10	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.00
2	1	1 - 2	2024	10	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.00
3	1	2 - 3	2025	3	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.00
4	1	3 - 4	2026	3	0.0001	0.0047	0.0057	0.001	0.000	0.0000	0.00
5	1	4 - 5	2027	3	0.0001	0.0047	0.0057	0.001	0.000	0.0000	0.00
6	1	5 - 6	2028	3	0.0001	0.0047	0.0057	0.001	0.000	0.0000	0.00
7	1	6 - 7	2029	3	0.0001	0.0047	0.0057	0.001	0.000	0.0000	0.00
8	1	7 - 8	2030	3	0.0001	0.0047	0.0057	0.001	0.000	0.0000	0.00
9	1	8 - 9	2031	3	0.0001	0.0047	0.0057	0.001	0.000	0.0000	0.00
10	1	9 - 10	2032	3	0.0001	0.0047	0.0057	0.001	0.000	0.0000	0.00
11	1	10 - 11	2033	3	0.0001	0.0047	0.0057	0.001	0.000	0.0000	0.00
12	1	11 - 12	2034	3	0.0001	0.0047	0.0057	0.001	0.000	0.0000	0.00
13	1	12 - 13	2035	3	0.0001	0.0047	0.0057	0.001	0.000	0.0000	0.00
14	1	13 - 14	2036	3	0.0001	0.0047	0.0057	0.001	0.000	0.0000	0.00
15	1	14 - 15	2037	3	0.0001	0.0047	0.0057	0.001	0.000	0.0000	0.00
16	1	15 - 16	2038	3	0.0001	0.0047	0.0057	0.001	0.000	0.0000	0.00
17	1	16-17	2039	1	0.0001	0.0047	0.0057	0.000	0.000	0.0000	0.00
18	1	17-18	2040	1	0.0001	0.0047	0.0057	0.000	0.000	0.0000	0.00
19	1	18-19	2041	1	0.0001	0.0047	0.0057	0.000	0.000	0.0000	0.00
20	1	19-20	2042	1	0.0001	0.0047	0.0057	0.000	0.000	0.0000	0.00
21	1	20-21	2043	1	0.0001	0.0047	0.0057	0.000	0.000	0.0000	0.00
22	1	21-22	2044	1	0.0001	0.0047	0.0057	0.000	0.000	0.0000	0.00
23	1	22-23	2045	1	0.0001	0.0047	0.0057	0.000	0.000	0.0000	0.00
24	1	23-24	2046	1	0.0001	0.0047	0.0057	0.000	0.000	0.0000	0.00
25	1	24-25	2047	1	0.0001	0.0047	0.0057	0.000	0.000	0.0000	0.00
26	1	25-26	2048	1	0.0001	0.0047	0.0057	0.000	0.000	0.0000	0.00
27	1	26-27	2049	1	0.0001	0.0047	0.0057	0.000	0.000	0.0000	0.00
28	1	27-28	2050	1	0.0001	0.0047	0.0057	0.000	0.000	0.0000	0.00
29	1	28-29	2051	1	0.0001	0.0047	0.0057	0.000	0.000	0.0000	0.00
30	1	29-30	2052	1	0.0001	0.0047	0.0057	0.000	0.000	0.0000	0.00
Total Increased Cancer Risk								0.02	0.008	0.001	**0.03**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00002	0.01	0.01

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Saratoga Avenue
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2026

16.9/28

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
DPM_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	55.7	3.4	Varied	1,638	17,820	191,810	2.366E-10	1.745E-10	6.8	3.16
DPM_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	55.7	3.4	Varied	1,638	17,703	190,550	2.366E-10	1.745E-10	6.8	3.16
									Total	3,275						

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle (g/VMT)	0.00034	0.000314		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - DPM_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.91%	64	3.96E-06	9	6.44%	105	6.00E-06	17	5.52%	90	5.14E-06
2	2.59%	42	2.62E-06	10	7.25%	119	7.33E-06	18	3.34%	55	3.11E-06
3	2.82%	46	2.85E-06	11	6.33%	104	6.40E-06	19	2.42%	40	2.44E-06
4	3.39%	56	3.43E-06	12	6.90%	113	6.98E-06	20	0.92%	15	9.31E-07
5	2.19%	36	2.21E-06	13	6.27%	103	6.34E-06	21	2.99%	49	3.03E-06
6	3.39%	56	3.43E-06	14	6.15%	101	6.23E-06	22	4.14%	68	4.19E-06
7	6.10%	100	6.17E-06	15	5.12%	84	5.18E-06	23	2.47%	40	2.50E-06
8	4.66%	76	4.34E-06	16	3.85%	63	3.90E-06	24	0.86%	14	8.73E-07
								Total		1,638	

2026 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.91%	64	3.93E-06	9	6.44%	105	5.96E-06	17	5.52%	90	5.11E-06
2	2.59%	42	2.60E-06	10	7.25%	119	7.28E-06	18	3.34%	55	3.09E-06
3	2.82%	46	2.83E-06	11	6.33%	104	6.36E-06	19	2.42%	40	2.43E-06
4	3.39%	56	3.41E-06	12	6.90%	113	6.94E-06	20	0.92%	15	9.25E-07
5	2.19%	36	2.20E-06	13	6.27%	103	6.30E-06	21	2.99%	49	3.01E-06
6	3.39%	56	3.41E-06	14	6.15%	101	6.19E-06	22	4.14%	68	4.16E-06
7	6.10%	100	6.13E-06	15	5.12%	84	5.14E-06	23	2.47%	40	2.49E-06
8	4.66%	76	4.31E-06	16	3.85%	63	3.87E-06	24	0.86%	14	8.67E-07
								Total		1,638	

El Paseo Option 1 Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Saratoga Avenue
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
PM2.5_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	1,638	17,820	191,810	8.520E-10	6.282E-10	2.6	1.21
PM2.5_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	1,638	17,703	190,550	8.520E-10	6.282E-10	2.6	1.21
									Total	3,275						

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle (g/VMT)	0.001228	0.00156		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - PM2.5_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	19	4.19E-06	9	7.11%	116	3.29E-05	17	7.39%	121	3.42E-05
2	0.42%	7	1.53E-06	10	4.39%	72	1.60E-05	18	8.17%	134	3.78E-05
3	0.41%	7	1.49E-06	11	4.67%	76	1.70E-05	19	5.70%	93	2.08E-05
4	0.27%	4	9.72E-07	12	5.89%	96	2.15E-05	20	4.27%	70	1.56E-05
5	0.50%	8	1.82E-06	13	6.15%	101	2.24E-05	21	3.26%	53	1.19E-05
6	0.91%	15	3.30E-06	14	6.03%	99	2.20E-05	22	3.30%	54	1.20E-05
7	3.79%	62	1.38E-05	15	7.01%	115	2.55E-05	23	2.46%	40	8.95E-06
8	7.76%	127	3.60E-05	16	7.13%	117	2.60E-05	24	1.86%	31	6.79E-06
								Total		1,638	

2026 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM2.5_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	19	4.17E-06	9	7.11%	116	3.27E-05	17	7.39%	121	3.40E-05
2	0.42%	7	1.52E-06	10	4.39%	72	1.59E-05	18	8.17%	134	3.76E-05
3	0.41%	7	1.48E-06	11	4.67%	76	1.69E-05	19	5.70%	93	2.06E-05
4	0.27%	4	9.65E-07	12	5.89%	96	2.13E-05	20	4.27%	70	1.55E-05
5	0.50%	8	1.81E-06	13	6.15%	101	2.23E-05	21	3.26%	53	1.18E-05
6	0.91%	15	3.28E-06	14	6.03%	99	2.18E-05	22	3.30%	54	1.19E-05
7	3.79%	62	1.37E-05	15	7.01%	115	2.54E-05	23	2.46%	40	8.89E-06
8	7.76%	127	3.57E-05	16	7.13%	117	2.58E-05	24	1.86%	31	6.74E-06
								Total		1,638	

El Paseo Option 1 Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Saratoga Avenue
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEXH_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	1,638	17,820	191,810	1.595E-08	1.176E-08	2.6	1.21
TEXH_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	1,638	17,703	190,550	1.595E-08	1.176E-08	2.6	1.21
									Total	3,275						

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle (g/VMT)	0.02299	0.03109		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	19	7.85E-05	9	7.11%	116	6.56E-04	17	7.39%	121	6.81E-04
2	0.42%	7	2.86E-05	10	4.39%	72	3.00E-04	18	8.17%	134	7.54E-04
3	0.41%	7	2.79E-05	11	4.67%	76	3.18E-04	19	5.70%	93	3.89E-04
4	0.27%	4	1.82E-05	12	5.89%	96	4.02E-04	20	4.27%	70	2.92E-04
5	0.50%	8	3.41E-05	13	6.15%	101	4.19E-04	21	3.26%	53	2.22E-04
6	0.91%	15	6.18E-05	14	6.03%	99	4.12E-04	22	3.30%	54	2.25E-04
7	3.79%	62	2.59E-04	15	7.01%	115	4.78E-04	23	2.46%	40	1.68E-04
8	7.76%	127	7.16E-04	16	7.13%	117	4.87E-04	24	1.86%	31	1.27E-04
								Total		1,638	

2026 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	19	7.80E-05	9	7.11%	116	6.52E-04	17	7.39%	121	6.77E-04
2	0.42%	7	2.84E-05	10	4.39%	72	2.98E-04	18	8.17%	134	7.49E-04
3	0.41%	7	2.77E-05	11	4.67%	76	3.16E-04	19	5.70%	93	3.86E-04
4	0.27%	4	1.81E-05	12	5.89%	96	3.99E-04	20	4.27%	70	2.90E-04
5	0.50%	8	3.38E-05	13	6.15%	101	4.17E-04	21	3.26%	53	2.21E-04
6	0.91%	15	6.14E-05	14	6.03%	99	4.09E-04	22	3.30%	54	2.24E-04
7	3.79%	62	2.57E-04	15	7.01%	115	4.75E-04	23	2.46%	40	1.66E-04
8	7.76%	127	7.11E-04	16	7.13%	117	4.84E-04	24	1.86%	31	1.26E-04
								Total		1,638	

El Paseo Option 1 Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Saratoga Avenue
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEVAP_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	1,638	17,820	191,810	2.100E-08	1.549E-08	2.6	1.21
TEVAP_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	1,638	17,703	190,550	2.100E-08	1.549E-08	2.6	1.21
									Total	3,275						

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle per Hour (g/hour)	1.21074	1.21074		
Emissions per Vehicle per Mile (g/VMT)	0.03027	0.04036		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	19	1.03E-04	9	7.11%	116	8.52E-04	17	7.39%	121	8.84E-04
2	0.42%	7	3.76E-05	10	4.39%	72	3.94E-04	18	8.17%	134	9.78E-04
3	0.41%	7	3.67E-05	11	4.67%	76	4.19E-04	19	5.70%	93	5.12E-04
4	0.27%	4	2.40E-05	12	5.89%	96	5.29E-04	20	4.27%	70	3.84E-04
5	0.50%	8	4.48E-05	13	6.15%	101	5.52E-04	21	3.26%	53	2.93E-04
6	0.91%	15	8.14E-05	14	6.03%	99	5.42E-04	22	3.30%	54	2.96E-04
7	3.79%	62	3.41E-04	15	7.01%	115	6.30E-04	23	2.46%	40	2.21E-04
8	7.76%	127	9.30E-04	16	7.13%	117	6.41E-04	24	1.86%	31	1.67E-04
								Total		1,638	

2026 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	19	1.03E-04	9	7.11%	116	8.46E-04	17	7.39%	121	8.79E-04
2	0.42%	7	3.74E-05	10	4.39%	72	3.92E-04	18	8.17%	134	9.72E-04
3	0.41%	7	3.65E-05	11	4.67%	76	4.16E-04	19	5.70%	93	5.08E-04
4	0.27%	4	2.38E-05	12	5.89%	96	5.26E-04	20	4.27%	70	3.81E-04
5	0.50%	8	4.46E-05	13	6.15%	101	5.49E-04	21	3.26%	53	2.91E-04
6	0.91%	15	8.09E-05	14	6.03%	99	5.38E-04	22	3.30%	54	2.95E-04
7	3.79%	62	3.39E-04	15	7.01%	115	6.25E-04	23	2.46%	40	2.19E-04
8	7.76%	127	9.24E-04	16	7.13%	117	6.37E-04	24	1.86%	31	1.66E-04
								Total		1,638	

El Paseo Option 1 Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Saratoga Avenue
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
FUG_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	1,638	17,820	191,810	2.340E-08	1.725E-08	2.6	1.21
FUG_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	1,638	17,703	190,550	2.340E-08	1.725E-08	2.6	1.21
									Total	3,275						

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211	0.00211		
Brake Wear - Emissions per Vehicle (g/VMT)	0.01680	0.01680		
Road Dust - Emissions per Vehicle (g/VMT)	0.01482	0.01482		
otal Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03373	0.03373		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	19	1.15E-04	9	7.11%	116	7.12E-04	17	7.39%	121	7.39E-04
2	0.42%	7	4.19E-05	10	4.39%	72	4.40E-04	18	8.17%	134	8.18E-04
3	0.41%	7	4.09E-05	11	4.67%	76	4.67E-04	19	5.70%	93	5.70E-04
4	0.27%	4	2.67E-05	12	5.89%	96	5.90E-04	20	4.27%	70	4.28E-04
5	0.50%	8	5.00E-05	13	6.15%	101	6.15E-04	21	3.26%	53	3.26E-04
6	0.91%	15	9.07E-05	14	6.03%	99	6.04E-04	22	3.30%	54	3.30E-04
7	3.79%	62	3.80E-04	15	7.01%	115	7.01E-04	23	2.46%	40	2.46E-04
8	7.76%	127	7.77E-04	16	7.13%	117	7.14E-04	24	1.86%	31	1.86E-04
								Total		1,638	

2026 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	19	1.14E-04	9	7.11%	116	7.07E-04	17	7.39%	121	7.34E-04
2	0.42%	7	4.17E-05	10	4.39%	72	4.37E-04	18	8.17%	134	8.12E-04
3	0.41%	7	4.07E-05	11	4.67%	76	4.64E-04	19	5.70%	93	5.66E-04
4	0.27%	4	2.65E-05	12	5.89%	96	5.86E-04	20	4.27%	70	4.25E-04
5	0.50%	8	4.96E-05	13	6.15%	101	6.11E-04	21	3.26%	53	3.24E-04
6	0.91%	15	9.01E-05	14	6.03%	99	6.00E-04	22	3.30%	54	3.28E-04
7	3.79%	62	3.77E-04	15	7.01%	115	6.97E-04	23	2.46%	40	2.44E-04
8	7.76%	127	7.72E-04	16	7.13%	117	7.09E-04	24	1.86%	31	1.85E-04
								Total		1,638	

El Paseo Option 1 Education & Saratoga, San Jose, CA - Saratoga Avenue Traffic - TACs & PM2.5
AERMOD Risk Modeling Parameters and Maximum Concentrations - Project Traffic
at Construction MEI Receptor (1.5 meter receptor height)

Emission Year	2026
Receptor Information	Construction MEI receptor
Number of Receptors	1
Receptor Height	1.5 meters
Receptor Distances	At Construction MEI location
Meteorological Conditions	
BAQMD San Jose Airport Met Data	2013-2017
Land Use Classification	Urban
Wind Speed	Variable
Wind Direction	Variable

Construction MEI Cancer Risk Maximum Concentrations

Meteorological Data Years	Concentration (µg/m3)*		
	DPM	Exhaust TOG	Evaporative TOG
2013-2017	0.0001	0.0045	0.0058

Construction MEI PM2.5 Maximum Concentrations

Meteorological Data Years	PM2.5 Concentration (µg/m3)*		
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5
2013-2017	0.0062	0.0060	0.00023

El Paseo Option 1 Education & Saratoga, San Jose, CA - Saratoga Avenue Traffic Cancer Risk
Impacts at Construction MEI - 1.5 meter receptor height
27 Year Residential Exposure - Project Traffic

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2023	10	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.00
1	1	0 - 1	2023	10	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.00
2	1	1 - 2	2024	10	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.00
3	1	2 - 3	2025	3	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.00
4	1	3 - 4	2026	3	0.0001	0.0045	0.0058	0.001	0.000	0.0000	0.00
5	1	4 - 5	2027	3	0.0001	0.0045	0.0058	0.001	0.000	0.0000	0.00
6	1	5 - 6	2028	3	0.0001	0.0045	0.0058	0.001	0.000	0.0000	0.00
7	1	6 - 7	2029	3	0.0001	0.0045	0.0058	0.001	0.000	0.0000	0.00
8	1	7 - 8	2030	3	0.0001	0.0045	0.0058	0.001	0.000	0.0000	0.00
9	1	8 - 9	2031	3	0.0001	0.0045	0.0058	0.001	0.000	0.0000	0.00
10	1	9 - 10	2032	3	0.0001	0.0045	0.0058	0.001	0.000	0.0000	0.00
11	1	10 - 11	2033	3	0.0001	0.0045	0.0058	0.001	0.000	0.0000	0.00
12	1	11 - 12	2034	3	0.0001	0.0045	0.0058	0.001	0.000	0.0000	0.00
13	1	12 - 13	2035	3	0.0001	0.0045	0.0058	0.001	0.000	0.0000	0.00
14	1	13 - 14	2036	3	0.0001	0.0045	0.0058	0.001	0.000	0.0000	0.00
15	1	14 - 15	2037	3	0.0001	0.0045	0.0058	0.001	0.000	0.0000	0.00
16	1	15 - 16	2038	3	0.0001	0.0045	0.0058	0.001	0.000	0.0000	0.00
17	1	16-17	2039	1	0.0001	0.0045	0.0058	0.000	0.000	0.0000	0.00
18	1	17-18	2040	1	0.0001	0.0045	0.0058	0.000	0.000	0.0000	0.00
19	1	18-19	2041	1	0.0001	0.0045	0.0058	0.000	0.000	0.0000	0.00
20	1	19-20	2042	1	0.0001	0.0045	0.0058	0.000	0.000	0.0000	0.00
21	1	20-21	2043	1	0.0001	0.0045	0.0058	0.000	0.000	0.0000	0.00
22	1	21-22	2044	1	0.0001	0.0045	0.0058	0.000	0.000	0.0000	0.00
23	1	22-23	2045	1	0.0001	0.0045	0.0058	0.000	0.000	0.0000	0.00
24	1	23-24	2046	1	0.0001	0.0045	0.0058	0.000	0.000	0.0000	0.00
25	1	24-25	2047	1	0.0001	0.0045	0.0058	0.000	0.000	0.0000	0.00
26	1	25-26	2048	1	0.0001	0.0045	0.0058	0.000	0.000	0.0000	0.00
27	1	26-27	2049	1	0.0001	0.0045	0.0058	0.000	0.000	0.0000	0.00
28	1	27-28	2050	1	0.0001	0.0045	0.0058	0.000	0.000	0.0000	0.00
29	1	28-29	2051	1	0.0001	0.0045	0.0058	0.000	0.000	0.0000	0.00
30	1	29-30	2052	1	0.0001	0.0045	0.0058	0.000	0.000	0.0000	0.00
Total Increased Cancer Risk								0.01	0.007	0.001	**0.02**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00001	0.01	0.01

* Third trimester of pregnancy

El Paseo Non-Education Option 2 with Saratoga Site

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Lawrence Expressway/Quito Road
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2026 16.9728

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
DPM_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	55.7	3.4	Varied	1,058	19,558	210,518	2.013E-10	1.484E-10	6.8	3.16
DPM_SB_LAW	Lawrence Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	55.7	3.4	Varied	1,058	19,281	207,540	2.013E-10	1.484E-10	6.8	3.16
									Total	2,116						

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle (g/VMT)	0.00045	0.000341		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - DPM_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.98%	42	3.76E-06	9	6.44%	68	4.62E-06	17	5.53%	58	3.97E-06
2	2.67%	28	2.52E-06	10	7.40%	78	6.99E-06	18	3.14%	33	2.25E-06
3	2.84%	30	2.68E-06	11	6.32%	67	5.97E-06	19	2.35%	25	2.22E-06
4	3.30%	35	3.11E-06	12	6.88%	73	6.50E-06	20	0.86%	9	8.13E-07
5	2.16%	23	2.04E-06	13	6.27%	66	5.92E-06	21	3.08%	33	2.91E-06
6	3.30%	35	3.11E-06	14	6.21%	66	5.87E-06	22	4.21%	45	3.98E-06
7	6.03%	64	5.70E-06	15	5.13%	54	4.85E-06	23	2.62%	28	2.48E-06
8	4.56%	48	3.27E-06	16	3.88%	41	3.67E-06	24	0.85%	9	8.05E-07
								Total		1,058	

2026 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.98%	42	3.70E-06	9	6.44%	68	4.55E-06	17	5.53%	58	3.91E-06
2	2.67%	28	2.49E-06	10	7.40%	78	6.89E-06	18	3.14%	33	2.22E-06
3	2.84%	30	2.65E-06	11	6.32%	67	5.88E-06	19	2.35%	25	2.19E-06
4	3.30%	35	3.07E-06	12	6.88%	73	6.41E-06	20	0.86%	9	8.02E-07
5	2.16%	23	2.01E-06	13	6.27%	66	5.84E-06	21	3.08%	33	2.87E-06
6	3.30%	35	3.07E-06	14	6.21%	66	5.78E-06	22	4.21%	45	3.92E-06
7	6.03%	64	5.62E-06	15	5.13%	54	4.78E-06	23	2.62%	28	2.44E-06
8	4.56%	48	3.23E-06	16	3.88%	41	3.62E-06	24	0.85%	9	7.94E-07
								Total		1,058	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Lawrence Expressway/Quito Road
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
PM2.5_NB_LAW	Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	1,058	19,558	210,518	5.501E-10	4.056E-10	2.6	1.21
PM2.5_SB_LAW	Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	1,058	19,281	207,540	5.501E-10	4.056E-10	2.6	1.21
									Total	2,116						

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle (g/VMT)	0.001227	0.00123		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - PM2.5_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	12	2.97E-06	9	7.11%	75	1.84E-05	17	7.38%	78	1.91E-05
2	0.42%	4	1.09E-06	10	4.39%	46	1.13E-05	18	8.18%	87	2.11E-05
3	0.41%	4	1.05E-06	11	4.66%	49	1.20E-05	19	5.70%	60	1.47E-05
4	0.26%	3	6.73E-07	12	5.89%	62	1.52E-05	20	4.27%	45	1.10E-05
5	0.50%	5	1.29E-06	13	6.15%	65	1.59E-05	21	3.26%	34	8.41E-06
6	0.90%	10	2.33E-06	14	6.04%	64	1.56E-05	22	3.30%	35	8.52E-06
7	3.79%	40	9.78E-06	15	7.01%	74	1.81E-05	23	2.46%	26	6.36E-06
8	7.76%	82	2.01E-05	16	7.14%	76	1.84E-05	24	1.87%	20	4.82E-06
								Total		1,058	

2026 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM2.5_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	12	2.93E-06	9	7.11%	75	1.81E-05	17	7.38%	78	1.88E-05
2	0.42%	4	1.07E-06	10	4.39%	46	1.12E-05	18	8.18%	87	2.08E-05
3	0.41%	4	1.03E-06	11	4.66%	49	1.19E-05	19	5.70%	60	1.45E-05
4	0.26%	3	6.64E-07	12	5.89%	62	1.50E-05	20	4.27%	45	1.09E-05
5	0.50%	5	1.27E-06	13	6.15%	65	1.57E-05	21	3.26%	34	8.29E-06
6	0.90%	10	2.30E-06	14	6.04%	64	1.54E-05	22	3.30%	35	8.40E-06
7	3.79%	40	9.64E-06	15	7.01%	74	1.79E-05	23	2.46%	26	6.27E-06
8	7.76%	82	1.98E-05	16	7.14%	76	1.82E-05	24	1.87%	20	4.75E-06
								Total		1,058	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Lawrence Expressway/Quito Road
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEXH_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	1,058	19,558	210,518	9.214E-09	6.794E-09	2.6	1.21
TEXH_SB_LAW	Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	1,058	19,281	207,540	9.214E-09	6.794E-09	2.6	1.21
									Total	2,116						

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle (g/VMT)	0.02055	0.02299		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	12	4.97E-05	9	7.11%	75	3.44E-04	17	7.38%	78	3.57E-04
2	0.42%	4	1.82E-05	10	4.39%	46	1.90E-04	18	8.18%	87	3.96E-04
3	0.41%	4	1.75E-05	11	4.66%	49	2.02E-04	19	5.70%	60	2.46E-04
4	0.26%	3	1.13E-05	12	5.89%	62	2.55E-04	20	4.27%	45	1.85E-04
5	0.50%	5	2.16E-05	13	6.15%	65	2.66E-04	21	3.26%	34	1.41E-04
6	0.90%	10	3.91E-05	14	6.04%	64	2.61E-04	22	3.30%	35	1.43E-04
7	3.79%	40	1.64E-04	15	7.01%	74	3.03E-04	23	2.46%	26	1.07E-04
8	7.76%	82	3.76E-04	16	7.14%	76	3.09E-04	24	1.87%	20	8.08E-05
								Total		1,058	

2026 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	12	4.90E-05	9	7.11%	75	3.39E-04	17	7.38%	78	3.52E-04
2	0.42%	4	1.79E-05	10	4.39%	46	1.87E-04	18	8.18%	87	3.90E-04
3	0.41%	4	1.73E-05	11	4.66%	49	1.99E-04	19	5.70%	60	2.43E-04
4	0.26%	3	1.11E-05	12	5.89%	62	2.51E-04	20	4.27%	45	1.82E-04
5	0.50%	5	2.13E-05	13	6.15%	65	2.62E-04	21	3.26%	34	1.39E-04
6	0.90%	10	3.85E-05	14	6.04%	64	2.57E-04	22	3.30%	35	1.41E-04
7	3.79%	40	1.61E-04	15	7.01%	74	2.99E-04	23	2.46%	26	1.05E-04
8	7.76%	82	3.70E-04	16	7.14%	76	3.04E-04	24	1.87%	20	7.96E-05
								Total		1,058	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Lawrence Expressway/Quito Road
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEVAP_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	1,058	19,558	210,518	1.086E-08	8.004E-09	2.6	1.21
TEVAP_SB_LAW	Lawrence Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	1,058	19,281	207,540	1.086E-08	8.004E-09	2.6	1.21
									Total	2,116						

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle per Hour (g/hour)	1.21074	1.21074		
Emissions per Vehicle per Mile (g/VMT)	0.02421	0.03027		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	12	5.86E-05	9	7.11%	75	4.53E-04	17	7.38%	78	4.70E-04
2	0.42%	4	2.14E-05	10	4.39%	46	2.24E-04	18	8.18%	87	5.21E-04
3	0.41%	4	2.07E-05	11	4.66%	49	2.38E-04	19	5.70%	60	2.90E-04
4	0.26%	3	1.33E-05	12	5.89%	62	3.00E-04	20	4.27%	45	2.18E-04
5	0.50%	5	2.54E-05	13	6.15%	65	3.14E-04	21	3.26%	34	1.66E-04
6	0.90%	10	4.61E-05	14	6.04%	64	3.08E-04	22	3.30%	35	1.68E-04
7	3.79%	40	1.93E-04	15	7.01%	74	3.57E-04	23	2.46%	26	1.25E-04
8	7.76%	82	4.94E-04	16	7.14%	76	3.64E-04	24	1.87%	20	9.51E-05
								Total		1,058	

2026 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	12	5.77E-05	9	7.11%	75	4.47E-04	17	7.38%	78	4.64E-04
2	0.42%	4	2.11E-05	10	4.39%	46	2.20E-04	18	8.18%	87	5.13E-04
3	0.41%	4	2.04E-05	11	4.66%	49	2.34E-04	19	5.70%	60	2.86E-04
4	0.26%	3	1.31E-05	12	5.89%	62	2.96E-04	20	4.27%	45	2.15E-04
5	0.50%	5	2.50E-05	13	6.15%	65	3.09E-04	21	3.26%	34	1.64E-04
6	0.90%	10	4.54E-05	14	6.04%	64	3.03E-04	22	3.30%	35	1.66E-04
7	3.79%	40	1.90E-04	15	7.01%	74	3.52E-04	23	2.46%	26	1.24E-04
8	7.76%	82	4.87E-04	16	7.14%	76	3.59E-04	24	1.87%	20	9.38E-05
								Total		1,058	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Lawrence Expressway/Quito Road
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
FUG_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	1,058	19,558	210,518	1.512E-08	1.115E-08	2.6	1.21
FUG_SB_LAW	Lawrence Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	1,058	19,281	207,540	1.512E-08	1.115E-08	2.6	1.21
									Total	2,116						

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211	0.00211		
Brake Wear - Emissions per Vehicle (g/VMT)	0.01680	0.01680		
Road Dust - Emissions per Vehicle (g/VMT)	0.01482	0.01482		
otal Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03373	0.03373		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	12	8.16E-05	9	7.11%	75	5.05E-04	17	7.38%	78	5.24E-04
2	0.42%	4	2.98E-05	10	4.39%	46	3.11E-04	18	8.18%	87	5.80E-04
3	0.41%	4	2.88E-05	11	4.66%	49	3.31E-04	19	5.70%	60	4.04E-04
4	0.26%	3	1.85E-05	12	5.89%	62	4.18E-04	20	4.27%	45	3.03E-04
5	0.50%	5	3.54E-05	13	6.15%	65	4.37E-04	21	3.26%	34	2.31E-04
6	0.90%	10	6.42E-05	14	6.04%	64	4.28E-04	22	3.30%	35	2.34E-04
7	3.79%	40	2.69E-04	15	7.01%	74	4.98E-04	23	2.46%	26	1.75E-04
8	7.76%	82	5.51E-04	16	7.14%	76	5.07E-04	24	1.87%	20	1.33E-04
								Total		1,058	

2026 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	12	8.04E-05	9	7.11%	75	4.98E-04	17	7.38%	78	5.17E-04
2	0.42%	4	2.94E-05	10	4.39%	46	3.07E-04	18	8.18%	87	5.72E-04
3	0.41%	4	2.84E-05	11	4.66%	49	3.26E-04	19	5.70%	60	3.99E-04
4	0.26%	3	1.82E-05	12	5.89%	62	4.12E-04	20	4.27%	45	2.99E-04
5	0.50%	5	3.49E-05	13	6.15%	65	4.30E-04	21	3.26%	34	2.28E-04
6	0.90%	10	6.32E-05	14	6.04%	64	4.22E-04	22	3.30%	35	2.31E-04
7	3.79%	40	2.65E-04	15	7.01%	74	4.91E-04	23	2.46%	26	1.72E-04
8	7.76%	82	5.43E-04	16	7.14%	76	4.99E-04	24	1.87%	20	1.31E-04
								Total		1,058	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Lawrence Expressway Traffic - TACs & PM2.5
AERMOD Risk Modeling Parameters and Maximum Concentrations - Project Traffic
at Construction MEI Receptor (1.5 meter receptor height)

Emission Year	2026
Receptor Information	Construction MEI receptor
Number of Receptors	1
Receptor Height	1.5 meters
Receptor Distances	At Construction MEI location
Meteorological Conditions	
BAQMD San Jose Airport Met Data	2013-2017
Land Use Classification	Urban
Wind Speed	Variable
Wind Direction	Variable

Construction MEI Cancer Risk Maximum Concentrations

Meteorological Data Years	Concentration (µg/m3)*		
	DPM	Exhaust TOG	Evaporative TOG
2013-2017	0.00007	0.0037	0.0045

Construction MEI PM2.5 Maximum Concentrations

Meteorological Data Years	PM2.5 Concentration (µg/m3)*		
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5
2013-2017	0.0061	0.0059	0.00022

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at Construction MEI - 1.5 meter receptor height
27 Year Residential Exposure - Project Traffic

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2023	10	0.00000	0.0000	0.0000	0.000	0.000	0.0000	0.00
1	1	0 - 1	2023	10	0.00000	0.0000	0.0000	0.000	0.000	0.0000	0.00
2	1	1 - 2	2024	10	0.00000	0.0000	0.0000	0.000	0.000	0.0000	0.00
3	1	2 - 3	2025	3	0.00000	0.0000	0.0000	0.000	0.000	0.0000	0.00
4	1	3 - 4	2026	3	0.00007	0.0037	0.0045	0.001	0.000	0.0000	0.00
5	1	4 - 5	2027	3	0.00007	0.0037	0.0045	0.001	0.000	0.0000	0.00
6	1	5 - 6	2028	3	0.00007	0.0037	0.0045	0.001	0.000	0.0000	0.00
7	1	6 - 7	2029	3	0.00007	0.0037	0.0045	0.001	0.000	0.0000	0.00
8	1	7 - 8	2030	3	0.00007	0.0037	0.0045	0.001	0.000	0.0000	0.00
9	1	8 - 9	2031	3	0.00007	0.0037	0.0045	0.001	0.000	0.0000	0.00
10	1	9 - 10	2032	3	0.00007	0.0037	0.0045	0.001	0.000	0.0000	0.00
11	1	10 - 11	2033	3	0.00007	0.0037	0.0045	0.001	0.000	0.0000	0.00
12	1	11 - 12	2034	3	0.00007	0.0037	0.0045	0.001	0.000	0.0000	0.00
13	1	12 - 13	2035	3	0.00007	0.0037	0.0045	0.001	0.000	0.0000	0.00
14	1	13 - 14	2036	3	0.00007	0.0037	0.0045	0.001	0.000	0.0000	0.00
15	1	14 - 15	2037	3	0.00007	0.0037	0.0045	0.001	0.000	0.0000	0.00
16	1	15 - 16	2038	3	0.00007	0.0037	0.0045	0.001	0.000	0.0000	0.00
17	1	16-17	2039	1	0.00007	0.0037	0.0045	0.000	0.000	0.0000	0.00
18	1	17-18	2040	1	0.00007	0.0037	0.0045	0.000	0.000	0.0000	0.00
19	1	18-19	2041	1	0.00007	0.0037	0.0045	0.000	0.000	0.0000	0.00
20	1	19-20	2042	1	0.00007	0.0037	0.0045	0.000	0.000	0.0000	0.00
21	1	20-21	2043	1	0.00007	0.0037	0.0045	0.000	0.000	0.0000	0.00
22	1	21-22	2044	1	0.00007	0.0037	0.0045	0.000	0.000	0.0000	0.00
23	1	22-23	2045	1	0.00007	0.0037	0.0045	0.000	0.000	0.0000	0.00
24	1	23-24	2046	1	0.00007	0.0037	0.0045	0.000	0.000	0.0000	0.00
25	1	24-25	2047	1	0.00007	0.0037	0.0045	0.000	0.000	0.0000	0.00
26	1	25-26	2048	1	0.00007	0.0037	0.0045	0.000	0.000	0.0000	0.00
27	1	26-27	2049	1	0.00007	0.0037	0.0045	0.000	0.000	0.0000	0.00
28	1	27-28	2050	1	0.00007	0.0037	0.0045	0.000	0.000	0.0000	0.00
29	1	28-29	2051	1	0.00007	0.0037	0.0045	0.000	0.000	0.0000	0.00
30	1	29-30	2052	1	0.00007	0.0037	0.0045	0.000	0.000	0.0000	0.00
Total Increased Cancer Risk								0.02	0.006	0.000	**0.03**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00001	0.01	0.01

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Saratoga Avenue
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2026

16.9/28

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
DPM_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	55.7	3.4	Varied	1,294	17,820	191,810	1.869E-10	1.378E-10	6.8	3.16
DPM_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	55.7	3.4	Varied	1,294	17,703	190,550	1.869E-10	1.378E-10	6.8	3.16
									Total	2,587						

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle (g/VMT)	0.00034	0.000314		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and DPM Emissions - DPM_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.91%	51	3.13E-06	9	6.44%	83	4.74E-06	17	5.52%	71	4.06E-06
2	2.59%	33	2.07E-06	10	7.25%	94	5.79E-06	18	3.34%	43	2.45E-06
3	2.82%	36	2.25E-06	11	6.33%	82	5.06E-06	19	2.42%	31	1.93E-06
4	3.39%	44	2.71E-06	12	6.90%	89	5.52E-06	20	0.92%	12	7.35E-07
5	2.19%	28	1.75E-06	13	6.27%	81	5.01E-06	21	2.99%	39	2.39E-06
6	3.39%	44	2.71E-06	14	6.15%	80	4.92E-06	22	4.14%	54	3.31E-06
7	6.10%	79	4.87E-06	15	5.12%	66	4.09E-06	23	2.47%	32	1.98E-06
8	4.66%	60	3.43E-06	16	3.85%	50	3.08E-06	24	0.86%	11	6.89E-07
								Total		1,294	

2026 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.91%	51	3.11E-06	9	6.44%	83	4.71E-06	17	5.52%	71	4.04E-06
2	2.59%	33	2.05E-06	10	7.25%	94	5.75E-06	18	3.34%	43	2.44E-06
3	2.82%	36	2.24E-06	11	6.33%	82	5.02E-06	19	2.42%	31	1.92E-06
4	3.39%	44	2.69E-06	12	6.90%	89	5.48E-06	20	0.92%	12	7.31E-07
5	2.19%	28	1.74E-06	13	6.27%	81	4.98E-06	21	2.99%	39	2.37E-06
6	3.39%	44	2.69E-06	14	6.15%	80	4.89E-06	22	4.14%	54	3.29E-06
7	6.10%	79	4.84E-06	15	5.12%	66	4.06E-06	23	2.47%	32	1.96E-06
8	4.66%	60	3.41E-06	16	3.85%	50	3.06E-06	24	0.86%	11	6.85E-07
								Total		1,294	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Saratoga Avenue
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
PM2.5_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	1,294	17,820	191,810	6.731E-10	4.963E-10	2.6	1.21
PM2.5_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	1,294	17,703	190,550	6.731E-10	4.963E-10	2.6	1.21
									Total	2,587						

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle (g/VMT)	0.001228	0.00156		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and PM2.5 Emissions - PM2.5_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	15	3.31E-06	9	7.11%	92	2.60E-05	17	7.39%	96	2.70E-05
2	0.42%	5	1.21E-06	10	4.39%	57	1.26E-05	18	8.17%	106	2.99E-05
3	0.41%	5	1.18E-06	11	4.67%	60	1.34E-05	19	5.70%	74	1.64E-05
4	0.27%	3	7.68E-07	12	5.89%	76	1.70E-05	20	4.27%	55	1.23E-05
5	0.50%	6	1.44E-06	13	6.15%	80	1.77E-05	21	3.26%	42	9.38E-06
6	0.91%	12	2.61E-06	14	6.03%	78	1.74E-05	22	3.30%	43	9.50E-06
7	3.79%	49	1.09E-05	15	7.01%	91	2.02E-05	23	2.46%	32	7.07E-06
8	7.76%	100	2.84E-05	16	7.13%	92	2.05E-05	24	1.86%	24	5.36E-06
								Total		1,294	

2026 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM2.5_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	15	3.29E-06	9	7.11%	92	2.59E-05	17	7.39%	96	2.68E-05
2	0.42%	5	1.20E-06	10	4.39%	57	1.26E-05	18	8.17%	106	2.97E-05
3	0.41%	5	1.17E-06	11	4.67%	60	1.33E-05	19	5.70%	74	1.63E-05
4	0.27%	3	7.63E-07	12	5.89%	76	1.68E-05	20	4.27%	55	1.22E-05
5	0.50%	6	1.43E-06	13	6.15%	80	1.76E-05	21	3.26%	42	9.32E-06
6	0.91%	12	2.59E-06	14	6.03%	78	1.73E-05	22	3.30%	43	9.44E-06
7	3.79%	49	1.08E-05	15	7.01%	91	2.00E-05	23	2.46%	32	7.02E-06
8	7.76%	100	2.82E-05	16	7.13%	92	2.04E-05	24	1.86%	24	5.33E-06
								Total		1,294	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Saratoga Avenue
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEXH_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	1,294	17,820	191,810	1.260E-08	9.291E-09	2.6	1.21
TEXH_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	1,294	17,703	190,550	1.260E-08	9.291E-09	2.6	1.21
									Total	2,587						

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle (g/VMT)	0.02299	0.03109		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	15	6.20E-05	9	7.11%	92	5.18E-04	17	7.39%	96	5.38E-04
2	0.42%	5	2.26E-05	10	4.39%	57	2.37E-04	18	8.17%	106	5.95E-04
3	0.41%	5	2.20E-05	11	4.67%	60	2.51E-04	19	5.70%	74	3.07E-04
4	0.27%	3	1.44E-05	12	5.89%	76	3.17E-04	20	4.27%	55	2.30E-04
5	0.50%	6	2.69E-05	13	6.15%	80	3.31E-04	21	3.26%	42	1.76E-04
6	0.91%	12	4.88E-05	14	6.03%	78	3.25E-04	22	3.30%	43	1.78E-04
7	3.79%	49	2.04E-04	15	7.01%	91	3.78E-04	23	2.46%	32	1.32E-04
8	7.76%	100	5.66E-04	16	7.13%	92	3.84E-04	24	1.86%	24	1.00E-04
								Total		1,294	

2026 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	15	6.16E-05	9	7.11%	92	5.15E-04	17	7.39%	96	5.35E-04
2	0.42%	5	2.24E-05	10	4.39%	57	2.35E-04	18	8.17%	106	5.92E-04
3	0.41%	5	2.19E-05	11	4.67%	60	2.50E-04	19	5.70%	74	3.05E-04
4	0.27%	3	1.43E-05	12	5.89%	76	3.15E-04	20	4.27%	55	2.29E-04
5	0.50%	6	2.67E-05	13	6.15%	80	3.29E-04	21	3.26%	42	1.74E-04
6	0.91%	12	4.85E-05	14	6.03%	78	3.23E-04	22	3.30%	43	1.77E-04
7	3.79%	49	2.03E-04	15	7.01%	91	3.75E-04	23	2.46%	32	1.32E-04
8	7.76%	100	5.62E-04	16	7.13%	92	3.82E-04	24	1.86%	24	9.97E-05
								Total		1,294	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Saratoga Avenue
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEVAP_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	1,294	17,820	191,810	1.659E-08	1.223E-08	2.6	1.21
TEVAP_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	1,294	17,703	190,550	1.659E-08	1.223E-08	2.6	1.21
									Total	2,587						

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle per Hour (g/hour)	1.21074	1.21074		
Emissions per Vehicle per Mile (g/VMT)	0.03027	0.04036		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	15	8.17E-05	9	7.11%	92	6.73E-04	17	7.39%	96	6.99E-04
2	0.42%	5	2.97E-05	10	4.39%	57	3.12E-04	18	8.17%	106	7.73E-04
3	0.41%	5	2.90E-05	11	4.67%	60	3.31E-04	19	5.70%	74	4.04E-04
4	0.27%	3	1.89E-05	12	5.89%	76	4.18E-04	20	4.27%	55	3.03E-04
5	0.50%	6	3.54E-05	13	6.15%	80	4.36E-04	21	3.26%	42	2.31E-04
6	0.91%	12	6.43E-05	14	6.03%	78	4.28E-04	22	3.30%	43	2.34E-04
7	3.79%	49	2.69E-04	15	7.01%	91	4.97E-04	23	2.46%	32	1.74E-04
8	7.76%	100	7.34E-04	16	7.13%	92	5.06E-04	24	1.86%	24	1.32E-04
								Total		1,294	

2026 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	15	8.11E-05	9	7.11%	92	6.68E-04	17	7.39%	96	6.94E-04
2	0.42%	5	2.95E-05	10	4.39%	57	3.10E-04	18	8.17%	106	7.68E-04
3	0.41%	5	2.88E-05	11	4.67%	60	3.29E-04	19	5.70%	74	4.01E-04
4	0.27%	3	1.88E-05	12	5.89%	76	4.15E-04	20	4.27%	55	3.01E-04
5	0.50%	6	3.52E-05	13	6.15%	80	4.33E-04	21	3.26%	42	2.30E-04
6	0.91%	12	6.39E-05	14	6.03%	78	4.25E-04	22	3.30%	43	2.33E-04
7	3.79%	49	2.67E-04	15	7.01%	91	4.94E-04	23	2.46%	32	1.73E-04
8	7.76%	100	7.30E-04	16	7.13%	92	5.03E-04	24	1.86%	24	1.31E-04
								Total		1,294	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Off-Site Residential
Project Operation - Saratoga Avenue
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2026

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
FUG_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	1,294	17,820	191,810	1.848E-08	1.363E-08	2.6	1.21
FUG_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	1,294	17,703	190,550	1.848E-08	1.363E-08	2.6	1.21
									Total	2,587						

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211	0.00211		
Brake Wear - Emissions per Vehicle (g/VMT)	0.01680	0.01680		
Road Dust - Emissions per Vehicle (g/VMT)	0.01482	0.01482		
otal Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03373	0.03373		

Emisson Factors from CT-EMFAC2017

2026 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	15	9.10E-05	9	7.11%	92	5.62E-04	17	7.39%	96	5.84E-04
2	0.42%	5	3.31E-05	10	4.39%	57	3.47E-04	18	8.17%	106	6.46E-04
3	0.41%	5	3.23E-05	11	4.67%	60	3.69E-04	19	5.70%	74	4.50E-04
4	0.27%	3	2.11E-05	12	5.89%	76	4.66E-04	20	4.27%	55	3.38E-04
5	0.50%	6	3.95E-05	13	6.15%	80	4.86E-04	21	3.26%	42	2.58E-04
6	0.91%	12	7.17E-05	14	6.03%	78	4.77E-04	22	3.30%	43	2.61E-04
7	3.79%	49	3.00E-04	15	7.01%	91	5.54E-04	23	2.46%	32	1.94E-04
8	7.76%	100	6.14E-04	16	7.13%	92	5.64E-04	24	1.86%	24	1.47E-04
								Total		1,294	

2026 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	15	9.04E-05	9	7.11%	92	5.59E-04	17	7.39%	96	5.80E-04
2	0.42%	5	3.29E-05	10	4.39%	57	3.45E-04	18	8.17%	106	6.42E-04
3	0.41%	5	3.21E-05	11	4.67%	60	3.66E-04	19	5.70%	74	4.47E-04
4	0.27%	3	2.09E-05	12	5.89%	76	4.63E-04	20	4.27%	55	3.36E-04
5	0.50%	6	3.92E-05	13	6.15%	80	4.83E-04	21	3.26%	42	2.56E-04
6	0.91%	12	7.12E-05	14	6.03%	78	4.74E-04	22	3.30%	43	2.59E-04
7	3.79%	49	2.98E-04	15	7.01%	91	5.50E-04	23	2.46%	32	1.93E-04
8	7.76%	100	6.10E-04	16	7.13%	92	5.60E-04	24	1.86%	24	1.46E-04
								Total		1,294	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Saratoga Avenue Traffic - TACs & PM2.5
AERMOD Risk Modeling Parameters and Maximum Concentrations - Project Traffic
at Construction MEI Receptor (1.5 meter receptor height)

Emission Year	2026
Receptor Information	Construction MEI receptor
Number of Receptors	1
Receptor Height	1.5 meters
Receptor Distances	At Construction MEI location
Meteorological Conditions	
BAQMD San Jose Airport Met Data	2013-2017
Land Use Classification	Urban
Wind Speed	Variable
Wind Direction	Variable

Construction MEI Cancer Risk Maximum Concentrations

Meteorological Data Years	Concentration (µg/m3)*		
	DPM	Exhaust TOG	Evaporative TOG
2013-2017	0.00004	0.0035	0.0046

Construction MEI PM2.5 Maximum Concentrations

Meteorological Data Years	PM2.5 Concentration (µg/m3)*		
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5
2013-2017	0.0049	0.0047	0.00019

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Saratoga Avenue Traffic Cancer Risk
Impacts at Construction MEI - 1.5 meter receptor height
27 Year Residential Exposure - Project Traffic

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2023	10	0.00000	0.0000	0.0000	0.000	0.000	0.0000	0.00
1	1	0 - 1	2023	10	0.00000	0.0000	0.0000	0.000	0.000	0.0000	0.00
2	1	1 - 2	2024	10	0.00000	0.0000	0.0000	0.000	0.000	0.0000	0.00
3	1	2 - 3	2025	3	0.00000	0.0000	0.0000	0.000	0.000	0.0000	0.00
4	1	3 - 4	2026	3	0.00004	0.0035	0.0046	0.001	0.000	0.0000	0.00
5	1	4 - 5	2027	3	0.00004	0.0035	0.0046	0.001	0.000	0.0000	0.00
6	1	5 - 6	2028	3	0.00004	0.0035	0.0046	0.001	0.000	0.0000	0.00
7	1	6 - 7	2029	3	0.00004	0.0035	0.0046	0.001	0.000	0.0000	0.00
8	1	7 - 8	2030	3	0.00004	0.0035	0.0046	0.001	0.000	0.0000	0.00
9	1	8 - 9	2031	3	0.00004	0.0035	0.0046	0.001	0.000	0.0000	0.00
10	1	9 - 10	2032	3	0.00004	0.0035	0.0046	0.001	0.000	0.0000	0.00
11	1	10 - 11	2033	3	0.00004	0.0035	0.0046	0.001	0.000	0.0000	0.00
12	1	11 - 12	2034	3	0.00004	0.0035	0.0046	0.001	0.000	0.0000	0.00
13	1	12 - 13	2035	3	0.00004	0.0035	0.0046	0.001	0.000	0.0000	0.00
14	1	13 - 14	2036	3	0.00004	0.0035	0.0046	0.001	0.000	0.0000	0.00
15	1	14 - 15	2037	3	0.00004	0.0035	0.0046	0.001	0.000	0.0000	0.00
16	1	15 - 16	2038	3	0.00004	0.0035	0.0046	0.001	0.000	0.0000	0.00
17	1	16-17	2039	1	0.00004	0.0035	0.0046	0.000	0.000	0.0000	0.00
18	1	17-18	2040	1	0.00004	0.0035	0.0046	0.000	0.000	0.0000	0.00
19	1	18-19	2041	1	0.00004	0.0035	0.0046	0.000	0.000	0.0000	0.00
20	1	19-20	2042	1	0.00004	0.0035	0.0046	0.000	0.000	0.0000	0.00
21	1	20-21	2043	1	0.00004	0.0035	0.0046	0.000	0.000	0.0000	0.00
22	1	21-22	2044	1	0.00004	0.0035	0.0046	0.000	0.000	0.0000	0.00
23	1	22-23	2045	1	0.00004	0.0035	0.0046	0.000	0.000	0.0000	0.00
24	1	23-24	2046	1	0.00004	0.0035	0.0046	0.000	0.000	0.0000	0.00
25	1	24-25	2047	1	0.00004	0.0035	0.0046	0.000	0.000	0.0000	0.00
26	1	25-26	2048	1	0.00004	0.0035	0.0046	0.000	0.000	0.0000	0.00
27	1	26-27	2049	1	0.00004	0.0035	0.0046	0.000	0.000	0.0000	0.00
28	1	27-28	2050	1	0.00004	0.0035	0.0046	0.000	0.000	0.0000	0.00
29	1	28-29	2051	1	0.00004	0.0035	0.0046	0.000	0.000	0.0000	0.00
30	1	29-30	2052	1	0.00004	0.0035	0.0046	0.000	0.000	0.0000	0.00
Total Increased Cancer Risk								0.01	0.006	0.000	**0.02**

Maximum Hazard Index	Maximum Fugitive PM2.5	Maximum Total PM2.5
0.000008	0.005	0.005

* Third trimester of pregnancy

Project Generators Emissions and Health Risks

El Paseo Option 1 Education Site, San Jose, CA

Standby Emergency Generator Impacts - w/ BAAQMD BACT Requirements for engines >1,000-hp
Off-site Sensitive Receptors
MEI Location =1.5 meter receptor height

DPM Emission Rates		
	DPM Emissions per Generator	
	Max Daily	Annual
Source Type	(lb/day)	(lb/year)
Four, 1,910-kW, 2,561-hp Generators BACT Requirements	0.045	16.48
CalEEMod DPM Emissions	8.24E-03	tons/year

Modeling Information		
Model	AERMOD	
Source	Diesel Generator Engine	
Source Type	Point	
Meteorological Data	2013-2017 San Jose Airport Meterological Data	
Point Source Stack Parameters		
Generator Engine Size (hp)	2561	
Stack Height (ft)	12.00	near ground level release
Stack Diameter (ft)**	0.60	
Exhaust Gas Flowrate (CFM)	12148.00	
Stack Exit Velocity (ft/sec)	716.08	
Exhaust Temperature (˚F)	1004.00	
Emissions Rate (lb/hr)	0.001881	

* AERMOD default

**BAAQMD default generator parameters

El Paseo Option 2 No Education Site, San Jose, CA

Standby Emergency Generator Impacts - w/ BAAQMD BACT Requirements for engines >1,000-hp

Off-site Sensitive Receptors

MEI Location =1.5 meter receptor height

DPM Emission Rates		
	DPM Emissions per Generator	
	Max Daily	Annual
Source Type	(lb/day)	(lb/year)
Three, 1,910-kW, 2,561-hp Generators BACT Requirements	0.034	12.36
CalEEMod DPM Emissions	6.18E-03	tons/year

Modeling Information		
Model	AERMOD	
Source	Diesel Generator Engine	
Source Type	Point	
Meteorological Data	2013-2017 San Jose Airport Meterological Data	
Point Source Stack Parameters		
Generator Engine Size (hp)	2561	
Stack Height (ft)	12.00	near ground level release
Stack Diameter (ft)**	0.60	
Exhaust Gas Flowrate (CFM)	12148.00	
Stack Exit Velocity (ft/sec)	716.08	
Exhaust Temperature (˚F)	1004.00	
Emissions Rate (lb/hr)	0.001411	

* AERMOD default

**BAAQMD default generator parameters

Saratoga Site, San Jose, CA

Standby Emergency Generator Impacts - w/ BAAQMD BACT Requirements for engines >1,000-hp

Off-site Sensitive Receptors

MEI Location =1.5 meter receptor height

DPM Emission Rates		
	DPM Emissions per Generator	
Source Type	Max Daily (lb/day)	Annual (lb/year)
1,910-kW, 2,561-hp Generator BACT Requirements	0.011	4.12
CalEEMod DPM Emissions	2.06E-03	tons/year

Modeling Information		
Model	AERMOD	
Source	Diesel Generator Engine	
Source Type	Point	
Meteorological Data	2013-2017 San Jose Airport Meterological Data	
Point Source Stack Parameters		
Generator Engine Size (hp)	2561	
Stack Height (ft)	12.00	near ground level release
Stack Diameter (ft)**	0.60	
Exhaust Gas Flowrate (CFM)	12148.00	
Stack Exit Velocity (ft/sec)	716.08	
Exhaust Temperature (˚F)	1004.00	
Emissions Rate (lb/hr)	0.000470	

* AERMOD default

**BAAQMD default generator parameters

El Paseo Option 1 Education & Saratoga, San Jose, CA - Cancer Risks from Project Operation
Project Emergency Generator
Impacts at Off-Site Receptors- 1.5m MEI Receptor Heights
Impact at Project MEI (27-year Exposure)

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information: DPM Conc (ug/m3) Year	DPM Conc (ug/m3) Annual	Age Sensitivity Factor	Infant/Child Cancer Risk (per million)		Hazard Index	Fugitive PM2.5	Total PM2.5
0	0.25	-0.25 - 0*	2023	0.00000	10	0.00				
1	1	0 - 1	2023	0.00000	10	0.00				
2	1	1 - 2	2024	0.00000	10	0.00				
3	1	2 - 3	2025	0.00000	3	0.00				
4	1	3 - 4	2026	0.00054	3	0.01		0.0001	0.001	0.001
5	1	4 - 5	2027	0.00054	3	0.01		0.0001	0.001	0.001
6	1	5 - 6	2028	0.00054	3	0.01		0.0001	0.001	0.001
7	1	6 - 7	2029	0.00054	3	0.01		0.0001	0.001	0.001
8	1	7 - 8	2030	0.00054	3	0.01		0.0001	0.001	0.001
9	1	8 - 9	2031	0.00054	3	0.01		0.0001	0.001	0.001
10	1	9 - 10	2032	0.00054	3	0.01		0.0001	0.001	0.001
11	1	10 - 11	2033	0.00054	3	0.01		0.0001	0.001	0.001
12	1	11 - 12	2034	0.00054	3	0.01		0.0001	0.001	0.001
13	1	12 - 13	2035	0.00054	3	0.01		0.0001	0.001	0.001
14	1	13 - 14	2036	0.00054	3	0.01		0.0001	0.001	0.001
15	1	14 - 15	2037	0.00054	3	0.01		0.0001	0.001	0.001
16	1	15 - 16	2038	0.00054	3	0.01		0.0001	0.001	0.001
17	1	16-17	2039	0.00054	1	0.00		0.0001	0.001	0.001
18	1	17-18	2040	0.00054	1	0.00		0.0001	0.001	0.001
19	1	18-19	2041	0.00054	1	0.00		0.0001	0.001	0.001
20	1	19-20	2042	0.00054	1	0.00		0.0001	0.001	0.001
21	1	20-21	2043	0.00054	1	0.00		0.0001	0.001	0.001
22	1	21-22	2044	0.00054	1	0.00		0.0001	0.001	0.001
23	1	22-23	2045	0.00054	1	0.00		0.0001	0.001	0.001
24	1	23-24	2046	0.00054	1	0.00		0.0001	0.001	0.001
25	1	24-25	2047	0.00054	1	0.00		0.0001	0.001	0.001
26	1	25-26	2048	0.00054	1	0.00		0.0001	0.001	0.001
27	1	26-27	2049	0.00054	1	0.00		0.0001	0.001	0.001
28	1	27-28	2050	0.00054	1	0.00		0.0001	0.001	0.001
29	1	28-29	2051	0.00054	1	0.00		0.0001	0.001	0.001
30	1	29-30	2052	0.00054	1	0.00		0.0001	0.001	0.001
Total Increased Cancer Risk						**0.15**	**Max**	**0.0001**	**0.001**	**0.001**

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Cancer Risks from Project Operation
Project Emergency Generator
Impacts at Off-Site Receptors- 1.5m MEI Receptor Heights
Impact at Project MEI (27-year Exposure)

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information: DPM Conc (ug/m3) Year	DPM Conc (ug/m3) Annual	Age Sensitivity Factor	Infant/Child Cancer Risk (per million)		Hazard Index	Fugitive PM2.5	Total PM2.5
0	0.25	-0.25 - 0*	2023	0.00000	10	0.00				
1	1	0 - 1	2023	0.00000	10	0.00				
2	1	1 - 2	2024	0.00000	10	0.00				
3	1	2 - 3	2025	0.00000	3	0.00				
4	1	3 - 4	2026	0.00052	3	0.01		0.0001	0.001	0.001
5	1	4 - 5	2027	0.00052	3	0.01		0.0001	0.001	0.001
6	1	5 - 6	2028	0.00052	3	0.01		0.0001	0.001	0.001
7	1	6 - 7	2029	0.00052	3	0.01		0.0001	0.001	0.001
8	1	7 - 8	2030	0.00052	3	0.01		0.0001	0.001	0.001
9	1	8 - 9	2031	0.00052	3	0.01		0.0001	0.001	0.001
10	1	9 - 10	2032	0.00052	3	0.01		0.0001	0.001	0.001
11	1	10 - 11	2033	0.00052	3	0.01		0.0001	0.001	0.001
12	1	11 - 12	2034	0.00052	3	0.01		0.0001	0.001	0.001
13	1	12 - 13	2035	0.00052	3	0.01		0.0001	0.001	0.001
14	1	13 - 14	2036	0.00052	3	0.01		0.0001	0.001	0.001
15	1	14 - 15	2037	0.00052	3	0.01		0.0001	0.001	0.001
16	1	15 - 16	2038	0.00052	3	0.01		0.0001	0.001	0.001
17	1	16-17	2039	0.00052	1	0.00		0.0001	0.001	0.001
18	1	17-18	2040	0.00052	1	0.00		0.0001	0.001	0.001
19	1	18-19	2041	0.00052	1	0.00		0.0001	0.001	0.001
20	1	19-20	2042	0.00052	1	0.00		0.0001	0.001	0.001
21	1	20-21	2043	0.00052	1	0.00		0.0001	0.001	0.001
22	1	21-22	2044	0.00052	1	0.00		0.0001	0.001	0.001
23	1	22-23	2045	0.00052	1	0.00		0.0001	0.001	0.001
24	1	23-24	2046	0.00052	1	0.00		0.0001	0.001	0.001
25	1	24-25	2047	0.00052	1	0.00		0.0001	0.001	0.001
26	1	25-26	2048	0.00052	1	0.00		0.0001	0.001	0.001
27	1	26-27	2049	0.00052	1	0.00		0.0001	0.001	0.001
28	1	27-28	2050	0.00052	1	0.00		0.0001	0.001	0.001
29	1	28-29	2051	0.00052	1	0.00		0.0001	0.001	0.001
30	1	29-30	2052	0.00052	1	0.00		0.0001	0.001	0.001
Total Increased Cancer Risk						**0.15**	**Max**	**0.0001**	**0.001**	**0.001**

* Third trimester of pregnancy

Attachment 5: Cumulative Community Risk from TAC Sources

CT-EMFAC2017 Roadway Emissions Factors - 2021

File Name: El Paseo Cumulative - Santa Clara (SF) - 2021 - Annual.EF
CT-EMFAC2017 Version: 1.0.2.27401
Run Date: 3/12/2021 12:14
Area: Santa Clara (SF)
Analysis Year: 2021
Season: Annual

Vehicle Category	VMT Fraction Across Category	Diesel VMT Fraction Within Category	Gas VMT Fraction Within Category
Truck 1	0.015	0.468	0.532
Truck 2	0.02	0.942	0.045
Non-Truck	0.965	0.013	0.964

Road Type: Major/Collector
Silt Loading Factor: CARB 0.032 g/m2
Precipitation Correction: CARB P = 64 days N = 365 days

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph
PM2.5	0.012433	0.008522	0.005854	0.004194	0.003261	0.002703	0.002371	0.002206	0.002174	0.002258	0.002453
TOG	0.253005	0.167552	0.11089	0.077146	0.05828	0.046477	0.038833	0.034006	0.031241	0.030144	0.030577
Diesel PM	0.003426	0.00286	0.002093	0.00156	0.001319	0.001194	0.001137	0.001141	0.001206	0.00133	0.001513

Fleet Average Running Loss Emission Factors (grams/veh-hour)

Pollutant Name	Emission Factor
TOG	1.485763

Fleet Average Tire Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.002107

Fleet Average Brake Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.016814

Fleet Average Road Dust Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.01489

==========END==========

El Paseo Education Option 1 with Saratoga Site

Lawrence Expressway Traffic Emissions and Health Risk Calculations

Analysis Year = ***2021***

Vehicle Type	2018 Caltrans Vehicles (veh/day)	2021 Vehicles (veh/day)
Total	**25,240**	**25,997**

Increase From 2018	1.03
Vehicles/Direction	**12,999**
Avg Vehicles/Hour/Direction	542

Traffic Data Year = ***2018***

El Paeso & Saratoga Traffic Report Volumes	AADT Total
Background + EP1 School Condition - Lawrence Expy	25,240

Percent of Total Vehicles

Traffic Increase per Year (%) = *1.00%*

El Paseo Option 1 Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Lawrence Expressway/Quito Road
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
DPM_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	55.7	3.4	Varied	12,999	19,558	210,518	7.325E-09	5.401E-09	6.8	3.16
DPM_SB_LAW	Lawrence Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	55.7	3.4	Varied	12,999	19,281	207,540	7.325E-09	5.401E-09	6.8	3.16
									Total	25,997						

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle (g/VMT)	0.00133	0.001141		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and DPM Emissions - DPM_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.82%	496	1.31E-04	9	6.42%	834	1.89E-04	17	5.55%	721	1.64E-04
2	2.60%	338	8.94E-05	10	7.23%	939	2.48E-04	18	3.24%	421	9.55E-05
3	2.83%	368	9.74E-05	11	6.30%	819	2.17E-04	19	2.43%	316	8.35E-05
4	3.41%	443	1.17E-04	12	6.99%	909	2.40E-04	20	0.92%	120	3.18E-05
5	2.20%	286	7.55E-05	13	6.18%	804	2.13E-04	21	3.06%	398	1.05E-04
6	3.35%	436	1.15E-04	14	6.13%	796	2.11E-04	22	4.16%	541	1.43E-04
7	6.13%	796	2.11E-04	15	5.14%	669	1.77E-04	23	2.43%	316	8.35E-05
8	4.74%	616	1.40E-04	16	3.87%	503	1.33E-04	24	0.87%	113	2.98E-05
								Total		12,999	

2021 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.82%	496	1.29E-04	9	6.42%	834	1.87E-04	17	5.55%	721	1.61E-04
2	2.60%	338	8.82E-05	10	7.23%	939	2.45E-04	18	3.24%	421	9.41E-05
3	2.83%	368	9.60E-05	11	6.30%	819	2.14E-04	19	2.43%	316	8.23E-05
4	3.41%	443	1.16E-04	12	6.99%	909	2.37E-04	20	0.92%	120	3.14E-05
5	2.20%	286	7.45E-05	13	6.18%	804	2.10E-04	21	3.06%	398	1.04E-04
6	3.35%	436	1.14E-04	14	6.13%	796	2.08E-04	22	4.16%	541	1.41E-04
7	6.13%	796	2.08E-04	15	5.14%	669	1.74E-04	23	2.43%	316	8.23E-05
8	4.74%	616	1.38E-04	16	3.87%	503	1.31E-04	24	0.87%	113	2.94E-05
								Total		12,999	

El Paseo Option 1 Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Lawrence Expressway/Quito Road
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
PM2.5_NB_LAW	Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	12,999	19,558	210,518	1.244E-08	9.170E-09	2.6	1.21
PM2.5_SB_LAW	Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	12,999	19,281	207,540	1.244E-08	9.170E-09	2.6	1.21
									Total	25,997						

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle (g/VMT)	0.002258	0.00221		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and PM2.5 Emissions - PM2.5_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	150	6.75E-05	9	7.11%	924	4.05E-04	17	7.38%	960	4.21E-04
2	0.42%	55	2.46E-05	10	4.39%	571	2.56E-04	18	8.17%	1062	4.66E-04
3	0.41%	53	2.38E-05	11	4.67%	607	2.73E-04	19	5.70%	741	3.33E-04
4	0.27%	35	1.57E-05	12	5.89%	766	3.44E-04	20	4.27%	555	2.49E-04
5	0.50%	66	2.94E-05	13	6.15%	800	3.59E-04	21	3.25%	423	1.90E-04
6	0.91%	118	5.30E-05	14	6.03%	784	3.52E-04	22	3.30%	429	1.93E-04
7	3.79%	493	2.21E-04	15	7.01%	911	4.09E-04	23	2.46%	319	1.43E-04
8	7.76%	1009	4.43E-04	16	7.14%	927	4.17E-04	24	1.87%	243	1.09E-04
								Total		12,999	

2021 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM2.5_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	150	6.65E-05	9	7.11%	924	4.00E-04	17	7.38%	960	4.15E-04
2	0.42%	55	2.42E-05	10	4.39%	571	2.53E-04	18	8.17%	1062	4.59E-04
3	0.41%	53	2.35E-05	11	4.67%	607	2.69E-04	19	5.70%	741	3.28E-04
4	0.27%	35	1.54E-05	12	5.89%	766	3.39E-04	20	4.27%	555	2.46E-04
5	0.50%	66	2.90E-05	13	6.15%	800	3.54E-04	21	3.25%	423	1.87E-04
6	0.91%	118	5.23E-05	14	6.03%	784	3.47E-04	22	3.30%	429	1.90E-04
7	3.79%	493	2.18E-04	15	7.01%	911	4.03E-04	23	2.46%	319	1.41E-04
8	7.76%	1009	4.36E-04	16	7.14%	927	4.11E-04	24	1.87%	243	1.07E-04
								Total		12,999	

El Paseo Option 1 Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Lawrence Expressway/Quito Road
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEXH_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	12,999	19,558	210,518	1.660E-07	1.224E-07	2.6	1.21
TEXH_SB_LAW	Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	12,999	19,281	207,540	1.660E-07	1.224E-07	2.6	1.21
									Total	25,997						

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle (g/VMT)	0.03014	0.03401		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	150	9.01E-04	9	7.11%	924	6.25E-03	17	7.38%	960	6.49E-03
2	0.42%	55	3.28E-04	10	4.39%	571	3.42E-03	18	8.17%	1062	7.18E-03
3	0.41%	53	3.18E-04	11	4.67%	607	3.64E-03	19	5.70%	741	4.44E-03
4	0.27%	35	2.09E-04	12	5.89%	766	4.59E-03	20	4.27%	555	3.33E-03
5	0.50%	66	3.93E-04	13	6.15%	800	4.79E-03	21	3.25%	423	2.54E-03
6	0.91%	118	7.08E-04	14	6.03%	784	4.70E-03	22	3.30%	429	2.57E-03
7	3.79%	493	2.96E-03	15	7.01%	911	5.46E-03	23	2.46%	319	1.91E-03
8	7.76%	1009	6.83E-03	16	7.14%	927	5.56E-03	24	1.87%	243	1.45E-03
								Total		12,999	

2021 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	150	8.88E-04	9	7.11%	924	6.16E-03	17	7.38%	960	6.40E-03
2	0.42%	55	3.23E-04	10	4.39%	571	3.37E-03	18	8.17%	1062	7.08E-03
3	0.41%	53	3.14E-04	11	4.67%	607	3.59E-03	19	5.70%	741	4.38E-03
4	0.27%	35	2.06E-04	12	5.89%	766	4.52E-03	20	4.27%	555	3.28E-03
5	0.50%	66	3.87E-04	13	6.15%	800	4.73E-03	21	3.25%	423	2.50E-03
6	0.91%	118	6.98E-04	14	6.03%	784	4.64E-03	22	3.30%	429	2.53E-03
7	3.79%	493	2.91E-03	15	7.01%	911	5.38E-03	23	2.46%	319	1.89E-03
8	7.76%	1009	6.73E-03	16	7.14%	927	5.48E-03	24	1.87%	243	1.43E-03
								Total		12,999	

El Paseo Option 1 Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Lawrence Expressway/Quito Road
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEVAP_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	12,999	19,558	210,518	1.637E-07	1.207E-07	2.6	1.21
TEVAP_SB_LAW	Lawrence Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	12,999	19,281	207,540	1.637E-07	1.207E-07	2.6	1.21
									Total	25,997						

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle per Hour (g/hour)	1.48576	1.48576		
Emissions per Vehicle per Mile (g/VMT)	0.02972	0.03714		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	150	8.88E-04	9	7.11%	924	6.82E-03	17	7.38%	960	7.09E-03
2	0.42%	55	3.23E-04	10	4.39%	571	3.37E-03	18	8.17%	1062	7.84E-03
3	0.41%	53	3.14E-04	11	4.67%	607	3.59E-03	19	5.70%	741	4.38E-03
4	0.27%	35	2.06E-04	12	5.89%	766	4.52E-03	20	4.27%	555	3.28E-03
5	0.50%	66	3.87E-04	13	6.15%	800	4.73E-03	21	3.25%	423	2.50E-03
6	0.91%	118	6.98E-04	14	6.03%	784	4.64E-03	22	3.30%	429	2.53E-03
7	3.79%	493	2.91E-03	15	7.01%	911	5.38E-03	23	2.46%	319	1.89E-03
8	7.76%	1009	7.45E-03	16	7.14%	927	5.48E-03	24	1.87%	243	1.43E-03
								Total		12,999	

2021 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	150	8.76E-04	9	7.11%	924	6.73E-03	17	7.38%	960	6.99E-03
2	0.42%	55	3.19E-04	10	4.39%	571	3.32E-03	18	8.17%	1062	7.73E-03
3	0.41%	53	3.09E-04	11	4.67%	607	3.54E-03	19	5.70%	741	4.32E-03
4	0.27%	35	2.03E-04	12	5.89%	766	4.46E-03	20	4.27%	555	3.24E-03
5	0.50%	66	3.82E-04	13	6.15%	800	4.66E-03	21	3.25%	423	2.46E-03
6	0.91%	118	6.88E-04	14	6.03%	784	4.57E-03	22	3.30%	429	2.50E-03
7	3.79%	493	2.87E-03	15	7.01%	911	5.31E-03	23	2.46%	319	1.86E-03
8	7.76%	1009	7.35E-03	16	7.14%	927	5.40E-03	24	1.87%	243	1.41E-03
								Total		12,999	

El Paseo Option 1 Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Lawrence Expressway/Quito Road
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
FUG_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	12,999	19,558	210,518	1.862E-07	1.373E-07	2.6	1.21
FUG_SB_LAW	Lawrence Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	12,999	19,281	207,540	1.862E-07	1.373E-07	2.6	1.21
									Total	25,997						

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211	0.00211		
Brake Wear - Emissions per Vehicle (g/VMT)	0.01681	0.01681		
Road Dust - Emissions per Vehicle (g/VMT)	0.01489	0.01489		
otal Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03381	0.03381		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	150	1.01E-03	9	7.11%	924	6.21E-03	17	7.38%	960	6.45E-03
2	0.42%	55	3.68E-04	10	4.39%	571	3.84E-03	18	8.17%	1062	7.14E-03
3	0.41%	53	3.57E-04	11	4.67%	607	4.08E-03	19	5.70%	741	4.98E-03
4	0.27%	35	2.34E-04	12	5.89%	766	5.15E-03	20	4.27%	555	3.73E-03
5	0.50%	66	4.41E-04	13	6.15%	800	5.38E-03	21	3.25%	423	2.84E-03
6	0.91%	118	7.94E-04	14	6.03%	784	5.27E-03	22	3.30%	429	2.88E-03
7	3.79%	493	3.31E-03	15	7.01%	911	6.13E-03	23	2.46%	319	2.15E-03
8	7.76%	1009	6.79E-03	16	7.14%	927	6.24E-03	24	1.87%	243	1.63E-03
								Total		12,999	

2021 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	150	9.96E-04	9	7.11%	924	6.12E-03	17	7.38%	960	6.36E-03
2	0.42%	55	3.63E-04	10	4.39%	571	3.78E-03	18	8.17%	1062	7.04E-03
3	0.41%	53	3.52E-04	11	4.67%	607	4.02E-03	19	5.70%	741	4.91E-03
4	0.27%	35	2.31E-04	12	5.89%	766	5.08E-03	20	4.27%	555	3.68E-03
5	0.50%	66	4.34E-04	13	6.15%	800	5.30E-03	21	3.25%	423	2.80E-03
6	0.91%	118	7.83E-04	14	6.03%	784	5.20E-03	22	3.30%	429	2.84E-03
7	3.79%	493	3.27E-03	15	7.01%	911	6.04E-03	23	2.46%	319	2.12E-03
8	7.76%	1009	6.69E-03	16	7.14%	927	6.15E-03	24	1.87%	243	1.61E-03
								Total		12,999	

El Paseo Option 1 Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at Construction MEI - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0024	0.0668	0.0680	0.028	0.004	0.0003	0.03
1	1	0 - 1	2021	10	0.0024	0.0668	0.0680	0.336	0.053	0.0032	0.39
2	1	1 - 2	2022	10	0.0024	0.0668	0.0680	0.336	0.053	0.0032	0.39
3	1	2 - 3	2023	3	0.0024	0.0668	0.0680	0.045	0.007	0.0004	0.05
4	1	3 - 4	2024	3	0.0024	0.0668	0.0680	0.045	0.007	0.0004	0.05
5	1	4 - 5	2025	3	0.0024	0.0668	0.0680	0.045	0.007	0.0004	0.05
6	1	5 - 6	2026	3	0.0024	0.0668	0.0680	0.045	0.007	0.0004	0.05
7	1	6 - 7	2027	3	0.0024	0.0668	0.0680	0.045	0.007	0.0004	0.05
8	1	7 - 8	2028	3	0.0024	0.0668	0.0680	0.045	0.007	0.0004	0.05
9	1	8 - 9	2029	3	0.0024	0.0668	0.0680	0.045	0.007	0.0004	0.05
10	1	9 - 10	2030	3	0.0024	0.0668	0.0680	0.045	0.007	0.0004	0.05
11	1	10 - 11	2031	3	0.0024	0.0668	0.0680	0.045	0.007	0.0004	0.05
12	1	11 - 12	2032	3	0.0024	0.0668	0.0680	0.045	0.007	0.0004	0.05
13	1	12 - 13	2033	3	0.0024	0.0668	0.0680	0.045	0.007	0.0004	0.05
14	1	13 - 14	2034	3	0.0024	0.0668	0.0680	0.045	0.007	0.0004	0.05
15	1	14 - 15	2035	3	0.0024	0.0668	0.0680	0.045	0.007	0.0004	0.05
16	1	15 - 16	2036	3	0.0024	0.0668	0.0680	0.045	0.007	0.0004	0.05
17	1	16-17	2037	1	0.0024	0.0668	0.0680	0.007	0.001	0.0001	0.01
18	1	17-18	2038	1	0.0024	0.0668	0.0680	0.007	0.001	0.0001	0.01
19	1	18-19	2039	1	0.0024	0.0668	0.0680	0.007	0.001	0.0001	0.01
20	1	19-20	2040	1	0.0024	0.0668	0.0680	0.007	0.001	0.0001	0.01
21	1	20-21	2041	1	0.0024	0.0668	0.0680	0.007	0.001	0.0001	0.01
22	1	21-22	2042	1	0.0024	0.0668	0.0680	0.007	0.001	0.0001	0.01
23	1	22-23	2043	1	0.0024	0.0668	0.0680	0.007	0.001	0.0001	0.01
24	1	23-24	2044	1	0.0024	0.0668	0.0680	0.007	0.001	0.0001	0.01
25	1	24-25	2045	1	0.0024	0.0668	0.0680	0.007	0.001	0.0001	0.01
26	1	25-26	2046	1	0.0024	0.0668	0.0680	0.007	0.001	0.0001	0.01
27	1	26-27	2047	1	0.0024	0.0668	0.0680	0.007	0.001	0.0001	0.01
28	1	27-28	2048	1	0.0024	0.0668	0.0680	0.007	0.001	0.0001	0.01
29	1	28-29	2049	1	0.0024	0.0668	0.0680	0.007	0.001	0.0001	0.01
30	1	29-30	2050	1	0.0024	0.0668	0.0680	0.007	0.001	0.0001	0.01
Total Increased Cancer Risk								1.43	0.226	0.014	**1.67**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.0005	0.07	0.08

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 1 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0145	0.4825	0.4904	0.168	0.032	0.0019	0.20
1	1	0 - 1	2021	10	0.0145	0.4825	0.4904	2.029	0.385	0.0230	2.44
2	1	1 - 2	2022	10	0.0145	0.4825	0.4904	2.029	0.385	0.0230	2.44
3	1	2 - 3	2023	3	0.0145	0.4825	0.4904	0.271	0.051	0.0031	0.32
4	1	3 - 4	2024	3	0.0145	0.4825	0.4904	0.271	0.051	0.0031	0.32
5	1	4 - 5	2025	3	0.0145	0.4825	0.4904	0.271	0.051	0.0031	0.32
6	1	5 - 6	2026	3	0.0145	0.4825	0.4904	0.271	0.051	0.0031	0.32
7	1	6 - 7	2027	3	0.0145	0.4825	0.4904	0.271	0.051	0.0031	0.32
8	1	7 - 8	2028	3	0.0145	0.4825	0.4904	0.271	0.051	0.0031	0.32
9	1	8 - 9	2029	3	0.0145	0.4825	0.4904	0.271	0.051	0.0031	0.32
10	1	9 - 10	2030	3	0.0145	0.4825	0.4904	0.271	0.051	0.0031	0.32
11	1	10 - 11	2031	3	0.0145	0.4825	0.4904	0.271	0.051	0.0031	0.32
12	1	11 - 12	2032	3	0.0145	0.4825	0.4904	0.271	0.051	0.0031	0.32
13	1	12 - 13	2033	3	0.0145	0.4825	0.4904	0.271	0.051	0.0031	0.32
14	1	13 - 14	2034	3	0.0145	0.4825	0.4904	0.271	0.051	0.0031	0.32
15	1	14 - 15	2035	3	0.0145	0.4825	0.4904	0.271	0.051	0.0031	0.32
16	1	15 - 16	2036	3	0.0145	0.4825	0.4904	0.271	0.051	0.0031	0.32
17	1	16-17	2037	1	0.0145	0.4825	0.4904	0.042	0.008	0.0005	0.05
18	1	17-18	2038	1	0.0145	0.4825	0.4904	0.042	0.008	0.0005	0.05
19	1	18-19	2039	1	0.0145	0.4825	0.4904	0.042	0.008	0.0005	0.05
20	1	19-20	2040	1	0.0145	0.4825	0.4904	0.042	0.008	0.0005	0.05
21	1	20-21	2041	1	0.0145	0.4825	0.4904	0.042	0.008	0.0005	0.05
22	1	21-22	2042	1	0.0145	0.4825	0.4904	0.042	0.008	0.0005	0.05
23	1	22-23	2043	1	0.0145	0.4825	0.4904	0.042	0.008	0.0005	0.05
24	1	23-24	2044	1	0.0145	0.4825	0.4904	0.042	0.008	0.0005	0.05
25	1	24-25	2045	1	0.0145	0.4825	0.4904	0.042	0.008	0.0005	0.05
26	1	25-26	2046	1	0.0145	0.4825	0.4904	0.042	0.008	0.0005	0.05
27	1	26-27	2047	1	0.0145	0.4825	0.4904	0.042	0.008	0.0005	0.05
28	1	27-28	2048	1	0.0145	0.4825	0.4904	0.042	0.008	0.0005	0.05
29	1	28-29	2049	1	0.0145	0.4825	0.4904	0.042	0.008	0.0005	0.05
30	1	29-30	2050	1	0.0145	0.4825	0.4904	0.042	0.008	0.0005	0.05
Total Increased Cancer Risk								8.60	1.630	0.098	**10.32**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.003	0.52	0.56

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 1 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - With MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0044	0.4825	0.4904	0.050	0.032	0.0019	0.08
1	1	0 - 1	2021	10	0.0044	0.4825	0.4904	0.609	0.385	0.0230	1.02
2	1	1 - 2	2022	10	0.0044	0.4825	0.4904	0.609	0.385	0.0230	1.02
3	1	2 - 3	2023	3	0.0044	0.4825	0.4904	0.081	0.051	0.0031	0.14
4	1	3 - 4	2024	3	0.0044	0.4825	0.4904	0.081	0.051	0.0031	0.14
5	1	4 - 5	2025	3	0.0044	0.4825	0.4904	0.081	0.051	0.0031	0.14
6	1	5 - 6	2026	3	0.0044	0.4825	0.4904	0.081	0.051	0.0031	0.14
7	1	6 - 7	2027	3	0.0044	0.4825	0.4904	0.081	0.051	0.0031	0.14
8	1	7 - 8	2028	3	0.0044	0.4825	0.4904	0.081	0.051	0.0031	0.14
9	1	8 - 9	2029	3	0.0044	0.4825	0.4904	0.081	0.051	0.0031	0.14
10	1	9 - 10	2030	3	0.0044	0.4825	0.4904	0.081	0.051	0.0031	0.14
11	1	10 - 11	2031	3	0.0044	0.4825	0.4904	0.081	0.051	0.0031	0.14
12	1	11 - 12	2032	3	0.0044	0.4825	0.4904	0.081	0.051	0.0031	0.14
13	1	12 - 13	2033	3	0.0044	0.4825	0.4904	0.081	0.051	0.0031	0.14
14	1	13 - 14	2034	3	0.0044	0.4825	0.4904	0.081	0.051	0.0031	0.14
15	1	14 - 15	2035	3	0.0044	0.4825	0.4904	0.081	0.051	0.0031	0.14
16	1	15 - 16	2036	3	0.0044	0.4825	0.4904	0.081	0.051	0.0031	0.14
17	1	16-17	2037	1	0.0044	0.4825	0.4904	0.013	0.008	0.0005	0.02
18	1	17-18	2038	1	0.0044	0.4825	0.4904	0.013	0.008	0.0005	0.02
19	1	18-19	2039	1	0.0044	0.4825	0.4904	0.013	0.008	0.0005	0.02
20	1	19-20	2040	1	0.0044	0.4825	0.4904	0.013	0.008	0.0005	0.02
21	1	20-21	2041	1	0.0044	0.4825	0.4904	0.013	0.008	0.0005	0.02
22	1	21-22	2042	1	0.0044	0.4825	0.4904	0.013	0.008	0.0005	0.02
23	1	22-23	2043	1	0.0044	0.4825	0.4904	0.013	0.008	0.0005	0.02
24	1	23-24	2044	1	0.0044	0.4825	0.4904	0.013	0.008	0.0005	0.02
25	1	24-25	2045	1	0.0044	0.4825	0.4904	0.013	0.008	0.0005	0.02
26	1	25-26	2046	1	0.0044	0.4825	0.4904	0.013	0.008	0.0005	0.02
27	1	26-27	2047	1	0.0044	0.4825	0.4904	0.013	0.008	0.0005	0.02
28	1	27-28	2048	1	0.0044	0.4825	0.4904	0.013	0.008	0.0005	0.02
29	1	28-29	2049	1	0.0044	0.4825	0.4904	0.013	0.008	0.0005	0.02
30	1	29-30	2050	1	0.0044	0.4825	0.4904	0.013	0.008	0.0005	0.02
Total Increased Cancer Risk								2.58	1.630	0.098	**4.31**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.001	0.16	0.17

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 1 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0123	0.2960	0.3009	0.142	0.020	0.0012	0.16
1	1	0 - 1	2021	10	0.0123	0.2960	0.3009	1.713	0.236	0.0141	1.96
2	1	1 - 2	2022	10	0.0123	0.2960	0.3009	1.713	0.236	0.0141	1.96
3	1	2 - 3	2023	3	0.0123	0.2960	0.3009	0.228	0.031	0.0019	0.26
4	1	3 - 4	2024	3	0.0123	0.2960	0.3009	0.228	0.031	0.0019	0.26
5	1	4 - 5	2025	3	0.0123	0.2960	0.3009	0.228	0.031	0.0019	0.26
6	1	5 - 6	2026	3	0.0123	0.2960	0.3009	0.228	0.031	0.0019	0.26
7	1	6 - 7	2027	3	0.0123	0.2960	0.3009	0.228	0.031	0.0019	0.26
8	1	7 - 8	2028	3	0.0123	0.2960	0.3009	0.228	0.031	0.0019	0.26
9	1	8 - 9	2029	3	0.0123	0.2960	0.3009	0.228	0.031	0.0019	0.26
10	1	9 - 10	2030	3	0.0123	0.2960	0.3009	0.228	0.031	0.0019	0.26
11	1	10 - 11	2031	3	0.0123	0.2960	0.3009	0.228	0.031	0.0019	0.26
12	1	11 - 12	2032	3	0.0123	0.2960	0.3009	0.228	0.031	0.0019	0.26
13	1	12 - 13	2033	3	0.0123	0.2960	0.3009	0.228	0.031	0.0019	0.26
14	1	13 - 14	2034	3	0.0123	0.2960	0.3009	0.228	0.031	0.0019	0.26
15	1	14 - 15	2035	3	0.0123	0.2960	0.3009	0.228	0.031	0.0019	0.26
16	1	15 - 16	2036	3	0.0123	0.2960	0.3009	0.228	0.031	0.0019	0.26
17	1	16-17	2037	1	0.0123	0.2960	0.3009	0.035	0.005	0.0003	0.04
18	1	17-18	2038	1	0.0123	0.2960	0.3009	0.035	0.005	0.0003	0.04
19	1	18-19	2039	1	0.0123	0.2960	0.3009	0.035	0.005	0.0003	0.04
20	1	19-20	2040	1	0.0123	0.2960	0.3009	0.035	0.005	0.0003	0.04
21	1	20-21	2041	1	0.0123	0.2960	0.3009	0.035	0.005	0.0003	0.04
22	1	21-22	2042	1	0.0123	0.2960	0.3009	0.035	0.005	0.0003	0.04
23	1	22-23	2043	1	0.0123	0.2960	0.3009	0.035	0.005	0.0003	0.04
24	1	23-24	2044	1	0.0123	0.2960	0.3009	0.035	0.005	0.0003	0.04
25	1	24-25	2045	1	0.0123	0.2960	0.3009	0.035	0.005	0.0003	0.04
26	1	25-26	2046	1	0.0123	0.2960	0.3009	0.035	0.005	0.0003	0.04
27	1	26-27	2047	1	0.0123	0.2960	0.3009	0.035	0.005	0.0003	0.04
28	1	27-28	2048	1	0.0123	0.2960	0.3009	0.035	0.005	0.0003	0.04
29	1	28-29	2049	1	0.0123	0.2960	0.3009	0.035	0.005	0.0003	0.04
30	1	29-30	2050	1	0.0123	0.2960	0.3009	0.035	0.005	0.0003	0.04
Total Increased Cancer Risk								7.26	1.000	0.060	**8.3**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00245	0.32	0.34

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 2 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0148	0.4993	0.5073	0.171	0.033	0.0020	0.21
1	1	0 - 1	2021	10	0.0148	0.4993	0.5073	2.062	0.398	0.0238	2.48
2	1	1 - 2	2022	10	0.0148	0.4993	0.5073	2.062	0.398	0.0238	2.48
3	1	2 - 3	2023	3	0.0148	0.4993	0.5073	0.275	0.053	0.0032	0.33
4	1	3 - 4	2024	3	0.0148	0.4993	0.5073	0.275	0.053	0.0032	0.33
5	1	4 - 5	2025	3	0.0148	0.4993	0.5073	0.275	0.053	0.0032	0.33
6	1	5 - 6	2026	3	0.0148	0.4993	0.5073	0.275	0.053	0.0032	0.33
7	1	6 - 7	2027	3	0.0148	0.4993	0.5073	0.275	0.053	0.0032	0.33
8	1	7 - 8	2028	3	0.0148	0.4993	0.5073	0.275	0.053	0.0032	0.33
9	1	8 - 9	2029	3	0.0148	0.4993	0.5073	0.275	0.053	0.0032	0.33
10	1	9 - 10	2030	3	0.0148	0.4993	0.5073	0.275	0.053	0.0032	0.33
11	1	10 - 11	2031	3	0.0148	0.4993	0.5073	0.275	0.053	0.0032	0.33
12	1	11 - 12	2032	3	0.0148	0.4993	0.5073	0.275	0.053	0.0032	0.33
13	1	12 - 13	2033	3	0.0148	0.4993	0.5073	0.275	0.053	0.0032	0.33
14	1	13 - 14	2034	3	0.0148	0.4993	0.5073	0.275	0.053	0.0032	0.33
15	1	14 - 15	2035	3	0.0148	0.4993	0.5073	0.275	0.053	0.0032	0.33
16	1	15 - 16	2036	3	0.0148	0.4993	0.5073	0.275	0.053	0.0032	0.33
17	1	16-17	2037	1	0.0148	0.4993	0.5073	0.042	0.008	0.0005	0.05
18	1	17-18	2038	1	0.0148	0.4993	0.5073	0.042	0.008	0.0005	0.05
19	1	18-19	2039	1	0.0148	0.4993	0.5073	0.042	0.008	0.0005	0.05
20	1	19-20	2040	1	0.0148	0.4993	0.5073	0.042	0.008	0.0005	0.05
21	1	20-21	2041	1	0.0148	0.4993	0.5073	0.042	0.008	0.0005	0.05
22	1	21-22	2042	1	0.0148	0.4993	0.5073	0.042	0.008	0.0005	0.05
23	1	22-23	2043	1	0.0148	0.4993	0.5073	0.042	0.008	0.0005	0.05
24	1	23-24	2044	1	0.0148	0.4993	0.5073	0.042	0.008	0.0005	0.05
25	1	24-25	2045	1	0.0148	0.4993	0.5073	0.042	0.008	0.0005	0.05
26	1	25-26	2046	1	0.0148	0.4993	0.5073	0.042	0.008	0.0005	0.05
27	1	26-27	2047	1	0.0148	0.4993	0.5073	0.042	0.008	0.0005	0.05
28	1	27-28	2048	1	0.0148	0.4993	0.5073	0.042	0.008	0.0005	0.05
29	1	28-29	2049	1	0.0148	0.4993	0.5073	0.042	0.008	0.0005	0.05
30	1	29-30	2050	1	0.0148	0.4993	0.5073	0.042	0.008	0.0005	0.05
Total Increased Cancer Risk								8.74	1.686	0.101	**10.53**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.003	0.54	0.58

El Paseo Option 1 Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 2 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - With MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0044	0.4993	0.5073	0.051	0.033	0.0020	0.09
1	1	0 - 1	2021	10	0.0044	0.4993	0.5073	0.619	0.398	0.0238	1.04
2	1	1 - 2	2022	10	0.0044	0.4993	0.5073	0.619	0.398	0.0238	1.04
3	1	2 - 3	2023	3	0.0044	0.4993	0.5073	0.082	0.053	0.0032	0.14
4	1	3 - 4	2024	3	0.0044	0.4993	0.5073	0.082	0.053	0.0032	0.14
5	1	4 - 5	2025	3	0.0044	0.4993	0.5073	0.082	0.053	0.0032	0.14
6	1	5 - 6	2026	3	0.0044	0.4993	0.5073	0.082	0.053	0.0032	0.14
7	1	6 - 7	2027	3	0.0044	0.4993	0.5073	0.082	0.053	0.0032	0.14
8	1	7 - 8	2028	3	0.0044	0.4993	0.5073	0.082	0.053	0.0032	0.14
9	1	8 - 9	2029	3	0.0044	0.4993	0.5073	0.082	0.053	0.0032	0.14
10	1	9 - 10	2030	3	0.0044	0.4993	0.5073	0.082	0.053	0.0032	0.14
11	1	10 - 11	2031	3	0.0044	0.4993	0.5073	0.082	0.053	0.0032	0.14
12	1	11 - 12	2032	3	0.0044	0.4993	0.5073	0.082	0.053	0.0032	0.14
13	1	12 - 13	2033	3	0.0044	0.4993	0.5073	0.082	0.053	0.0032	0.14
14	1	13 - 14	2034	3	0.0044	0.4993	0.5073	0.082	0.053	0.0032	0.14
15	1	14 - 15	2035	3	0.0044	0.4993	0.5073	0.082	0.053	0.0032	0.14
16	1	15 - 16	2036	3	0.0044	0.4993	0.5073	0.082	0.053	0.0032	0.14
17	1	16-17	2037	1	0.0044	0.4993	0.5073	0.013	0.008	0.0005	0.02
18	1	17-18	2038	1	0.0044	0.4993	0.5073	0.013	0.008	0.0005	0.02
19	1	18-19	2039	1	0.0044	0.4993	0.5073	0.013	0.008	0.0005	0.02
20	1	19-20	2040	1	0.0044	0.4993	0.5073	0.013	0.008	0.0005	0.02
21	1	20-21	2041	1	0.0044	0.4993	0.5073	0.013	0.008	0.0005	0.02
22	1	21-22	2042	1	0.0044	0.4993	0.5073	0.013	0.008	0.0005	0.02
23	1	22-23	2043	1	0.0044	0.4993	0.5073	0.013	0.008	0.0005	0.02
24	1	23-24	2044	1	0.0044	0.4993	0.5073	0.013	0.008	0.0005	0.02
25	1	24-25	2045	1	0.0044	0.4993	0.5073	0.013	0.008	0.0005	0.02
26	1	25-26	2046	1	0.0044	0.4993	0.5073	0.013	0.008	0.0005	0.02
27	1	26-27	2047	1	0.0044	0.4993	0.5073	0.013	0.008	0.0005	0.02
28	1	27-28	2048	1	0.0044	0.4993	0.5073	0.013	0.008	0.0005	0.02
29	1	28-29	2049	1	0.0044	0.4993	0.5073	0.013	0.008	0.0005	0.02
30	1	29-30	2050	1	0.0044	0.4993	0.5073	0.013	0.008	0.0005	0.02
Total Increased Cancer Risk								2.62	1.686	0.101	**4.41**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.001	0.16	0.17

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 2 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0124	0.2827	0.2871	0.143	0.019	0.0011	0.16
1	1	0 - 1	2021	10	0.0124	0.2827	0.2871	1.731	0.225	0.0135	1.97
2	1	1 - 2	2022	10	0.0124	0.2827	0.2871	1.731	0.225	0.0135	1.97
3	1	2 - 3	2023	3	0.0124	0.2827	0.2871	0.231	0.030	0.0018	0.26
4	1	3 - 4	2024	3	0.0124	0.2827	0.2871	0.231	0.030	0.0018	0.26
5	1	4 - 5	2025	3	0.0124	0.2827	0.2871	0.231	0.030	0.0018	0.26
6	1	5 - 6	2026	3	0.0124	0.2827	0.2871	0.231	0.030	0.0018	0.26
7	1	6 - 7	2027	3	0.0124	0.2827	0.2871	0.231	0.030	0.0018	0.26
8	1	7 - 8	2028	3	0.0124	0.2827	0.2871	0.231	0.030	0.0018	0.26
9	1	8 - 9	2029	3	0.0124	0.2827	0.2871	0.231	0.030	0.0018	0.26
10	1	9 - 10	2030	3	0.0124	0.2827	0.2871	0.231	0.030	0.0018	0.26
11	1	10 - 11	2031	3	0.0124	0.2827	0.2871	0.231	0.030	0.0018	0.26
12	1	11 - 12	2032	3	0.0124	0.2827	0.2871	0.231	0.030	0.0018	0.26
13	1	12 - 13	2033	3	0.0124	0.2827	0.2871	0.231	0.030	0.0018	0.26
14	1	13 - 14	2034	3	0.0124	0.2827	0.2871	0.231	0.030	0.0018	0.26
15	1	14 - 15	2035	3	0.0124	0.2827	0.2871	0.231	0.030	0.0018	0.26
16	1	15 - 16	2036	3	0.0124	0.2827	0.2871	0.231	0.030	0.0018	0.26
17	1	16-17	2037	1	0.0124	0.2827	0.2871	0.036	0.005	0.0003	0.04
18	1	17-18	2038	1	0.0124	0.2827	0.2871	0.036	0.005	0.0003	0.04
19	1	18-19	2039	1	0.0124	0.2827	0.2871	0.036	0.005	0.0003	0.04
20	1	19-20	2040	1	0.0124	0.2827	0.2871	0.036	0.005	0.0003	0.04
21	1	20-21	2041	1	0.0124	0.2827	0.2871	0.036	0.005	0.0003	0.04
22	1	21-22	2042	1	0.0124	0.2827	0.2871	0.036	0.005	0.0003	0.04
23	1	22-23	2043	1	0.0124	0.2827	0.2871	0.036	0.005	0.0003	0.04
24	1	23-24	2044	1	0.0124	0.2827	0.2871	0.036	0.005	0.0003	0.04
25	1	24-25	2045	1	0.0124	0.2827	0.2871	0.036	0.005	0.0003	0.04
26	1	25-26	2046	1	0.0124	0.2827	0.2871	0.036	0.005	0.0003	0.04
27	1	26-27	2047	1	0.0124	0.2827	0.2871	0.036	0.005	0.0003	0.04
28	1	27-28	2048	1	0.0124	0.2827	0.2871	0.036	0.005	0.0003	0.04
29	1	28-29	2049	1	0.0124	0.2827	0.2871	0.036	0.005	0.0003	0.04
30	1	29-30	2050	1	0.0124	0.2827	0.2871	0.036	0.005	0.0003	0.04
Total Increased Cancer Risk								7.34	0.955	0.057	**8.3**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00248	0.31	0.33

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 3 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	
0	0.25	-0.25 - 0*	2021	10	0.0059	0.1685	0.1714	0.068	0.011	0.0007	0.08
1	1	0 - 1	2021	10	0.0059	0.1685	0.1714	0.826	0.134	0.0080	0.97
2	1	1 - 2	2022	10	0.0059	0.1685	0.1714	0.826	0.134	0.0080	0.97
3	1	2 - 3	2023	3	0.0059	0.1685	0.1714	0.110	0.018	0.0011	0.13
4	1	3 - 4	2024	3	0.0059	0.1685	0.1714	0.110	0.018	0.0011	0.13
5	1	4 - 5	2025	3	0.0059	0.1685	0.1714	0.110	0.018	0.0011	0.13
6	1	5 - 6	2026	3	0.0059	0.1685	0.1714	0.110	0.018	0.0011	0.13
7	1	6 - 7	2027	3	0.0059	0.1685	0.1714	0.110	0.018	0.0011	0.13
8	1	7 - 8	2028	3	0.0059	0.1685	0.1714	0.110	0.018	0.0011	0.13
9	1	8 - 9	2029	3	0.0059	0.1685	0.1714	0.110	0.018	0.0011	0.13
10	1	9 - 10	2030	3	0.0059	0.1685	0.1714	0.110	0.018	0.0011	0.13
11	1	10 - 11	2031	3	0.0059	0.1685	0.1714	0.110	0.018	0.0011	0.13
12	1	11 - 12	2032	3	0.0059	0.1685	0.1714	0.110	0.018	0.0011	0.13
13	1	12 - 13	2033	3	0.0059	0.1685	0.1714	0.110	0.018	0.0011	0.13
14	1	13 - 14	2034	3	0.0059	0.1685	0.1714	0.110	0.018	0.0011	0.13
15	1	14 - 15	2035	3	0.0059	0.1685	0.1714	0.110	0.018	0.0011	0.13
16	1	15 - 16	2036	3	0.0059	0.1685	0.1714	0.110	0.018	0.0011	0.13
17	1	16-17	2037	1	0.0059	0.1685	0.1714	0.017	0.003	0.0002	0.02
18	1	17-18	2038	1	0.0059	0.1685	0.1714	0.017	0.003	0.0002	0.02
19	1	18-19	2039	1	0.0059	0.1685	0.1714	0.017	0.003	0.0002	0.02
20	1	19-20	2040	1	0.0059	0.1685	0.1714	0.017	0.003	0.0002	0.02
21	1	20-21	2041	1	0.0059	0.1685	0.1714	0.017	0.003	0.0002	0.02
22	1	21-22	2042	1	0.0059	0.1685	0.1714	0.017	0.003	0.0002	0.02
23	1	22-23	2043	1	0.0059	0.1685	0.1714	0.017	0.003	0.0002	0.02
24	1	23-24	2044	1	0.0059	0.1685	0.1714	0.017	0.003	0.0002	0.02
25	1	24-25	2045	1	0.0059	0.1685	0.1714	0.017	0.003	0.0002	0.02
26	1	25-26	2046	1	0.0059	0.1685	0.1714	0.017	0.003	0.0002	0.02
27	1	26-27	2047	1	0.0059	0.1685	0.1714	0.017	0.003	0.0002	0.02
28	1	27-28	2048	1	0.0059	0.1685	0.1714	0.017	0.003	0.0002	0.02
29	1	28-29	2049	1	0.0059	0.1685	0.1714	0.017	0.003	0.0002	0.02
30	1	29-30	2050	1	0.0059	0.1685	0.1714	0.017	0.003	0.0002	0.02
Total Increased Cancer Risk								3.50	0.569	0.034	**4.11**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00118	0.18	0.19

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 3 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0055	0.1500	0.1526	0.063	0.010	0.0006	0.07
1	1	0 - 1	2021	10	0.0055	0.1500	0.1526	0.764	0.120	0.0072	0.89
2	1	1 - 2	2022	10	0.0055	0.1500	0.1526	0.764	0.120	0.0072	0.89
3	1	2 - 3	2023	3	0.0055	0.1500	0.1526	0.102	0.016	0.0010	0.12
4	1	3 - 4	2024	3	0.0055	0.1500	0.1526	0.102	0.016	0.0010	0.12
5	1	4 - 5	2025	3	0.0055	0.1500	0.1526	0.102	0.016	0.0010	0.12
6	1	5 - 6	2026	3	0.0055	0.1500	0.1526	0.102	0.016	0.0010	0.12
7	1	6 - 7	2027	3	0.0055	0.1500	0.1526	0.102	0.016	0.0010	0.12
8	1	7 - 8	2028	3	0.0055	0.1500	0.1526	0.102	0.016	0.0010	0.12
9	1	8 - 9	2029	3	0.0055	0.1500	0.1526	0.102	0.016	0.0010	0.12
10	1	9 - 10	2030	3	0.0055	0.1500	0.1526	0.102	0.016	0.0010	0.12
11	1	10 - 11	2031	3	0.0055	0.1500	0.1526	0.102	0.016	0.0010	0.12
12	1	11 - 12	2032	3	0.0055	0.1500	0.1526	0.102	0.016	0.0010	0.12
13	1	12 - 13	2033	3	0.0055	0.1500	0.1526	0.102	0.016	0.0010	0.12
14	1	13 - 14	2034	3	0.0055	0.1500	0.1526	0.102	0.016	0.0010	0.12
15	1	14 - 15	2035	3	0.0055	0.1500	0.1526	0.102	0.016	0.0010	0.12
16	1	15 - 16	2036	3	0.0055	0.1500	0.1526	0.102	0.016	0.0010	0.12
17	1	16-17	2037	1	0.0055	0.1500	0.1526	0.016	0.002	0.0001	0.02
18	1	17-18	2038	1	0.0055	0.1500	0.1526	0.016	0.002	0.0001	0.02
19	1	18-19	2039	1	0.0055	0.1500	0.1526	0.016	0.002	0.0001	0.02
20	1	19-20	2040	1	0.0055	0.1500	0.1526	0.016	0.002	0.0001	0.02
21	1	20-21	2041	1	0.0055	0.1500	0.1526	0.016	0.002	0.0001	0.02
22	1	21-22	2042	1	0.0055	0.1500	0.1526	0.016	0.002	0.0001	0.02
23	1	22-23	2043	1	0.0055	0.1500	0.1526	0.016	0.002	0.0001	0.02
24	1	23-24	2044	1	0.0055	0.1500	0.1526	0.016	0.002	0.0001	0.02
25	1	24-25	2045	1	0.0055	0.1500	0.1526	0.016	0.002	0.0001	0.02
26	1	25-26	2046	1	0.0055	0.1500	0.1526	0.016	0.002	0.0001	0.02
27	1	26-27	2047	1	0.0055	0.1500	0.1526	0.016	0.002	0.0001	0.02
28	1	27-28	2048	1	0.0055	0.1500	0.1526	0.016	0.002	0.0001	0.02
29	1	28-29	2049	1	0.0055	0.1500	0.1526	0.016	0.002	0.0001	0.02
30	1	29-30	2050	1	0.0055	0.1500	0.1526	0.016	0.002	0.0001	0.02
Total Increased Cancer Risk								3.24	0.507	0.030	**3.8**

Maximum Hazard Index	Fugitive PM2.5	Total PM2.5
0.00109	0.16	0.17

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 4 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0055	0.1565	0.1592	0.064	0.010	0.0006	0.07
1	1	0 - 1	2021	10	0.0055	0.1565	0.1592	0.769	0.125	0.0075	0.90
2	1	1 - 2	2022	10	0.0055	0.1565	0.1592	0.769	0.125	0.0075	0.90
3	1	2 - 3	2023	3	0.0055	0.1565	0.1592	0.103	0.017	0.0010	0.12
4	1	3 - 4	2024	3	0.0055	0.1565	0.1592	0.103	0.017	0.0010	0.12
5	1	4 - 5	2025	3	0.0055	0.1565	0.1592	0.103	0.017	0.0010	0.12
6	1	5 - 6	2026	3	0.0055	0.1565	0.1592	0.103	0.017	0.0010	0.12
7	1	6 - 7	2027	3	0.0055	0.1565	0.1592	0.103	0.017	0.0010	0.12
8	1	7 - 8	2028	3	0.0055	0.1565	0.1592	0.103	0.017	0.0010	0.12
9	1	8 - 9	2029	3	0.0055	0.1565	0.1592	0.103	0.017	0.0010	0.12
10	1	9 - 10	2030	3	0.0055	0.1565	0.1592	0.103	0.017	0.0010	0.12
11	1	10 - 11	2031	3	0.0055	0.1565	0.1592	0.103	0.017	0.0010	0.12
12	1	11 - 12	2032	3	0.0055	0.1565	0.1592	0.103	0.017	0.0010	0.12
13	1	12 - 13	2033	3	0.0055	0.1565	0.1592	0.103	0.017	0.0010	0.12
14	1	13 - 14	2034	3	0.0055	0.1565	0.1592	0.103	0.017	0.0010	0.12
15	1	14 - 15	2035	3	0.0055	0.1565	0.1592	0.103	0.017	0.0010	0.12
16	1	15 - 16	2036	3	0.0055	0.1565	0.1592	0.103	0.017	0.0010	0.12
17	1	16-17	2037	1	0.0055	0.1565	0.1592	0.016	0.003	0.0002	0.02
18	1	17-18	2038	1	0.0055	0.1565	0.1592	0.016	0.003	0.0002	0.02
19	1	18-19	2039	1	0.0055	0.1565	0.1592	0.016	0.003	0.0002	0.02
20	1	19-20	2040	1	0.0055	0.1565	0.1592	0.016	0.003	0.0002	0.02
21	1	20-21	2041	1	0.0055	0.1565	0.1592	0.016	0.003	0.0002	0.02
22	1	21-22	2042	1	0.0055	0.1565	0.1592	0.016	0.003	0.0002	0.02
23	1	22-23	2043	1	0.0055	0.1565	0.1592	0.016	0.003	0.0002	0.02
24	1	23-24	2044	1	0.0055	0.1565	0.1592	0.016	0.003	0.0002	0.02
25	1	24-25	2045	1	0.0055	0.1565	0.1592	0.016	0.003	0.0002	0.02
26	1	25-26	2046	1	0.0055	0.1565	0.1592	0.016	0.003	0.0002	0.02
27	1	26-27	2047	1	0.0055	0.1565	0.1592	0.016	0.003	0.0002	0.02
28	1	27-28	2048	1	0.0055	0.1565	0.1592	0.016	0.003	0.0002	0.02
29	1	28-29	2049	1	0.0055	0.1565	0.1592	0.016	0.003	0.0002	0.02
30	1	29-30	2050	1	0.0055	0.1565	0.1592	0.016	0.003	0.0002	0.02
Total Increased Cancer Risk								3.26	0.529	0.032	**3.82**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00110	0.17	0.18

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 4 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0051	0.1409	0.1433	0.059	0.009	0.0006	0.07
1	1	0 - 1	2021	10	0.0051	0.1409	0.1433	0.715	0.112	0.0067	0.83
2	1	1 - 2	2022	10	0.0051	0.1409	0.1433	0.715	0.112	0.0067	0.83
3	1	2 - 3	2023	3	0.0051	0.1409	0.1433	0.095	0.015	0.0009	0.11
4	1	3 - 4	2024	3	0.0051	0.1409	0.1433	0.095	0.015	0.0009	0.11
5	1	4 - 5	2025	3	0.0051	0.1409	0.1433	0.095	0.015	0.0009	0.11
6	1	5 - 6	2026	3	0.0051	0.1409	0.1433	0.095	0.015	0.0009	0.11
7	1	6 - 7	2027	3	0.0051	0.1409	0.1433	0.095	0.015	0.0009	0.11
8	1	7 - 8	2028	3	0.0051	0.1409	0.1433	0.095	0.015	0.0009	0.11
9	1	8 - 9	2029	3	0.0051	0.1409	0.1433	0.095	0.015	0.0009	0.11
10	1	9 - 10	2030	3	0.0051	0.1409	0.1433	0.095	0.015	0.0009	0.11
11	1	10 - 11	2031	3	0.0051	0.1409	0.1433	0.095	0.015	0.0009	0.11
12	1	11 - 12	2032	3	0.0051	0.1409	0.1433	0.095	0.015	0.0009	0.11
13	1	12 - 13	2033	3	0.0051	0.1409	0.1433	0.095	0.015	0.0009	0.11
14	1	13 - 14	2034	3	0.0051	0.1409	0.1433	0.095	0.015	0.0009	0.11
15	1	14 - 15	2035	3	0.0051	0.1409	0.1433	0.095	0.015	0.0009	0.11
16	1	15 - 16	2036	3	0.0051	0.1409	0.1433	0.095	0.015	0.0009	0.11
17	1	16-17	2037	1	0.0051	0.1409	0.1433	0.015	0.002	0.0001	0.02
18	1	17-18	2038	1	0.0051	0.1409	0.1433	0.015	0.002	0.0001	0.02
19	1	18-19	2039	1	0.0051	0.1409	0.1433	0.015	0.002	0.0001	0.02
20	1	19-20	2040	1	0.0051	0.1409	0.1433	0.015	0.002	0.0001	0.02
21	1	20-21	2041	1	0.0051	0.1409	0.1433	0.015	0.002	0.0001	0.02
22	1	21-22	2042	1	0.0051	0.1409	0.1433	0.015	0.002	0.0001	0.02
23	1	22-23	2043	1	0.0051	0.1409	0.1433	0.015	0.002	0.0001	0.02
24	1	23-24	2044	1	0.0051	0.1409	0.1433	0.015	0.002	0.0001	0.02
25	1	24-25	2045	1	0.0051	0.1409	0.1433	0.015	0.002	0.0001	0.02
26	1	25-26	2046	1	0.0051	0.1409	0.1433	0.015	0.002	0.0001	0.02
27	1	26-27	2047	1	0.0051	0.1409	0.1433	0.015	0.002	0.0001	0.02
28	1	27-28	2048	1	0.0051	0.1409	0.1433	0.015	0.002	0.0001	0.02
29	1	28-29	2049	1	0.0051	0.1409	0.1433	0.015	0.002	0.0001	0.02
30	1	29-30	2050	1	0.0051	0.1409	0.1433	0.015	0.002	0.0001	0.02
Total Increased Cancer Risk								3.03	0.476	0.029	**3.5**

Maximum Hazard Index	Fugitive PM2.5	Total PM2.5
0.00102	0.15	0.16

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at Saratoga On-Site 1st Level (2nd Floor) Residential Receptors - 8.2 meter receptor height
30 Year Residential Exposure - Cumulative Traffic

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0075	0.1568	0.1597	0.087	0.010	0.0006	0.10
1	1	0 - 1	2021	10	0.0075	0.1568	0.1597	1.053	0.125	0.0075	1.19
2	1	1 - 2	2022	10	0.0075	0.1568	0.1597	1.053	0.125	0.0075	1.19
3	1	2 - 3	2023	3	0.0075	0.1568	0.1597	0.140	0.017	0.0010	0.16
4	1	3 - 4	2024	3	0.0075	0.1568	0.1597	0.140	0.017	0.0010	0.16
5	1	4 - 5	2025	3	0.0075	0.1568	0.1597	0.140	0.017	0.0010	0.16
6	1	5 - 6	2026	3	0.0075	0.1568	0.1597	0.140	0.017	0.0010	0.16
7	1	6 - 7	2027	3	0.0075	0.1568	0.1597	0.140	0.017	0.0010	0.16
8	1	7 - 8	2028	3	0.0075	0.1568	0.1597	0.140	0.017	0.0010	0.16
9	1	8 - 9	2029	3	0.0075	0.1568	0.1597	0.140	0.017	0.0010	0.16
10	1	9 - 10	2030	3	0.0075	0.1568	0.1597	0.140	0.017	0.0010	0.16
11	1	10 - 11	2031	3	0.0075	0.1568	0.1597	0.140	0.017	0.0010	0.16
12	1	11 - 12	2032	3	0.0075	0.1568	0.1597	0.140	0.017	0.0010	0.16
13	1	12 - 13	2033	3	0.0075	0.1568	0.1597	0.140	0.017	0.0010	0.16
14	1	13 - 14	2034	3	0.0075	0.1568	0.1597	0.140	0.017	0.0010	0.16
15	1	14 - 15	2035	3	0.0075	0.1568	0.1597	0.140	0.017	0.0010	0.16
16	1	15 - 16	2036	3	0.0075	0.1568	0.1597	0.140	0.017	0.0010	0.16
17	1	16-17	2037	1	0.0075	0.1568	0.1597	0.022	0.003	0.0002	0.02
18	1	17-18	2038	1	0.0075	0.1568	0.1597	0.022	0.003	0.0002	0.02
19	1	18-19	2039	1	0.0075	0.1568	0.1597	0.022	0.003	0.0002	0.02
20	1	19-20	2040	1	0.0075	0.1568	0.1597	0.022	0.003	0.0002	0.02
21	1	20-21	2041	1	0.0075	0.1568	0.1597	0.022	0.003	0.0002	0.02
22	1	21-22	2042	1	0.0075	0.1568	0.1597	0.022	0.003	0.0002	0.02
23	1	22-23	2043	1	0.0075	0.1568	0.1597	0.022	0.003	0.0002	0.02
24	1	23-24	2044	1	0.0075	0.1568	0.1597	0.022	0.003	0.0002	0.02
25	1	24-25	2045	1	0.0075	0.1568	0.1597	0.022	0.003	0.0002	0.02
26	1	25-26	2046	1	0.0075	0.1568	0.1597	0.022	0.003	0.0002	0.02
27	1	26-27	2047	1	0.0075	0.1568	0.1597	0.022	0.003	0.0002	0.02
28	1	27-28	2048	1	0.0075	0.1568	0.1597	0.022	0.003	0.0002	0.02
29	1	28-29	2049	1	0.0075	0.1568	0.1597	0.022	0.003	0.0002	0.02
30	1	29-30	2050	1	0.0075	0.1568	0.1597	0.022	0.003	0.0002	0.02
Total Increased Cancer Risk								4.46	0.530	0.032	**5.02**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00151	0.17	0.18

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at Saratoga On-Site 2nd Level (3rd Floor) Residential Receptors - 11.3 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0049	0.0993	0.1012	0.056	0.007	0.0004	0.06
1	1	0 - 1	2021	10	0.0049	0.0993	0.1012	0.680	0.079	0.0048	0.76
2	1	1 - 2	2022	10	0.0049	0.0993	0.1012	0.680	0.079	0.0048	0.76
3	1	2 - 3	2023	3	0.0049	0.0993	0.1012	0.091	0.011	0.0006	0.10
4	1	3 - 4	2024	3	0.0049	0.0993	0.1012	0.091	0.011	0.0006	0.10
5	1	4 - 5	2025	3	0.0049	0.0993	0.1012	0.091	0.011	0.0006	0.10
6	1	5 - 6	2026	3	0.0049	0.0993	0.1012	0.091	0.011	0.0006	0.10
7	1	6 - 7	2027	3	0.0049	0.0993	0.1012	0.091	0.011	0.0006	0.10
8	1	7 - 8	2028	3	0.0049	0.0993	0.1012	0.091	0.011	0.0006	0.10
9	1	8 - 9	2029	3	0.0049	0.0993	0.1012	0.091	0.011	0.0006	0.10
10	1	9 - 10	2030	3	0.0049	0.0993	0.1012	0.091	0.011	0.0006	0.10
11	1	10 - 11	2031	3	0.0049	0.0993	0.1012	0.091	0.011	0.0006	0.10
12	1	11 - 12	2032	3	0.0049	0.0993	0.1012	0.091	0.011	0.0006	0.10
13	1	12 - 13	2033	3	0.0049	0.0993	0.1012	0.091	0.011	0.0006	0.10
14	1	13 - 14	2034	3	0.0049	0.0993	0.1012	0.091	0.011	0.0006	0.10
15	1	14 - 15	2035	3	0.0049	0.0993	0.1012	0.091	0.011	0.0006	0.10
16	1	15 - 16	2036	3	0.0049	0.0993	0.1012	0.091	0.011	0.0006	0.10
17	1	16-17	2037	1	0.0049	0.0993	0.1012	0.014	0.002	0.0001	0.02
18	1	17-18	2038	1	0.0049	0.0993	0.1012	0.014	0.002	0.0001	0.02
19	1	18-19	2039	1	0.0049	0.0993	0.1012	0.014	0.002	0.0001	0.02
20	1	19-20	2040	1	0.0049	0.0993	0.1012	0.014	0.002	0.0001	0.02
21	1	20-21	2041	1	0.0049	0.0993	0.1012	0.014	0.002	0.0001	0.02
22	1	21-22	2042	1	0.0049	0.0993	0.1012	0.014	0.002	0.0001	0.02
23	1	22-23	2043	1	0.0049	0.0993	0.1012	0.014	0.002	0.0001	0.02
24	1	23-24	2044	1	0.0049	0.0993	0.1012	0.014	0.002	0.0001	0.02
25	1	24-25	2045	1	0.0049	0.0993	0.1012	0.014	0.002	0.0001	0.02
26	1	25-26	2046	1	0.0049	0.0993	0.1012	0.014	0.002	0.0001	0.02
27	1	26-27	2047	1	0.0049	0.0993	0.1012	0.014	0.002	0.0001	0.02
28	1	27-28	2048	1	0.0049	0.0993	0.1012	0.014	0.002	0.0001	0.02
29	1	28-29	2049	1	0.0049	0.0993	0.1012	0.014	0.002	0.0001	0.02
30	1	29-30	2050	1	0.0049	0.0993	0.1012	0.014	0.002	0.0001	0.02
Total Increased Cancer Risk								2.88	0.336	0.020	**3.2**

Maximum Hazard Index	Maximum Fugitive PM2.5	Maximum Total PM2.5
0.00097	0.11	0.11

* Third trimester of pregnancy

Saratoga Ave Traffic Emissions and Health Risk Calculations

Analysis Year = ***2021***

Vehicle Type	2018 Caltrans Vehicles (veh/day)	2021 Vehicles (veh/day)
Total	**26,825**	**27,630**

Increase From 2018	1.03
Vehicles/Direction	**13,815**
Avg Vehicles/Hour/Direction	576

Traffic Data Year = ***2018***

El Paeso & Saratoga Traffic Report Volumes	AADT Total
Background + EP1 School Condition - Saratoga Rd	26,825

Percent of Total Vehicles

Traffic Increase per Year (%) = *1.00%*

El Paseo Option 1 Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Saratoga Avenue
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
DPM_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	55.7	3.4	Varied	13,815	17,820	191,810	6.679E-09	4.925E-09	6.8	3.16
DPM_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	55.7	3.4	Varied	13,815	17,703	190,550	6.679E-09	4.925E-09	6.8	3.16
									Total	27,630						

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle (g/VMT)	0.00114	0.001194		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and DPM Emissions - DPM_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.82%	527	1.09E-04	9	6.42%	886	1.92E-04	17	5.55%	767	1.66E-04
2	2.60%	359	7.43E-05	10	7.23%	998	2.06E-04	18	3.24%	447	9.68E-05
3	2.83%	391	8.09E-05	11	6.30%	870	1.80E-04	19	2.43%	335	6.93E-05
4	3.41%	471	9.74E-05	12	6.99%	966	2.00E-04	20	0.92%	128	2.64E-05
5	2.20%	303	6.27E-05	13	6.18%	854	1.77E-04	21	3.06%	423	8.75E-05
6	3.35%	463	9.58E-05	14	6.13%	846	1.75E-04	22	4.16%	575	1.19E-04
7	6.13%	846	1.75E-04	15	5.14%	711	1.47E-04	23	2.43%	335	6.93E-05
8	4.74%	655	1.42E-04	16	3.87%	535	1.11E-04	24	0.87%	120	2.48E-05
								Total		13,815	

2021 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.82%	527	1.08E-04	9	6.42%	886	1.91E-04	17	5.55%	767	1.65E-04
2	2.60%	359	7.38E-05	10	7.23%	998	2.05E-04	18	3.24%	447	9.61E-05
3	2.83%	391	8.04E-05	11	6.30%	870	1.79E-04	19	2.43%	335	6.89E-05
4	3.41%	471	9.68E-05	12	6.99%	966	1.98E-04	20	0.92%	128	2.62E-05
5	2.20%	303	6.23E-05	13	6.18%	854	1.76E-04	21	3.06%	423	8.69E-05
6	3.35%	463	9.51E-05	14	6.13%	846	1.74E-04	22	4.16%	575	1.18E-04
7	6.13%	846	1.74E-04	15	5.14%	711	1.46E-04	23	2.43%	335	6.89E-05
8	4.74%	655	1.41E-04	16	3.87%	535	1.10E-04	24	0.87%	120	2.46E-05
								Total		13,815	

El Paseo Option 1 Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Saratoga Avenue
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
PM2.5_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	13,815	17,820	191,810	1.291E-08	9.521E-09	2.6	1.21
PM2.5_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	13,815	17,703	190,550	1.291E-08	9.521E-09	2.6	1.21
									Total	27,630						

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle (g/VMT)	0.002206	0.00270		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and PM2.5 Emissions - PM2.5_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	160	6.39E-05	9	7.11%	982	4.81E-04	17	7.38%	1020	5.00E-04
2	0.42%	58	2.32E-05	10	4.39%	606	2.42E-04	18	8.17%	1128	5.53E-04
3	0.41%	56	2.26E-05	11	4.67%	645	2.58E-04	19	5.70%	787	3.15E-04
4	0.27%	37	1.48E-05	12	5.89%	814	3.25E-04	20	4.27%	590	2.36E-04
5	0.50%	70	2.78E-05	13	6.15%	850	3.40E-04	21	3.25%	449	1.80E-04
6	0.91%	125	5.02E-05	14	6.03%	834	3.33E-04	22	3.30%	456	1.82E-04
7	3.79%	524	2.09E-04	15	7.01%	968	3.87E-04	23	2.46%	339	1.36E-04
8	7.76%	1072	5.25E-04	16	7.14%	986	3.94E-04	24	1.87%	258	1.03E-04
								Total		13,815	

2021 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM2.5_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	160	6.34E-05	9	7.11%	982	4.78E-04	17	7.38%	1020	4.96E-04
2	0.42%	58	2.31E-05	10	4.39%	606	2.41E-04	18	8.17%	1128	5.49E-04
3	0.41%	56	2.24E-05	11	4.67%	645	2.56E-04	19	5.70%	787	3.13E-04
4	0.27%	37	1.47E-05	12	5.89%	814	3.23E-04	20	4.27%	590	2.34E-04
5	0.50%	70	2.77E-05	13	6.15%	850	3.38E-04	21	3.25%	449	1.79E-04
6	0.91%	125	4.98E-05	14	6.03%	834	3.31E-04	22	3.30%	456	1.81E-04
7	3.79%	524	2.08E-04	15	7.01%	968	3.84E-04	23	2.46%	339	1.35E-04
8	7.76%	1072	5.22E-04	16	7.14%	986	3.91E-04	24	1.87%	258	1.02E-04
								Total		13,815	

El Paseo Option 1 Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Saratoga Avenue
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEXH_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	13,815	17,820	191,810	1.991E-07	1.468E-07	2.6	1.21
TEXH_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	13,815	17,703	190,550	1.991E-07	1.468E-07	2.6	1.21
									Total	27,630						

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle (g/VMT)	0.03401	0.04648		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	160	9.84E-04	9	7.11%	982	8.27E-03	17	7.38%	1020	8.59E-03
2	0.42%	58	3.58E-04	10	4.39%	606	3.74E-03	18	8.17%	1128	9.50E-03
3	0.41%	56	3.48E-04	11	4.67%	645	3.97E-03	19	5.70%	787	4.85E-03
4	0.27%	37	2.28E-04	12	5.89%	814	5.01E-03	20	4.27%	590	3.64E-03
5	0.50%	70	4.29E-04	13	6.15%	850	5.24E-03	21	3.25%	449	2.77E-03
6	0.91%	125	7.73E-04	14	6.03%	834	5.14E-03	22	3.30%	456	2.81E-03
7	3.79%	524	3.23E-03	15	7.01%	968	5.97E-03	23	2.46%	339	2.09E-03
8	7.76%	1072	9.03E-03	16	7.14%	986	6.07E-03	24	1.87%	258	1.59E-03
								Total		13,815	

2021 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	160	9.78E-04	9	7.11%	982	8.21E-03	17	7.38%	1020	8.53E-03
2	0.42%	58	3.56E-04	10	4.39%	606	3.71E-03	18	8.17%	1128	9.44E-03
3	0.41%	56	3.45E-04	11	4.67%	645	3.95E-03	19	5.70%	787	4.82E-03
4	0.27%	37	2.27E-04	12	5.89%	814	4.98E-03	20	4.27%	590	3.61E-03
5	0.50%	70	4.26E-04	13	6.15%	850	5.20E-03	21	3.25%	449	2.75E-03
6	0.91%	125	7.68E-04	14	6.03%	834	5.10E-03	22	3.30%	456	2.79E-03
7	3.79%	524	3.21E-03	15	7.01%	968	5.93E-03	23	2.46%	339	2.08E-03
8	7.76%	1072	8.97E-03	16	7.14%	986	6.03E-03	24	1.87%	258	1.58E-03
								Total		13,815	

El Paseo Option 1 Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Saratoga Avenue
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEVAP_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	13,815	17,820	191,810	2.174E-07	1.603E-07	2.6	1.21
TEVAP_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	13,815	17,703	190,550	2.174E-07	1.603E-07	2.6	1.21
									Total	27,630						

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle per Hour (g/hour)	1.48576	1.48576		
Emissions per Vehicle per Mile (g/VMT)	0.03714	0.04953		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	160	1.08E-03	9	7.11%	982	8.81E-03	17	7.38%	1020	9.15E-03
2	0.42%	58	3.91E-04	10	4.39%	606	4.08E-03	18	8.17%	1128	1.01E-02
3	0.41%	56	3.80E-04	11	4.67%	645	4.34E-03	19	5.70%	787	5.30E-03
4	0.27%	37	2.49E-04	12	5.89%	814	5.48E-03	20	4.27%	590	3.97E-03
5	0.50%	70	4.69E-04	13	6.15%	850	5.72E-03	21	3.25%	449	3.03E-03
6	0.91%	125	8.45E-04	14	6.03%	834	5.61E-03	22	3.30%	456	3.07E-03
7	3.79%	524	3.53E-03	15	7.01%	968	6.52E-03	23	2.46%	339	2.28E-03
8	7.76%	1072	9.63E-03	16	7.14%	986	6.64E-03	24	1.87%	258	1.73E-03
								Total		13,815	

2021 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	160	1.07E-03	9	7.11%	982	8.75E-03	17	7.38%	1020	9.09E-03
2	0.42%	58	3.89E-04	10	4.39%	606	4.06E-03	18	8.17%	1128	1.01E-02
3	0.41%	56	3.77E-04	11	4.67%	645	4.31E-03	19	5.70%	787	5.26E-03
4	0.27%	37	2.48E-04	12	5.89%	814	5.44E-03	20	4.27%	590	3.95E-03
5	0.50%	70	4.66E-04	13	6.15%	850	5.68E-03	21	3.25%	449	3.01E-03
6	0.91%	125	8.39E-04	14	6.03%	834	5.57E-03	22	3.30%	456	3.05E-03
7	3.79%	524	3.50E-03	15	7.01%	968	6.47E-03	23	2.46%	339	2.27E-03
8	7.76%	1072	9.56E-03	16	7.14%	986	6.59E-03	24	1.87%	258	1.72E-03
								Total		13,815	

El Paseo Option 1 Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Saratoga Avenue
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
FUG_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	13,815	17,820	191,810	1.979E-07	1.459E-07	2.6	1.21
FUG_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	13,815	17,703	190,550	1.979E-07	1.459E-07	2.6	1.21
									Total	27,630						

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211	0.00211		
Brake Wear - Emissions per Vehicle (g/VMT)	0.01681	0.01681		
Road Dust - Emissions per Vehicle (g/VMT)	0.01489	0.01489		
otal Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03381	0.03381		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	160	9.79E-04	9	7.11%	982	6.02E-03	17	7.38%	1020	6.25E-03
2	0.42%	58	3.56E-04	10	4.39%	606	3.72E-03	18	8.17%	1128	6.91E-03
3	0.41%	56	3.46E-04	11	4.67%	645	3.95E-03	19	5.70%	787	4.82E-03
4	0.27%	37	2.27E-04	12	5.89%	814	4.99E-03	20	4.27%	590	3.62E-03
5	0.50%	70	4.27E-04	13	6.15%	850	5.21E-03	21	3.25%	449	2.75E-03
6	0.91%	125	7.69E-04	14	6.03%	834	5.11E-03	22	3.30%	456	2.79E-03
7	3.79%	524	3.21E-03	15	7.01%	968	5.93E-03	23	2.46%	339	2.08E-03
8	7.76%	1072	6.57E-03	16	7.14%	986	6.04E-03	24	1.87%	258	1.58E-03
								Total		13,815	

2021 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	160	9.72E-04	9	7.11%	982	5.98E-03	17	7.38%	1020	6.21E-03
2	0.42%	58	3.54E-04	10	4.39%	606	3.69E-03	18	8.17%	1128	6.87E-03
3	0.41%	56	3.43E-04	11	4.67%	645	3.93E-03	19	5.70%	787	4.79E-03
4	0.27%	37	2.26E-04	12	5.89%	814	4.95E-03	20	4.27%	590	3.59E-03
5	0.50%	70	4.24E-04	13	6.15%	850	5.17E-03	21	3.25%	449	2.74E-03
6	0.91%	125	7.64E-04	14	6.03%	834	5.07E-03	22	3.30%	456	2.77E-03
7	3.79%	524	3.19E-03	15	7.01%	968	5.89E-03	23	2.46%	339	2.07E-03
8	7.76%	1072	6.53E-03	16	7.14%	986	6.00E-03	24	1.87%	258	1.57E-03
								Total		13,815	

El Paseo Option 1 Education & Saratoga, San Jose, CA - Saratoga Avenue Traffic Cancer Risk
Impacts at Construction MEI - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0016	0.0557	0.0604	0.018	0.004	0.0002	0.02
1	1	0 - 1	2021	10	0.0016	0.0557	0.0604	0.216	0.044	0.0028	0.26
2	1	1 - 2	2022	10	0.0016	0.0557	0.0604	0.216	0.044	0.0028	0.26
3	1	2 - 3	2023	3	0.0016	0.0557	0.0604	0.029	0.006	0.0004	0.04
4	1	3 - 4	2024	3	0.0016	0.0557	0.0604	0.029	0.006	0.0004	0.04
5	1	4 - 5	2025	3	0.0016	0.0557	0.0604	0.029	0.006	0.0004	0.04
6	1	5 - 6	2026	3	0.0016	0.0557	0.0604	0.029	0.006	0.0004	0.04
7	1	6 - 7	2027	3	0.0016	0.0557	0.0604	0.029	0.006	0.0004	0.04
8	1	7 - 8	2028	3	0.0016	0.0557	0.0604	0.029	0.006	0.0004	0.04
9	1	8 - 9	2029	3	0.0016	0.0557	0.0604	0.029	0.006	0.0004	0.04
10	1	9 - 10	2030	3	0.0016	0.0557	0.0604	0.029	0.006	0.0004	0.04
11	1	10 - 11	2031	3	0.0016	0.0557	0.0604	0.029	0.006	0.0004	0.04
12	1	11 - 12	2032	3	0.0016	0.0557	0.0604	0.029	0.006	0.0004	0.04
13	1	12 - 13	2033	3	0.0016	0.0557	0.0604	0.029	0.006	0.0004	0.04
14	1	13 - 14	2034	3	0.0016	0.0557	0.0604	0.029	0.006	0.0004	0.04
15	1	14 - 15	2035	3	0.0016	0.0557	0.0604	0.029	0.006	0.0004	0.04
16	1	15 - 16	2036	3	0.0016	0.0557	0.0604	0.029	0.006	0.0004	0.04
17	1	16-17	2037	1	0.0016	0.0557	0.0604	0.004	0.001	0.0001	0.01
18	1	17-18	2038	1	0.0016	0.0557	0.0604	0.004	0.001	0.0001	0.01
19	1	18-19	2039	1	0.0016	0.0557	0.0604	0.004	0.001	0.0001	0.01
20	1	19-20	2040	1	0.0016	0.0557	0.0604	0.004	0.001	0.0001	0.01
21	1	20-21	2041	1	0.0016	0.0557	0.0604	0.004	0.001	0.0001	0.01
22	1	21-22	2042	1	0.0016	0.0557	0.0604	0.004	0.001	0.0001	0.01
23	1	22-23	2043	1	0.0016	0.0557	0.0604	0.004	0.001	0.0001	0.01
24	1	23-24	2044	1	0.0016	0.0557	0.0604	0.004	0.001	0.0001	0.01
25	1	24-25	2045	1	0.0016	0.0557	0.0604	0.004	0.001	0.0001	0.01
26	1	25-26	2046	1	0.0016	0.0557	0.0604	0.004	0.001	0.0001	0.01
27	1	26-27	2047	1	0.0016	0.0557	0.0604	0.004	0.001	0.0001	0.01
28	1	27-28	2048	1	0.0016	0.0557	0.0604	0.004	0.001	0.0001	0.01
29	1	28-29	2049	1	0.0016	0.0557	0.0604	0.004	0.001	0.0001	0.01
30	1	29-30	2050	1	0.0016	0.0557	0.0604	0.004	0.001	0.0001	0.01
Total Increased Cancer Risk								0.92	0.188	0.012	**1.12**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.0003	0.05	0.05

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 1 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0103	0.5324	0.5769	0.119	0.035	0.0022	0.16
1	1	0 - 1	2021	10	0.0103	0.5324	0.5769	1.439	0.424	0.0271	1.89
2	1	1 - 2	2022	10	0.0103	0.5324	0.5769	1.439	0.424	0.0271	1.89
3	1	2 - 3	2023	3	0.0103	0.5324	0.5769	0.192	0.057	0.0036	0.25
4	1	3 - 4	2024	3	0.0103	0.5324	0.5769	0.192	0.057	0.0036	0.25
5	1	4 - 5	2025	3	0.0103	0.5324	0.5769	0.192	0.057	0.0036	0.25
6	1	5 - 6	2026	3	0.0103	0.5324	0.5769	0.192	0.057	0.0036	0.25
7	1	6 - 7	2027	3	0.0103	0.5324	0.5769	0.192	0.057	0.0036	0.25
8	1	7 - 8	2028	3	0.0103	0.5324	0.5769	0.192	0.057	0.0036	0.25
9	1	8 - 9	2029	3	0.0103	0.5324	0.5769	0.192	0.057	0.0036	0.25
10	1	9 - 10	2030	3	0.0103	0.5324	0.5769	0.192	0.057	0.0036	0.25
11	1	10 - 11	2031	3	0.0103	0.5324	0.5769	0.192	0.057	0.0036	0.25
12	1	11 - 12	2032	3	0.0103	0.5324	0.5769	0.192	0.057	0.0036	0.25
13	1	12 - 13	2033	3	0.0103	0.5324	0.5769	0.192	0.057	0.0036	0.25
14	1	13 - 14	2034	3	0.0103	0.5324	0.5769	0.192	0.057	0.0036	0.25
15	1	14 - 15	2035	3	0.0103	0.5324	0.5769	0.192	0.057	0.0036	0.25
16	1	15 - 16	2036	3	0.0103	0.5324	0.5769	0.192	0.057	0.0036	0.25
17	1	16-17	2037	1	0.0103	0.5324	0.5769	0.030	0.009	0.0006	0.04
18	1	17-18	2038	1	0.0103	0.5324	0.5769	0.030	0.009	0.0006	0.04
19	1	18-19	2039	1	0.0103	0.5324	0.5769	0.030	0.009	0.0006	0.04
20	1	19-20	2040	1	0.0103	0.5324	0.5769	0.030	0.009	0.0006	0.04
21	1	20-21	2041	1	0.0103	0.5324	0.5769	0.030	0.009	0.0006	0.04
22	1	21-22	2042	1	0.0103	0.5324	0.5769	0.030	0.009	0.0006	0.04
23	1	22-23	2043	1	0.0103	0.5324	0.5769	0.030	0.009	0.0006	0.04
24	1	23-24	2044	1	0.0103	0.5324	0.5769	0.030	0.009	0.0006	0.04
25	1	24-25	2045	1	0.0103	0.5324	0.5769	0.030	0.009	0.0006	0.04
26	1	25-26	2046	1	0.0103	0.5324	0.5769	0.030	0.009	0.0006	0.04
27	1	26-27	2047	1	0.0103	0.5324	0.5769	0.030	0.009	0.0006	0.04
28	1	27-28	2048	1	0.0103	0.5324	0.5769	0.030	0.009	0.0006	0.04
29	1	28-29	2049	1	0.0103	0.5324	0.5769	0.030	0.009	0.0006	0.04
30	1	29-30	2050	1	0.0103	0.5324	0.5769	0.030	0.009	0.0006	0.04
Total Increased Cancer Risk								6.10	1.798	0.115	**8.01**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00206	0.48	0.52

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 1 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - With MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0031	0.5324	0.5769	0.036	0.035	0.0022	0.07
1	1	0 - 1	2021	10	0.0031	0.5324	0.5769	0.432	0.424	0.0271	0.88
2	1	1 - 2	2022	10	0.0031	0.5324	0.5769	0.432	0.424	0.0271	0.88
3	1	2 - 3	2023	3	0.0031	0.5324	0.5769	0.058	0.057	0.0036	0.12
4	1	3 - 4	2024	3	0.0031	0.5324	0.5769	0.058	0.057	0.0036	0.12
5	1	4 - 5	2025	3	0.0031	0.5324	0.5769	0.058	0.057	0.0036	0.12
6	1	5 - 6	2026	3	0.0031	0.5324	0.5769	0.058	0.057	0.0036	0.12
7	1	6 - 7	2027	3	0.0031	0.5324	0.5769	0.058	0.057	0.0036	0.12
8	1	7 - 8	2028	3	0.0031	0.5324	0.5769	0.058	0.057	0.0036	0.12
9	1	8 - 9	2029	3	0.0031	0.5324	0.5769	0.058	0.057	0.0036	0.12
10	1	9 - 10	2030	3	0.0031	0.5324	0.5769	0.058	0.057	0.0036	0.12
11	1	10 - 11	2031	3	0.0031	0.5324	0.5769	0.058	0.057	0.0036	0.12
12	1	11 - 12	2032	3	0.0031	0.5324	0.5769	0.058	0.057	0.0036	0.12
13	1	12 - 13	2033	3	0.0031	0.5324	0.5769	0.058	0.057	0.0036	0.12
14	1	13 - 14	2034	3	0.0031	0.5324	0.5769	0.058	0.057	0.0036	0.12
15	1	14 - 15	2035	3	0.0031	0.5324	0.5769	0.058	0.057	0.0036	0.12
16	1	15 - 16	2036	3	0.0031	0.5324	0.5769	0.058	0.057	0.0036	0.12
17	1	16-17	2037	1	0.0031	0.5324	0.5769	0.009	0.009	0.0006	0.02
18	1	17-18	2038	1	0.0031	0.5324	0.5769	0.009	0.009	0.0006	0.02
19	1	18-19	2039	1	0.0031	0.5324	0.5769	0.009	0.009	0.0006	0.02
20	1	19-20	2040	1	0.0031	0.5324	0.5769	0.009	0.009	0.0006	0.02
21	1	20-21	2041	1	0.0031	0.5324	0.5769	0.009	0.009	0.0006	0.02
22	1	21-22	2042	1	0.0031	0.5324	0.5769	0.009	0.009	0.0006	0.02
23	1	22-23	2043	1	0.0031	0.5324	0.5769	0.009	0.009	0.0006	0.02
24	1	23-24	2044	1	0.0031	0.5324	0.5769	0.009	0.009	0.0006	0.02
25	1	24-25	2045	1	0.0031	0.5324	0.5769	0.009	0.009	0.0006	0.02
26	1	25-26	2046	1	0.0031	0.5324	0.5769	0.009	0.009	0.0006	0.02
27	1	26-27	2047	1	0.0031	0.5324	0.5769	0.009	0.009	0.0006	0.02
28	1	27-28	2048	1	0.0031	0.5324	0.5769	0.009	0.009	0.0006	0.02
29	1	28-29	2049	1	0.0031	0.5324	0.5769	0.009	0.009	0.0006	0.02
30	1	29-30	2050	1	0.0031	0.5324	0.5769	0.009	0.009	0.0006	0.02
Total Increased Cancer Risk								1.83	1.798	0.115	**3.74**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00062	0.15	0.16

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 1 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0084	0.2202	0.2386	0.097	0.015	0.0009	0.11
1	1	0 - 1	2021	10	0.0084	0.2202	0.2386	1.171	0.175	0.0112	1.36
2	1	1 - 2	2022	10	0.0084	0.2202	0.2386	1.171	0.175	0.0112	1.36
3	1	2 - 3	2023	3	0.0084	0.2202	0.2386	0.156	0.023	0.0015	0.18
4	1	3 - 4	2024	3	0.0084	0.2202	0.2386	0.156	0.023	0.0015	0.18
5	1	4 - 5	2025	3	0.0084	0.2202	0.2386	0.156	0.023	0.0015	0.18
6	1	5 - 6	2026	3	0.0084	0.2202	0.2386	0.156	0.023	0.0015	0.18
7	1	6 - 7	2027	3	0.0084	0.2202	0.2386	0.156	0.023	0.0015	0.18
8	1	7 - 8	2028	3	0.0084	0.2202	0.2386	0.156	0.023	0.0015	0.18
9	1	8 - 9	2029	3	0.0084	0.2202	0.2386	0.156	0.023	0.0015	0.18
10	1	9 - 10	2030	3	0.0084	0.2202	0.2386	0.156	0.023	0.0015	0.18
11	1	10 - 11	2031	3	0.0084	0.2202	0.2386	0.156	0.023	0.0015	0.18
12	1	11 - 12	2032	3	0.0084	0.2202	0.2386	0.156	0.023	0.0015	0.18
13	1	12 - 13	2033	3	0.0084	0.2202	0.2386	0.156	0.023	0.0015	0.18
14	1	13 - 14	2034	3	0.0084	0.2202	0.2386	0.156	0.023	0.0015	0.18
15	1	14 - 15	2035	3	0.0084	0.2202	0.2386	0.156	0.023	0.0015	0.18
16	1	15 - 16	2036	3	0.0084	0.2202	0.2386	0.156	0.023	0.0015	0.18
17	1	16-17	2037	1	0.0084	0.2202	0.2386	0.024	0.004	0.0002	0.03
18	1	17-18	2038	1	0.0084	0.2202	0.2386	0.024	0.004	0.0002	0.03
19	1	18-19	2039	1	0.0084	0.2202	0.2386	0.024	0.004	0.0002	0.03
20	1	19-20	2040	1	0.0084	0.2202	0.2386	0.024	0.004	0.0002	0.03
21	1	20-21	2041	1	0.0084	0.2202	0.2386	0.024	0.004	0.0002	0.03
22	1	21-22	2042	1	0.0084	0.2202	0.2386	0.024	0.004	0.0002	0.03
23	1	22-23	2043	1	0.0084	0.2202	0.2386	0.024	0.004	0.0002	0.03
24	1	23-24	2044	1	0.0084	0.2202	0.2386	0.024	0.004	0.0002	0.03
25	1	24-25	2045	1	0.0084	0.2202	0.2386	0.024	0.004	0.0002	0.03
26	1	25-26	2046	1	0.0084	0.2202	0.2386	0.024	0.004	0.0002	0.03
27	1	26-27	2047	1	0.0084	0.2202	0.2386	0.024	0.004	0.0002	0.03
28	1	27-28	2048	1	0.0084	0.2202	0.2386	0.024	0.004	0.0002	0.03
29	1	28-29	2049	1	0.0084	0.2202	0.2386	0.024	0.004	0.0002	0.03
30	1	29-30	2050	1	0.0084	0.2202	0.2386	0.024	0.004	0.0002	0.03
Total Increased Cancer Risk								4.96	0.744	0.047	**5.8**

Maximum Hazard Index	Fugitive PM2.5	Total PM2.5
0.00168	0.20	0.21

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 2 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0055	0.2159	0.2339	0.063	0.014	0.0009	0.08
1	1	0 - 1	2021	10	0.0055	0.2159	0.2339	0.761	0.172	0.0110	0.94
2	1	1 - 2	2022	10	0.0055	0.2159	0.2339	0.761	0.172	0.0110	0.94
3	1	2 - 3	2023	3	0.0055	0.2159	0.2339	0.101	0.023	0.0015	0.13
4	1	3 - 4	2024	3	0.0055	0.2159	0.2339	0.101	0.023	0.0015	0.13
5	1	4 - 5	2025	3	0.0055	0.2159	0.2339	0.101	0.023	0.0015	0.13
6	1	5 - 6	2026	3	0.0055	0.2159	0.2339	0.101	0.023	0.0015	0.13
7	1	6 - 7	2027	3	0.0055	0.2159	0.2339	0.101	0.023	0.0015	0.13
8	1	7 - 8	2028	3	0.0055	0.2159	0.2339	0.101	0.023	0.0015	0.13
9	1	8 - 9	2029	3	0.0055	0.2159	0.2339	0.101	0.023	0.0015	0.13
10	1	9 - 10	2030	3	0.0055	0.2159	0.2339	0.101	0.023	0.0015	0.13
11	1	10 - 11	2031	3	0.0055	0.2159	0.2339	0.101	0.023	0.0015	0.13
12	1	11 - 12	2032	3	0.0055	0.2159	0.2339	0.101	0.023	0.0015	0.13
13	1	12 - 13	2033	3	0.0055	0.2159	0.2339	0.101	0.023	0.0015	0.13
14	1	13 - 14	2034	3	0.0055	0.2159	0.2339	0.101	0.023	0.0015	0.13
15	1	14 - 15	2035	3	0.0055	0.2159	0.2339	0.101	0.023	0.0015	0.13
16	1	15 - 16	2036	3	0.0055	0.2159	0.2339	0.101	0.023	0.0015	0.13
17	1	16-17	2037	1	0.0055	0.2159	0.2339	0.016	0.004	0.0002	0.02
18	1	17-18	2038	1	0.0055	0.2159	0.2339	0.016	0.004	0.0002	0.02
19	1	18-19	2039	1	0.0055	0.2159	0.2339	0.016	0.004	0.0002	0.02
20	1	19-20	2040	1	0.0055	0.2159	0.2339	0.016	0.004	0.0002	0.02
21	1	20-21	2041	1	0.0055	0.2159	0.2339	0.016	0.004	0.0002	0.02
22	1	21-22	2042	1	0.0055	0.2159	0.2339	0.016	0.004	0.0002	0.02
23	1	22-23	2043	1	0.0055	0.2159	0.2339	0.016	0.004	0.0002	0.02
24	1	23-24	2044	1	0.0055	0.2159	0.2339	0.016	0.004	0.0002	0.02
25	1	24-25	2045	1	0.0055	0.2159	0.2339	0.016	0.004	0.0002	0.02
26	1	25-26	2046	1	0.0055	0.2159	0.2339	0.016	0.004	0.0002	0.02
27	1	26-27	2047	1	0.0055	0.2159	0.2339	0.016	0.004	0.0002	0.02
28	1	27-28	2048	1	0.0055	0.2159	0.2339	0.016	0.004	0.0002	0.02
29	1	28-29	2049	1	0.0055	0.2159	0.2339	0.016	0.004	0.0002	0.02
30	1	29-30	2050	1	0.0055	0.2159	0.2339	0.016	0.004	0.0002	0.02
Total Increased Cancer Risk								3.22	0.729	0.047	**4.00**

Maximum Hazard Index	Fugitive PM2.5	Total PM2.5
0.00109	0.20	0.21

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 2 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0047	0.1689	0.1830	0.055	0.011	0.0007	0.07
1	1	0 - 1	2021	10	0.0047	0.1689	0.1830	0.660	0.135	0.0086	0.80
2	1	1 - 2	2022	10	0.0047	0.1689	0.1830	0.660	0.135	0.0086	0.80
3	1	2 - 3	2023	3	0.0047	0.1689	0.1830	0.088	0.018	0.0011	0.11
4	1	3 - 4	2024	3	0.0047	0.1689	0.1830	0.088	0.018	0.0011	0.11
5	1	4 - 5	2025	3	0.0047	0.1689	0.1830	0.088	0.018	0.0011	0.11
6	1	5 - 6	2026	3	0.0047	0.1689	0.1830	0.088	0.018	0.0011	0.11
7	1	6 - 7	2027	3	0.0047	0.1689	0.1830	0.088	0.018	0.0011	0.11
8	1	7 - 8	2028	3	0.0047	0.1689	0.1830	0.088	0.018	0.0011	0.11
9	1	8 - 9	2029	3	0.0047	0.1689	0.1830	0.088	0.018	0.0011	0.11
10	1	9 - 10	2030	3	0.0047	0.1689	0.1830	0.088	0.018	0.0011	0.11
11	1	10 - 11	2031	3	0.0047	0.1689	0.1830	0.088	0.018	0.0011	0.11
12	1	11 - 12	2032	3	0.0047	0.1689	0.1830	0.088	0.018	0.0011	0.11
13	1	12 - 13	2033	3	0.0047	0.1689	0.1830	0.088	0.018	0.0011	0.11
14	1	13 - 14	2034	3	0.0047	0.1689	0.1830	0.088	0.018	0.0011	0.11
15	1	14 - 15	2035	3	0.0047	0.1689	0.1830	0.088	0.018	0.0011	0.11
16	1	15 - 16	2036	3	0.0047	0.1689	0.1830	0.088	0.018	0.0011	0.11
17	1	16-17	2037	1	0.0047	0.1689	0.1830	0.014	0.003	0.0002	0.02
18	1	17-18	2038	1	0.0047	0.1689	0.1830	0.014	0.003	0.0002	0.02
19	1	18-19	2039	1	0.0047	0.1689	0.1830	0.014	0.003	0.0002	0.02
20	1	19-20	2040	1	0.0047	0.1689	0.1830	0.014	0.003	0.0002	0.02
21	1	20-21	2041	1	0.0047	0.1689	0.1830	0.014	0.003	0.0002	0.02
22	1	21-22	2042	1	0.0047	0.1689	0.1830	0.014	0.003	0.0002	0.02
23	1	22-23	2043	1	0.0047	0.1689	0.1830	0.014	0.003	0.0002	0.02
24	1	23-24	2044	1	0.0047	0.1689	0.1830	0.014	0.003	0.0002	0.02
25	1	24-25	2045	1	0.0047	0.1689	0.1830	0.014	0.003	0.0002	0.02
26	1	25-26	2046	1	0.0047	0.1689	0.1830	0.014	0.003	0.0002	0.02
27	1	26-27	2047	1	0.0047	0.1689	0.1830	0.014	0.003	0.0002	0.02
28	1	27-28	2048	1	0.0047	0.1689	0.1830	0.014	0.003	0.0002	0.02
29	1	28-29	2049	1	0.0047	0.1689	0.1830	0.014	0.003	0.0002	0.02
30	1	29-30	2050	1	0.0047	0.1689	0.1830	0.014	0.003	0.0002	0.02
Total Increased Cancer Risk								2.80	0.571	0.036	**3.4**

* Third trimester of pregnancy

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00095	0.15	0.16

El Paseo Option 1 Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 3 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0036	0.1344	0.1456	0.042	0.009	0.0006	0.05
1	1	0 - 1	2021	10	0.0036	0.1344	0.1456	0.503	0.107	0.0068	0.62
2	1	1 - 2	2022	10	0.0036	0.1344	0.1456	0.503	0.107	0.0068	0.62
3	1	2 - 3	2023	3	0.0036	0.1344	0.1456	0.067	0.014	0.0009	0.08
4	1	3 - 4	2024	3	0.0036	0.1344	0.1456	0.067	0.014	0.0009	0.08
5	1	4 - 5	2025	3	0.0036	0.1344	0.1456	0.067	0.014	0.0009	0.08
6	1	5 - 6	2026	3	0.0036	0.1344	0.1456	0.067	0.014	0.0009	0.08
7	1	6 - 7	2027	3	0.0036	0.1344	0.1456	0.067	0.014	0.0009	0.08
8	1	7 - 8	2028	3	0.0036	0.1344	0.1456	0.067	0.014	0.0009	0.08
9	1	8 - 9	2029	3	0.0036	0.1344	0.1456	0.067	0.014	0.0009	0.08
10	1	9 - 10	2030	3	0.0036	0.1344	0.1456	0.067	0.014	0.0009	0.08
11	1	10 - 11	2031	3	0.0036	0.1344	0.1456	0.067	0.014	0.0009	0.08
12	1	11 - 12	2032	3	0.0036	0.1344	0.1456	0.067	0.014	0.0009	0.08
13	1	12 - 13	2033	3	0.0036	0.1344	0.1456	0.067	0.014	0.0009	0.08
14	1	13 - 14	2034	3	0.0036	0.1344	0.1456	0.067	0.014	0.0009	0.08
15	1	14 - 15	2035	3	0.0036	0.1344	0.1456	0.067	0.014	0.0009	0.08
16	1	15 - 16	2036	3	0.0036	0.1344	0.1456	0.067	0.014	0.0009	0.08
17	1	16-17	2037	1	0.0036	0.1344	0.1456	0.010	0.002	0.0001	0.01
18	1	17-18	2038	1	0.0036	0.1344	0.1456	0.010	0.002	0.0001	0.01
19	1	18-19	2039	1	0.0036	0.1344	0.1456	0.010	0.002	0.0001	0.01
20	1	19-20	2040	1	0.0036	0.1344	0.1456	0.010	0.002	0.0001	0.01
21	1	20-21	2041	1	0.0036	0.1344	0.1456	0.010	0.002	0.0001	0.01
22	1	21-22	2042	1	0.0036	0.1344	0.1456	0.010	0.002	0.0001	0.01
23	1	22-23	2043	1	0.0036	0.1344	0.1456	0.010	0.002	0.0001	0.01
24	1	23-24	2044	1	0.0036	0.1344	0.1456	0.010	0.002	0.0001	0.01
25	1	24-25	2045	1	0.0036	0.1344	0.1456	0.010	0.002	0.0001	0.01
26	1	25-26	2046	1	0.0036	0.1344	0.1456	0.010	0.002	0.0001	0.01
27	1	26-27	2047	1	0.0036	0.1344	0.1456	0.010	0.002	0.0001	0.01
28	1	27-28	2048	1	0.0036	0.1344	0.1456	0.010	0.002	0.0001	0.01
29	1	28-29	2049	1	0.0036	0.1344	0.1456	0.010	0.002	0.0001	0.01
30	1	29-30	2050	1	0.0036	0.1344	0.1456	0.010	0.002	0.0001	0.01
Total Increased Cancer Risk								2.13	0.454	0.029	**2.61**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00072	0.12	0.13

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 3 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0033	0.1179	0.1277	0.038	0.008	0.0005	0.05
1	1	0 - 1	2021	10	0.0033	0.1179	0.1277	0.461	0.094	0.0060	0.56
2	1	1 - 2	2022	10	0.0033	0.1179	0.1277	0.461	0.094	0.0060	0.56
3	1	2 - 3	2023	3	0.0033	0.1179	0.1277	0.061	0.013	0.0008	0.07
4	1	3 - 4	2024	3	0.0033	0.1179	0.1277	0.061	0.013	0.0008	0.07
5	1	4 - 5	2025	3	0.0033	0.1179	0.1277	0.061	0.013	0.0008	0.07
6	1	5 - 6	2026	3	0.0033	0.1179	0.1277	0.061	0.013	0.0008	0.07
7	1	6 - 7	2027	3	0.0033	0.1179	0.1277	0.061	0.013	0.0008	0.07
8	1	7 - 8	2028	3	0.0033	0.1179	0.1277	0.061	0.013	0.0008	0.07
9	1	8 - 9	2029	3	0.0033	0.1179	0.1277	0.061	0.013	0.0008	0.07
10	1	9 - 10	2030	3	0.0033	0.1179	0.1277	0.061	0.013	0.0008	0.07
11	1	10 - 11	2031	3	0.0033	0.1179	0.1277	0.061	0.013	0.0008	0.07
12	1	11 - 12	2032	3	0.0033	0.1179	0.1277	0.061	0.013	0.0008	0.07
13	1	12 - 13	2033	3	0.0033	0.1179	0.1277	0.061	0.013	0.0008	0.07
14	1	13 - 14	2034	3	0.0033	0.1179	0.1277	0.061	0.013	0.0008	0.07
15	1	14 - 15	2035	3	0.0033	0.1179	0.1277	0.061	0.013	0.0008	0.07
16	1	15 - 16	2036	3	0.0033	0.1179	0.1277	0.061	0.013	0.0008	0.07
17	1	16-17	2037	1	0.0033	0.1179	0.1277	0.009	0.002	0.0001	0.01
18	1	17-18	2038	1	0.0033	0.1179	0.1277	0.009	0.002	0.0001	0.01
19	1	18-19	2039	1	0.0033	0.1179	0.1277	0.009	0.002	0.0001	0.01
20	1	19-20	2040	1	0.0033	0.1179	0.1277	0.009	0.002	0.0001	0.01
21	1	20-21	2041	1	0.0033	0.1179	0.1277	0.009	0.002	0.0001	0.01
22	1	21-22	2042	1	0.0033	0.1179	0.1277	0.009	0.002	0.0001	0.01
23	1	22-23	2043	1	0.0033	0.1179	0.1277	0.009	0.002	0.0001	0.01
24	1	23-24	2044	1	0.0033	0.1179	0.1277	0.009	0.002	0.0001	0.01
25	1	24-25	2045	1	0.0033	0.1179	0.1277	0.009	0.002	0.0001	0.01
26	1	25-26	2046	1	0.0033	0.1179	0.1277	0.009	0.002	0.0001	0.01
27	1	26-27	2047	1	0.0033	0.1179	0.1277	0.009	0.002	0.0001	0.01
28	1	27-28	2048	1	0.0033	0.1179	0.1277	0.009	0.002	0.0001	0.01
29	1	28-29	2049	1	0.0033	0.1179	0.1277	0.009	0.002	0.0001	0.01
30	1	29-30	2050	1	0.0033	0.1179	0.1277	0.009	0.002	0.0001	0.01
Total Increased Cancer Risk								1.95	0.398	0.025	**2.4**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00066	0.11	0.11

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 4 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0052	0.2018	0.2186	0.060	0.013	0.0008	0.07
1	1	0 - 1	2021	10	0.0052	0.2018	0.2186	0.720	0.161	0.0103	0.89
2	1	1 - 2	2022	10	0.0052	0.2018	0.2186	0.720	0.161	0.0103	0.89
3	1	2 - 3	2023	3	0.0052	0.2018	0.2186	0.096	0.021	0.0014	0.12
4	1	3 - 4	2024	3	0.0052	0.2018	0.2186	0.096	0.021	0.0014	0.12
5	1	4 - 5	2025	3	0.0052	0.2018	0.2186	0.096	0.021	0.0014	0.12
6	1	5 - 6	2026	3	0.0052	0.2018	0.2186	0.096	0.021	0.0014	0.12
7	1	6 - 7	2027	3	0.0052	0.2018	0.2186	0.096	0.021	0.0014	0.12
8	1	7 - 8	2028	3	0.0052	0.2018	0.2186	0.096	0.021	0.0014	0.12
9	1	8 - 9	2029	3	0.0052	0.2018	0.2186	0.096	0.021	0.0014	0.12
10	1	9 - 10	2030	3	0.0052	0.2018	0.2186	0.096	0.021	0.0014	0.12
11	1	10 - 11	2031	3	0.0052	0.2018	0.2186	0.096	0.021	0.0014	0.12
12	1	11 - 12	2032	3	0.0052	0.2018	0.2186	0.096	0.021	0.0014	0.12
13	1	12 - 13	2033	3	0.0052	0.2018	0.2186	0.096	0.021	0.0014	0.12
14	1	13 - 14	2034	3	0.0052	0.2018	0.2186	0.096	0.021	0.0014	0.12
15	1	14 - 15	2035	3	0.0052	0.2018	0.2186	0.096	0.021	0.0014	0.12
16	1	15 - 16	2036	3	0.0052	0.2018	0.2186	0.096	0.021	0.0014	0.12
17	1	16-17	2037	1	0.0052	0.2018	0.2186	0.015	0.003	0.0002	0.02
18	1	17-18	2038	1	0.0052	0.2018	0.2186	0.015	0.003	0.0002	0.02
19	1	18-19	2039	1	0.0052	0.2018	0.2186	0.015	0.003	0.0002	0.02
20	1	19-20	2040	1	0.0052	0.2018	0.2186	0.015	0.003	0.0002	0.02
21	1	20-21	2041	1	0.0052	0.2018	0.2186	0.015	0.003	0.0002	0.02
22	1	21-22	2042	1	0.0052	0.2018	0.2186	0.015	0.003	0.0002	0.02
23	1	22-23	2043	1	0.0052	0.2018	0.2186	0.015	0.003	0.0002	0.02
24	1	23-24	2044	1	0.0052	0.2018	0.2186	0.015	0.003	0.0002	0.02
25	1	24-25	2045	1	0.0052	0.2018	0.2186	0.015	0.003	0.0002	0.02
26	1	25-26	2046	1	0.0052	0.2018	0.2186	0.015	0.003	0.0002	0.02
27	1	26-27	2047	1	0.0052	0.2018	0.2186	0.015	0.003	0.0002	0.02
28	1	27-28	2048	1	0.0052	0.2018	0.2186	0.015	0.003	0.0002	0.02
29	1	28-29	2049	1	0.0052	0.2018	0.2186	0.015	0.003	0.0002	0.02
30	1	29-30	2050	1	0.0052	0.2018	0.2186	0.015	0.003	0.0002	0.02
Total Increased Cancer Risk								3.05	0.681	0.043	**3.78**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00103	0.18	0.20

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 4 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0045	0.1615	0.1750	0.052	0.011	0.0007	0.06
1	1	0 - 1	2021	10	0.0045	0.1615	0.1750	0.631	0.129	0.0082	0.77
2	1	1 - 2	2022	10	0.0045	0.1615	0.1750	0.631	0.129	0.0082	0.77
3	1	2 - 3	2023	3	0.0045	0.1615	0.1750	0.084	0.017	0.0011	0.10
4	1	3 - 4	2024	3	0.0045	0.1615	0.1750	0.084	0.017	0.0011	0.10
5	1	4 - 5	2025	3	0.0045	0.1615	0.1750	0.084	0.017	0.0011	0.10
6	1	5 - 6	2026	3	0.0045	0.1615	0.1750	0.084	0.017	0.0011	0.10
7	1	6 - 7	2027	3	0.0045	0.1615	0.1750	0.084	0.017	0.0011	0.10
8	1	7 - 8	2028	3	0.0045	0.1615	0.1750	0.084	0.017	0.0011	0.10
9	1	8 - 9	2029	3	0.0045	0.1615	0.1750	0.084	0.017	0.0011	0.10
10	1	9 - 10	2030	3	0.0045	0.1615	0.1750	0.084	0.017	0.0011	0.10
11	1	10 - 11	2031	3	0.0045	0.1615	0.1750	0.084	0.017	0.0011	0.10
12	1	11 - 12	2032	3	0.0045	0.1615	0.1750	0.084	0.017	0.0011	0.10
13	1	12 - 13	2033	3	0.0045	0.1615	0.1750	0.084	0.017	0.0011	0.10
14	1	13 - 14	2034	3	0.0045	0.1615	0.1750	0.084	0.017	0.0011	0.10
15	1	14 - 15	2035	3	0.0045	0.1615	0.1750	0.084	0.017	0.0011	0.10
16	1	15 - 16	2036	3	0.0045	0.1615	0.1750	0.084	0.017	0.0011	0.10
17	1	16-17	2037	1	0.0045	0.1615	0.1750	0.013	0.003	0.0002	0.02
18	1	17-18	2038	1	0.0045	0.1615	0.1750	0.013	0.003	0.0002	0.02
19	1	18-19	2039	1	0.0045	0.1615	0.1750	0.013	0.003	0.0002	0.02
20	1	19-20	2040	1	0.0045	0.1615	0.1750	0.013	0.003	0.0002	0.02
21	1	20-21	2041	1	0.0045	0.1615	0.1750	0.013	0.003	0.0002	0.02
22	1	21-22	2042	1	0.0045	0.1615	0.1750	0.013	0.003	0.0002	0.02
23	1	22-23	2043	1	0.0045	0.1615	0.1750	0.013	0.003	0.0002	0.02
24	1	23-24	2044	1	0.0045	0.1615	0.1750	0.013	0.003	0.0002	0.02
25	1	24-25	2045	1	0.0045	0.1615	0.1750	0.013	0.003	0.0002	0.02
26	1	25-26	2046	1	0.0045	0.1615	0.1750	0.013	0.003	0.0002	0.02
27	1	26-27	2047	1	0.0045	0.1615	0.1750	0.013	0.003	0.0002	0.02
28	1	27-28	2048	1	0.0045	0.1615	0.1750	0.013	0.003	0.0002	0.02
29	1	28-29	2049	1	0.0045	0.1615	0.1750	0.013	0.003	0.0002	0.02
30	1	29-30	2050	1	0.0045	0.1615	0.1750	0.013	0.003	0.0002	0.02
Total Increased Cancer Risk								2.67	0.546	0.035	**3.3**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00090	0.15	0.16

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at Saratoga On-Site 1st Level (2nd Floor) Residential Receptors - 8.2 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0038	0.0652	0.0705	0.044	0.004	0.0003	0.05
1	1	0 - 1	2021	10	0.0038	0.0652	0.0705	0.536	0.052	0.0033	0.59
2	1	1 - 2	2022	10	0.0038	0.0652	0.0705	0.536	0.052	0.0033	0.59
3	1	2 - 3	2023	3	0.0038	0.0652	0.0705	0.071	0.007	0.0004	0.08
4	1	3 - 4	2024	3	0.0038	0.0652	0.0705	0.071	0.007	0.0004	0.08
5	1	4 - 5	2025	3	0.0038	0.0652	0.0705	0.071	0.007	0.0004	0.08
6	1	5 - 6	2026	3	0.0038	0.0652	0.0705	0.071	0.007	0.0004	0.08
7	1	6 - 7	2027	3	0.0038	0.0652	0.0705	0.071	0.007	0.0004	0.08
8	1	7 - 8	2028	3	0.0038	0.0652	0.0705	0.071	0.007	0.0004	0.08
9	1	8 - 9	2029	3	0.0038	0.0652	0.0705	0.071	0.007	0.0004	0.08
10	1	9 - 10	2030	3	0.0038	0.0652	0.0705	0.071	0.007	0.0004	0.08
11	1	10 - 11	2031	3	0.0038	0.0652	0.0705	0.071	0.007	0.0004	0.08
12	1	11 - 12	2032	3	0.0038	0.0652	0.0705	0.071	0.007	0.0004	0.08
13	1	12 - 13	2033	3	0.0038	0.0652	0.0705	0.071	0.007	0.0004	0.08
14	1	13 - 14	2034	3	0.0038	0.0652	0.0705	0.071	0.007	0.0004	0.08
15	1	14 - 15	2035	3	0.0038	0.0652	0.0705	0.071	0.007	0.0004	0.08
16	1	15 - 16	2036	3	0.0038	0.0652	0.0705	0.071	0.007	0.0004	0.08
17	1	16-17	2037	1	0.0038	0.0652	0.0705	0.011	0.001	0.0001	0.01
18	1	17-18	2038	1	0.0038	0.0652	0.0705	0.011	0.001	0.0001	0.01
19	1	18-19	2039	1	0.0038	0.0652	0.0705	0.011	0.001	0.0001	0.01
20	1	19-20	2040	1	0.0038	0.0652	0.0705	0.011	0.001	0.0001	0.01
21	1	20-21	2041	1	0.0038	0.0652	0.0705	0.011	0.001	0.0001	0.01
22	1	21-22	2042	1	0.0038	0.0652	0.0705	0.011	0.001	0.0001	0.01
23	1	22-23	2043	1	0.0038	0.0652	0.0705	0.011	0.001	0.0001	0.01
24	1	23-24	2044	1	0.0038	0.0652	0.0705	0.011	0.001	0.0001	0.01
25	1	24-25	2045	1	0.0038	0.0652	0.0705	0.011	0.001	0.0001	0.01
26	1	25-26	2046	1	0.0038	0.0652	0.0705	0.011	0.001	0.0001	0.01
27	1	26-27	2047	1	0.0038	0.0652	0.0705	0.011	0.001	0.0001	0.01
28	1	27-28	2048	1	0.0038	0.0652	0.0705	0.011	0.001	0.0001	0.01
29	1	28-29	2049	1	0.0038	0.0652	0.0705	0.011	0.001	0.0001	0.01
30	1	29-30	2050	1	0.0038	0.0652	0.0705	0.011	0.001	0.0001	0.01
Total Increased Cancer Risk								2.27	0.220	0.014	**2.51**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00077	0.06	0.06

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at Saratoga On-Site 2nd Level (3rd Floor) Residential Receptors - 11.3 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0018	0.0359	0.0388	0.021	0.002	0.0002	0.02
1	1	0 - 1	2021	10	0.0018	0.0359	0.0388	0.257	0.029	0.0018	0.29
2	1	1 - 2	2022	10	0.0018	0.0359	0.0388	0.257	0.029	0.0018	0.29
3	1	2 - 3	2023	3	0.0018	0.0359	0.0388	0.034	0.004	0.0002	0.04
4	1	3 - 4	2024	3	0.0018	0.0359	0.0388	0.034	0.004	0.0002	0.04
5	1	4 - 5	2025	3	0.0018	0.0359	0.0388	0.034	0.004	0.0002	0.04
6	1	5 - 6	2026	3	0.0018	0.0359	0.0388	0.034	0.004	0.0002	0.04
7	1	6 - 7	2027	3	0.0018	0.0359	0.0388	0.034	0.004	0.0002	0.04
8	1	7 - 8	2028	3	0.0018	0.0359	0.0388	0.034	0.004	0.0002	0.04
9	1	8 - 9	2029	3	0.0018	0.0359	0.0388	0.034	0.004	0.0002	0.04
10	1	9 - 10	2030	3	0.0018	0.0359	0.0388	0.034	0.004	0.0002	0.04
11	1	10 - 11	2031	3	0.0018	0.0359	0.0388	0.034	0.004	0.0002	0.04
12	1	11 - 12	2032	3	0.0018	0.0359	0.0388	0.034	0.004	0.0002	0.04
13	1	12 - 13	2033	3	0.0018	0.0359	0.0388	0.034	0.004	0.0002	0.04
14	1	13 - 14	2034	3	0.0018	0.0359	0.0388	0.034	0.004	0.0002	0.04
15	1	14 - 15	2035	3	0.0018	0.0359	0.0388	0.034	0.004	0.0002	0.04
16	1	15 - 16	2036	3	0.0018	0.0359	0.0388	0.034	0.004	0.0002	0.04
17	1	16-17	2037	1	0.0018	0.0359	0.0388	0.005	0.001	0.0000	0.01
18	1	17-18	2038	1	0.0018	0.0359	0.0388	0.005	0.001	0.0000	0.01
19	1	18-19	2039	1	0.0018	0.0359	0.0388	0.005	0.001	0.0000	0.01
20	1	19-20	2040	1	0.0018	0.0359	0.0388	0.005	0.001	0.0000	0.01
21	1	20-21	2041	1	0.0018	0.0359	0.0388	0.005	0.001	0.0000	0.01
22	1	21-22	2042	1	0.0018	0.0359	0.0388	0.005	0.001	0.0000	0.01
23	1	22-23	2043	1	0.0018	0.0359	0.0388	0.005	0.001	0.0000	0.01
24	1	23-24	2044	1	0.0018	0.0359	0.0388	0.005	0.001	0.0000	0.01
25	1	24-25	2045	1	0.0018	0.0359	0.0388	0.005	0.001	0.0000	0.01
26	1	25-26	2046	1	0.0018	0.0359	0.0388	0.005	0.001	0.0000	0.01
27	1	26-27	2047	1	0.0018	0.0359	0.0388	0.005	0.001	0.0000	0.01
28	1	27-28	2048	1	0.0018	0.0359	0.0388	0.005	0.001	0.0000	0.01
29	1	28-29	2049	1	0.0018	0.0359	0.0388	0.005	0.001	0.0000	0.01
30	1	29-30	2050	1	0.0018	0.0359	0.0388	0.005	0.001	0.0000	0.01
Total Increased Cancer Risk								1.09	0.121	0.008	**1.2**

Maximum Hazard Index	Maximum Fugitive PM2.5	Maximum Total PM2.5
0.00037	0.03	0.03

* Third trimester of pregnancy

Prospect Road Traffic Emissions and Health Risk Calculations

Analysis Year = ***2021***

Vehicle Type	2016 Caltrans Vehicles (veh/day)	2021 Vehicles (veh/day)
Total	**23,550**	**24,728**

Increase From 2016	1.05
Vehicles/Direction	**12,364**
Avg Vehicles/Hour/Direction	515

Traffic Data Year = ***2016***

El Paeso & Saratoga Traffic Report Volumes	AADT Total
Background + EP1 School Condition - Prospect Rd	23,550

Percent of Total Vehicles

Traffic Increase per Year (%) = *1.00%*

El Paseo Option 1 Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Prospect Road / Campbell Avenue
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
DPM_EB_PRO	Prospect Road / Campbell Ave Eastbound	EB	2	1144.4	0.71	13.3	43.7	3.4	Varied	12,364	15,238	164,020	7.593E-09	5.598E-09	6.8	3.16
DPM_WB_PRO	Prospect Road / Cambell Ave Westbound	WB	2	1137.5	0.71	13.3	43.7	3.4	Varied	12,364	15,146	163,031	7.593E-09	5.598E-09	6.8	3.16
									Total	24,728						

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle (g/VMT)	0.00114	0.001319		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and DPM Emissions - DPM_EB_PRO

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.82%	472	1.06E-04	9	6.42%	793	2.07E-04	17	5.55%	686	1.79E-04
2	2.60%	322	7.22E-05	10	7.23%	893	2.01E-04	18	3.24%	400	1.04E-04
3	2.83%	350	7.86E-05	11	6.30%	779	1.75E-04	19	2.43%	300	6.74E-05
4	3.41%	422	9.47E-05	12	6.99%	865	1.94E-04	20	0.92%	114	2.57E-05
5	2.20%	272	6.10E-05	13	6.18%	765	1.72E-04	21	3.06%	379	8.51E-05
6	3.35%	415	9.31E-05	14	6.13%	758	1.70E-04	22	4.16%	515	1.16E-04
7	6.13%	758	1.70E-04	15	5.14%	636	1.43E-04	23	2.43%	300	6.74E-05
8	4.74%	586	1.53E-04	16	3.87%	479	1.08E-04	24	0.87%	107	2.41E-05
								Total		12,364	

2021 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_WB_PRO

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.82%	472	1.05E-04	9	6.42%	793	2.05E-04	17	5.55%	686	1.78E-04
2	2.60%	322	7.18E-05	10	7.23%	893	1.99E-04	18	3.24%	400	1.04E-04
3	2.83%	350	7.82E-05	11	6.30%	779	1.74E-04	19	2.43%	300	6.70E-05
4	3.41%	422	9.41E-05	12	6.99%	865	1.93E-04	20	0.92%	114	2.55E-05
5	2.20%	272	6.06E-05	13	6.18%	765	1.71E-04	21	3.06%	379	8.46E-05
6	3.35%	415	9.25E-05	14	6.13%	758	1.69E-04	22	4.16%	515	1.15E-04
7	6.13%	758	1.69E-04	15	5.14%	636	1.42E-04	23	2.43%	300	6.70E-05
8	4.74%	586	1.52E-04	16	3.87%	479	1.07E-04	24	0.87%	107	2.39E-05
								Total		12,364	

El Paseo Option 1 Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Prospect Road / Campbell Avenue
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
PM2.5_EB_PRO	Prospect Road / Campbell Ave Eastbound	EB	2	1144.4	0.71	13.3	44	1.3	Varied	12,364	15,238	164,020	1.583E-08	1.167E-08	2.6	1.21
PM2.5_WB_PRO	Prospect Road / Cambell Ave Westbound	WB	2	1137.5	0.71	13.3	44	1.3	Varied	12,364	15,146	163,031	1.583E-08	1.167E-08	2.6	1.21
									Total	24,728						

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle (g/VMT)	0.002371	0.00326		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and PM2.5 Emissions - PM2.5_EB_PRO

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	143	6.70E-05	9	7.11%	879	5.66E-04	17	7.38%	913	5.88E-04
2	0.42%	52	2.44E-05	10	4.39%	543	2.54E-04	18	8.17%	1010	6.50E-04
3	0.41%	51	2.37E-05	11	4.67%	577	2.70E-04	19	5.70%	705	3.30E-04
4	0.27%	33	1.55E-05	12	5.89%	728	3.41E-04	20	4.27%	528	2.47E-04
5	0.50%	62	2.92E-05	13	6.15%	761	3.56E-04	21	3.25%	402	1.88E-04
6	0.91%	112	5.26E-05	14	6.03%	746	3.49E-04	22	3.30%	408	1.91E-04
7	3.79%	469	2.20E-04	15	7.01%	866	4.06E-04	23	2.46%	304	1.42E-04
8	7.76%	960	6.18E-04	16	7.14%	882	4.13E-04	24	1.87%	231	1.08E-04
								Total		12,364	

2021 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM2.5_WB_PRO

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	143	6.66E-05	9	7.11%	879	5.63E-04	17	7.38%	913	5.84E-04
2	0.42%	52	2.42E-05	10	4.39%	543	2.53E-04	18	8.17%	1010	6.47E-04
3	0.41%	51	2.35E-05	11	4.67%	577	2.69E-04	19	5.70%	705	3.28E-04
4	0.27%	33	1.54E-05	12	5.89%	728	3.39E-04	20	4.27%	528	2.46E-04
5	0.50%	62	2.90E-05	13	6.15%	761	3.54E-04	21	3.25%	402	1.87E-04
6	0.91%	112	5.23E-05	14	6.03%	746	3.47E-04	22	3.30%	408	1.90E-04
7	3.79%	469	2.18E-04	15	7.01%	866	4.03E-04	23	2.46%	304	1.41E-04
8	7.76%	960	6.15E-04	16	7.14%	882	4.11E-04	24	1.87%	231	1.07E-04
								Total		12,364	

El Paseo Option 1 Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Prospect Road / Campbell Avenue
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEXH_EB_PRO	Prospect Road / Campbell Ave Eastbound	EB	2	1144.4	0.71	13.3	44	1.3	Varied	12,364	15,238	164,020	2.593E-07	1.912E-07	2.6	1.21
TEXH_WB_PRO	Prospect Road / Cambell Ave Westbound	WB	2	1137.5	0.71	13.3	44	1.3	Varied	12,364	15,146	163,031	2.593E-07	1.912E-07	2.6	1.21
									Total	24,728						

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle (g/VMT)	0.03883	0.05828		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_EB_PRO

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	143	1.10E-03	9	7.11%	879	1.01E-02	17	7.38%	913	1.05E-02
2	0.42%	52	3.99E-04	10	4.39%	543	4.16E-03	18	8.17%	1010	1.16E-02
3	0.41%	51	3.87E-04	11	4.67%	577	4.43E-03	19	5.70%	705	5.40E-03
4	0.27%	33	2.54E-04	12	5.89%	728	5.59E-03	20	4.27%	528	4.05E-03
5	0.50%	62	4.78E-04	13	6.15%	761	5.83E-03	21	3.25%	402	3.09E-03
6	0.91%	112	8.62E-04	14	6.03%	746	5.72E-03	22	3.30%	408	3.13E-03
7	3.79%	469	3.60E-03	15	7.01%	866	6.65E-03	23	2.46%	304	2.33E-03
8	7.76%	960	1.10E-02	16	7.14%	882	6.77E-03	24	1.87%	231	1.77E-03
								Total		12,364	

2021 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_WB_PRO

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	143	1.09E-03	9	7.11%	879	1.01E-02	17	7.38%	913	1.04E-02
2	0.42%	52	3.97E-04	10	4.39%	543	4.14E-03	18	8.17%	1010	1.16E-02
3	0.41%	51	3.85E-04	11	4.67%	577	4.40E-03	19	5.70%	705	5.37E-03
4	0.27%	33	2.53E-04	12	5.89%	728	5.55E-03	20	4.27%	528	4.03E-03
5	0.50%	62	4.75E-04	13	6.15%	761	5.80E-03	21	3.25%	402	3.07E-03
6	0.91%	112	8.56E-04	14	6.03%	746	5.69E-03	22	3.30%	408	3.11E-03
7	3.79%	469	3.57E-03	15	7.01%	866	6.61E-03	23	2.46%	304	2.32E-03
8	7.76%	960	1.10E-02	16	7.14%	882	6.73E-03	24	1.87%	231	1.76E-03
								Total		12,364	

El Paseo Option 1 Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Prospect Road / Campbell Avenue
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEVAP_EB_PRO	Prospect Road / Campbell Ave Eastbound	EB	2	1144.4	0.71	13.3	44	1.3	Varied	12,364	15,238	164,020	2.835E-07	2.090E-07	2.6	1.21
TEVAP_WB_PRO	Prospect Road / Cambell Ave Westbound	WB	2	1137.5	0.71	13.3	44	1.3	Varied	12,364	15,146	163,031	2.835E-07	2.090E-07	2.6	1.21
									Total	24,728						

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle per Hour (g/hour)	1.48576	1.48576		
Emissions per Vehicle per Mile (g/VMT)	0.04245	0.05943		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_EB_PRO

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	143	1.20E-03	9	7.11%	879	1.03E-02	17	7.38%	913	1.07E-02
2	0.42%	52	4.36E-04	10	4.39%	543	4.55E-03	18	8.17%	1010	1.19E-02
3	0.41%	51	4.23E-04	11	4.67%	577	4.84E-03	19	5.70%	705	5.91E-03
4	0.27%	33	2.78E-04	12	5.89%	728	6.11E-03	20	4.27%	528	4.43E-03
5	0.50%	62	5.23E-04	13	6.15%	761	6.38E-03	21	3.25%	402	3.37E-03
6	0.91%	112	9.42E-04	14	6.03%	746	6.26E-03	22	3.30%	408	3.42E-03
7	3.79%	469	3.93E-03	15	7.01%	866	7.26E-03	23	2.46%	304	2.55E-03
8	7.76%	960	1.13E-02	16	7.14%	882	7.40E-03	24	1.87%	231	1.93E-03
								Total		12,364	

2021 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_WB_PRO

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	143	1.19E-03	9	7.11%	879	1.03E-02	17	7.38%	913	1.07E-02
2	0.42%	52	4.33E-04	10	4.39%	543	4.52E-03	18	8.17%	1010	1.18E-02
3	0.41%	51	4.21E-04	11	4.67%	577	4.81E-03	19	5.70%	705	5.87E-03
4	0.27%	33	2.76E-04	12	5.89%	728	6.07E-03	20	4.27%	528	4.40E-03
5	0.50%	62	5.19E-04	13	6.15%	761	6.34E-03	21	3.25%	402	3.35E-03
6	0.91%	112	9.36E-04	14	6.03%	746	6.22E-03	22	3.30%	408	3.40E-03
7	3.79%	469	3.91E-03	15	7.01%	866	7.22E-03	23	2.46%	304	2.53E-03
8	7.76%	960	1.12E-02	16	7.14%	882	7.35E-03	24	1.87%	231	1.92E-03
								Total		12,364	

El Paseo Option 1 Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Prospect Road / Campbell Avenue
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
FUG_EB_PRO	Prospect Road / Campbell Ave Eastbound	EB	2	1144.4	0.71	13.3	44	1.3	Varied	12,364	15,238	164,020	2.258E-07	1.665E-07	2.6	1.21
FUG_WB_PRO	Prospect Road / Cambell Ave Westbound	WB	2	1137.5	0.71	13.3	44	1.3	Varied	12,364	15,146	163,031	2.258E-07	1.665E-07	2.6	1.21
									Total	24,728						

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211	0.00211		
Brake Wear - Emissions per Vehicle (g/VMT)	0.01681	0.01681		
Road Dust - Emissions per Vehicle (g/VMT)	0.01489	0.01489		
otal Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03381	0.03381		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_EB_PRO

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	143	9.55E-04	9	7.11%	879	5.87E-03	17	7.38%	913	6.10E-03
2	0.42%	52	3.47E-04	10	4.39%	543	3.62E-03	18	8.17%	1010	6.74E-03
3	0.41%	51	3.37E-04	11	4.67%	577	3.85E-03	19	5.70%	705	4.71E-03
4	0.27%	33	2.22E-04	12	5.89%	728	4.86E-03	20	4.27%	528	3.53E-03
5	0.50%	62	4.16E-04	13	6.15%	761	5.08E-03	21	3.25%	402	2.69E-03
6	0.91%	112	7.50E-04	14	6.03%	746	4.98E-03	22	3.30%	408	2.72E-03
7	3.79%	469	3.13E-03	15	7.01%	866	5.79E-03	23	2.46%	304	2.03E-03
8	7.76%	960	6.41E-03	16	7.14%	882	5.89E-03	24	1.87%	231	1.54E-03
								Total		12,364	

2021 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_WB_PRO

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	143	9.49E-04	9	7.11%	879	5.83E-03	17	7.38%	913	6.06E-03
2	0.42%	52	3.45E-04	10	4.39%	543	3.60E-03	18	8.17%	1010	6.70E-03
3	0.41%	51	3.35E-04	11	4.67%	577	3.83E-03	19	5.70%	705	4.68E-03
4	0.27%	33	2.20E-04	12	5.89%	728	4.83E-03	20	4.27%	528	3.51E-03
5	0.50%	62	4.14E-04	13	6.15%	761	5.05E-03	21	3.25%	402	2.67E-03
6	0.91%	112	7.46E-04	14	6.03%	746	4.95E-03	22	3.30%	408	2.71E-03
7	3.79%	469	3.11E-03	15	7.01%	866	5.75E-03	23	2.46%	304	2.02E-03
8	7.76%	960	6.37E-03	16	7.14%	882	5.86E-03	24	1.87%	231	1.53E-03
								Total		12,364	

El Paseo Option 1 Education & Saratoga, San Jose, CA - Prospect Road Traffic Cancer Risk
Impacts at Construction MEI - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0006	0.0214	0.0229	0.007	0.001	0.0001	0.01
1	1	0 - 1	2021	10	0.0006	0.0214	0.0229	0.087	0.017	0.0011	0.10
2	1	1 - 2	2022	10	0.0006	0.0214	0.0229	0.087	0.017	0.0011	0.10
3	1	2 - 3	2023	3	0.0006	0.0214	0.0229	0.012	0.002	0.0001	0.01
4	1	3 - 4	2024	3	0.0006	0.0214	0.0229	0.012	0.002	0.0001	0.01
5	1	4 - 5	2025	3	0.0006	0.0214	0.0229	0.012	0.002	0.0001	0.01
6	1	5 - 6	2026	3	0.0006	0.0214	0.0229	0.012	0.002	0.0001	0.01
7	1	6 - 7	2027	3	0.0006	0.0214	0.0229	0.012	0.002	0.0001	0.01
8	1	7 - 8	2028	3	0.0006	0.0214	0.0229	0.012	0.002	0.0001	0.01
9	1	8 - 9	2029	3	0.0006	0.0214	0.0229	0.012	0.002	0.0001	0.01
10	1	9 - 10	2030	3	0.0006	0.0214	0.0229	0.012	0.002	0.0001	0.01
11	1	10 - 11	2031	3	0.0006	0.0214	0.0229	0.012	0.002	0.0001	0.01
12	1	11 - 12	2032	3	0.0006	0.0214	0.0229	0.012	0.002	0.0001	0.01
13	1	12 - 13	2033	3	0.0006	0.0214	0.0229	0.012	0.002	0.0001	0.01
14	1	13 - 14	2034	3	0.0006	0.0214	0.0229	0.012	0.002	0.0001	0.01
15	1	14 - 15	2035	3	0.0006	0.0214	0.0229	0.012	0.002	0.0001	0.01
16	1	15 - 16	2036	3	0.0006	0.0214	0.0229	0.012	0.002	0.0001	0.01
17	1	16-17	2037	1	0.0006	0.0214	0.0229	0.002	0.000	0.0000	0.00
18	1	17-18	2038	1	0.0006	0.0214	0.0229	0.002	0.000	0.0000	0.00
19	1	18-19	2039	1	0.0006	0.0214	0.0229	0.002	0.000	0.0000	0.00
20	1	19-20	2040	1	0.0006	0.0214	0.0229	0.002	0.000	0.0000	0.00
21	1	20-21	2041	1	0.0006	0.0214	0.0229	0.002	0.000	0.0000	0.00
22	1	21-22	2042	1	0.0006	0.0214	0.0229	0.002	0.000	0.0000	0.00
23	1	22-23	2043	1	0.0006	0.0214	0.0229	0.002	0.000	0.0000	0.00
24	1	23-24	2044	1	0.0006	0.0214	0.0229	0.002	0.000	0.0000	0.00
25	1	24-25	2045	1	0.0006	0.0214	0.0229	0.002	0.000	0.0000	0.00
26	1	25-26	2046	1	0.0006	0.0214	0.0229	0.002	0.000	0.0000	0.00
27	1	26-27	2047	1	0.0006	0.0214	0.0229	0.002	0.000	0.0000	0.00
28	1	27-28	2048	1	0.0006	0.0214	0.0229	0.002	0.000	0.0000	0.00
29	1	28-29	2049	1	0.0006	0.0214	0.0229	0.002	0.000	0.0000	0.00
30	1	29-30	2050	1	0.0006	0.0214	0.0229	0.002	0.000	0.0000	0.00
Total Increased Cancer Risk								0.37	0.072	0.005	**0.44**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.0001	0.02	0.02

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at El Paseo Building 1 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0013	0.0449	0.0480	0.015	0.003	0.0002	0.02
1	1	0 - 1	2021	10	0.0013	0.0449	0.0480	0.180	0.036	0.0023	0.22
2	1	1 - 2	2022	10	0.0013	0.0449	0.0480	0.180	0.036	0.0023	0.22
3	1	2 - 3	2023	3	0.0013	0.0449	0.0480	0.024	0.005	0.0003	0.03
4	1	3 - 4	2024	3	0.0013	0.0449	0.0480	0.024	0.005	0.0003	0.03
5	1	4 - 5	2025	3	0.0013	0.0449	0.0480	0.024	0.005	0.0003	0.03
6	1	5 - 6	2026	3	0.0013	0.0449	0.0480	0.024	0.005	0.0003	0.03
7	1	6 - 7	2027	3	0.0013	0.0449	0.0480	0.024	0.005	0.0003	0.03
8	1	7 - 8	2028	3	0.0013	0.0449	0.0480	0.024	0.005	0.0003	0.03
9	1	8 - 9	2029	3	0.0013	0.0449	0.0480	0.024	0.005	0.0003	0.03
10	1	9 - 10	2030	3	0.0013	0.0449	0.0480	0.024	0.005	0.0003	0.03
11	1	10 - 11	2031	3	0.0013	0.0449	0.0480	0.024	0.005	0.0003	0.03
12	1	11 - 12	2032	3	0.0013	0.0449	0.0480	0.024	0.005	0.0003	0.03
13	1	12 - 13	2033	3	0.0013	0.0449	0.0480	0.024	0.005	0.0003	0.03
14	1	13 - 14	2034	3	0.0013	0.0449	0.0480	0.024	0.005	0.0003	0.03
15	1	14 - 15	2035	3	0.0013	0.0449	0.0480	0.024	0.005	0.0003	0.03
16	1	15 - 16	2036	3	0.0013	0.0449	0.0480	0.024	0.005	0.0003	0.03
17	1	16-17	2037	1	0.0013	0.0449	0.0480	0.004	0.001	0.0000	0.00
18	1	17-18	2038	1	0.0013	0.0449	0.0480	0.004	0.001	0.0000	0.00
19	1	18-19	2039	1	0.0013	0.0449	0.0480	0.004	0.001	0.0000	0.00
20	1	19-20	2040	1	0.0013	0.0449	0.0480	0.004	0.001	0.0000	0.00
21	1	20-21	2041	1	0.0013	0.0449	0.0480	0.004	0.001	0.0000	0.00
22	1	21-22	2042	1	0.0013	0.0449	0.0480	0.004	0.001	0.0000	0.00
23	1	22-23	2043	1	0.0013	0.0449	0.0480	0.004	0.001	0.0000	0.00
24	1	23-24	2044	1	0.0013	0.0449	0.0480	0.004	0.001	0.0000	0.00
25	1	24-25	2045	1	0.0013	0.0449	0.0480	0.004	0.001	0.0000	0.00
26	1	25-26	2046	1	0.0013	0.0449	0.0480	0.004	0.001	0.0000	0.00
27	1	26-27	2047	1	0.0013	0.0449	0.0480	0.004	0.001	0.0000	0.00
28	1	27-28	2048	1	0.0013	0.0449	0.0480	0.004	0.001	0.0000	0.00
29	1	28-29	2049	1	0.0013	0.0449	0.0480	0.004	0.001	0.0000	0.00
30	1	29-30	2050	1	0.0013	0.0449	0.0480	0.004	0.001	0.0000	0.00
Total Increased Cancer Risk								0.76	0.152	0.010	**0.92**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00026	0.03	0.04

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at El Paseo Building 1 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0013	0.0432	0.0461	0.014	0.003	0.0002	0.02
1	1	0 - 1	2021	10	0.0013	0.0432	0.0461	0.175	0.034	0.0022	0.21
2	1	1 - 2	2022	10	0.0013	0.0432	0.0461	0.175	0.034	0.0022	0.21
3	1	2 - 3	2023	3	0.0013	0.0432	0.0461	0.023	0.005	0.0003	0.03
4	1	3 - 4	2024	3	0.0013	0.0432	0.0461	0.023	0.005	0.0003	0.03
5	1	4 - 5	2025	3	0.0013	0.0432	0.0461	0.023	0.005	0.0003	0.03
6	1	5 - 6	2026	3	0.0013	0.0432	0.0461	0.023	0.005	0.0003	0.03
7	1	6 - 7	2027	3	0.0013	0.0432	0.0461	0.023	0.005	0.0003	0.03
8	1	7 - 8	2028	3	0.0013	0.0432	0.0461	0.023	0.005	0.0003	0.03
9	1	8 - 9	2029	3	0.0013	0.0432	0.0461	0.023	0.005	0.0003	0.03
10	1	9 - 10	2030	3	0.0013	0.0432	0.0461	0.023	0.005	0.0003	0.03
11	1	10 - 11	2031	3	0.0013	0.0432	0.0461	0.023	0.005	0.0003	0.03
12	1	11 - 12	2032	3	0.0013	0.0432	0.0461	0.023	0.005	0.0003	0.03
13	1	12 - 13	2033	3	0.0013	0.0432	0.0461	0.023	0.005	0.0003	0.03
14	1	13 - 14	2034	3	0.0013	0.0432	0.0461	0.023	0.005	0.0003	0.03
15	1	14 - 15	2035	3	0.0013	0.0432	0.0461	0.023	0.005	0.0003	0.03
16	1	15 - 16	2036	3	0.0013	0.0432	0.0461	0.023	0.005	0.0003	0.03
17	1	16-17	2037	1	0.0013	0.0432	0.0461	0.004	0.001	0.0000	0.00
18	1	17-18	2038	1	0.0013	0.0432	0.0461	0.004	0.001	0.0000	0.00
19	1	18-19	2039	1	0.0013	0.0432	0.0461	0.004	0.001	0.0000	0.00
20	1	19-20	2040	1	0.0013	0.0432	0.0461	0.004	0.001	0.0000	0.00
21	1	20-21	2041	1	0.0013	0.0432	0.0461	0.004	0.001	0.0000	0.00
22	1	21-22	2042	1	0.0013	0.0432	0.0461	0.004	0.001	0.0000	0.00
23	1	22-23	2043	1	0.0013	0.0432	0.0461	0.004	0.001	0.0000	0.00
24	1	23-24	2044	1	0.0013	0.0432	0.0461	0.004	0.001	0.0000	0.00
25	1	24-25	2045	1	0.0013	0.0432	0.0461	0.004	0.001	0.0000	0.00
26	1	25-26	2046	1	0.0013	0.0432	0.0461	0.004	0.001	0.0000	0.00
27	1	26-27	2047	1	0.0013	0.0432	0.0461	0.004	0.001	0.0000	0.00
28	1	27-28	2048	1	0.0013	0.0432	0.0461	0.004	0.001	0.0000	0.00
29	1	28-29	2049	1	0.0013	0.0432	0.0461	0.004	0.001	0.0000	0.00
30	1	29-30	2050	1	0.0013	0.0432	0.0461	0.004	0.001	0.0000	0.00
Total Increased Cancer Risk								0.74	0.146	0.009	**0.9**

* Third trimester of pregnancy

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00025	0.03	0.04

El Paseo Option 1 Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at El Paseo Building 2 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0008	0.0252	0.0270	0.009	0.002	0.0001	0.01
1	1	0 - 1	2021	10	0.0008	0.0252	0.0270	0.105	0.020	0.0013	0.13
2	1	1 - 2	2022	10	0.0008	0.0252	0.0270	0.105	0.020	0.0013	0.13
3	1	2 - 3	2023	3	0.0008	0.0252	0.0270	0.014	0.003	0.0002	0.02
4	1	3 - 4	2024	3	0.0008	0.0252	0.0270	0.014	0.003	0.0002	0.02
5	1	4 - 5	2025	3	0.0008	0.0252	0.0270	0.014	0.003	0.0002	0.02
6	1	5 - 6	2026	3	0.0008	0.0252	0.0270	0.014	0.003	0.0002	0.02
7	1	6 - 7	2027	3	0.0008	0.0252	0.0270	0.014	0.003	0.0002	0.02
8	1	7 - 8	2028	3	0.0008	0.0252	0.0270	0.014	0.003	0.0002	0.02
9	1	8 - 9	2029	3	0.0008	0.0252	0.0270	0.014	0.003	0.0002	0.02
10	1	9 - 10	2030	3	0.0008	0.0252	0.0270	0.014	0.003	0.0002	0.02
11	1	10 - 11	2031	3	0.0008	0.0252	0.0270	0.014	0.003	0.0002	0.02
12	1	11 - 12	2032	3	0.0008	0.0252	0.0270	0.014	0.003	0.0002	0.02
13	1	12 - 13	2033	3	0.0008	0.0252	0.0270	0.014	0.003	0.0002	0.02
14	1	13 - 14	2034	3	0.0008	0.0252	0.0270	0.014	0.003	0.0002	0.02
15	1	14 - 15	2035	3	0.0008	0.0252	0.0270	0.014	0.003	0.0002	0.02
16	1	15 - 16	2036	3	0.0008	0.0252	0.0270	0.014	0.003	0.0002	0.02
17	1	16-17	2037	1	0.0008	0.0252	0.0270	0.002	0.000	0.0000	0.00
18	1	17-18	2038	1	0.0008	0.0252	0.0270	0.002	0.000	0.0000	0.00
19	1	18-19	2039	1	0.0008	0.0252	0.0270	0.002	0.000	0.0000	0.00
20	1	19-20	2040	1	0.0008	0.0252	0.0270	0.002	0.000	0.0000	0.00
21	1	20-21	2041	1	0.0008	0.0252	0.0270	0.002	0.000	0.0000	0.00
22	1	21-22	2042	1	0.0008	0.0252	0.0270	0.002	0.000	0.0000	0.00
23	1	22-23	2043	1	0.0008	0.0252	0.0270	0.002	0.000	0.0000	0.00
24	1	23-24	2044	1	0.0008	0.0252	0.0270	0.002	0.000	0.0000	0.00
25	1	24-25	2045	1	0.0008	0.0252	0.0270	0.002	0.000	0.0000	0.00
26	1	25-26	2046	1	0.0008	0.0252	0.0270	0.002	0.000	0.0000	0.00
27	1	26-27	2047	1	0.0008	0.0252	0.0270	0.002	0.000	0.0000	0.00
28	1	27-28	2048	1	0.0008	0.0252	0.0270	0.002	0.000	0.0000	0.00
29	1	28-29	2049	1	0.0008	0.0252	0.0270	0.002	0.000	0.0000	0.00
30	1	29-30	2050	1	0.0008	0.0252	0.0270	0.002	0.000	0.0000	0.00
Total Increased Cancer Risk								0.44	0.085	0.005	**0.53**

Maximum Hazard Index	Maximum Fugitive PM2.5	Maximum Total PM2.5
0.00015	0.02	0.02

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at El Paseo Building 2 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0007	0.0245	0.0262	0.008	0.002	0.0001	0.01
1	1	0 - 1	2021	10	0.0007	0.0245	0.0262	0.102	0.019	0.0012	0.12
2	1	1 - 2	2022	10	0.0007	0.0245	0.0262	0.102	0.019	0.0012	0.12
3	1	2 - 3	2023	3	0.0007	0.0245	0.0262	0.014	0.003	0.0002	0.02
4	1	3 - 4	2024	3	0.0007	0.0245	0.0262	0.014	0.003	0.0002	0.02
5	1	4 - 5	2025	3	0.0007	0.0245	0.0262	0.014	0.003	0.0002	0.02
6	1	5 - 6	2026	3	0.0007	0.0245	0.0262	0.014	0.003	0.0002	0.02
7	1	6 - 7	2027	3	0.0007	0.0245	0.0262	0.014	0.003	0.0002	0.02
8	1	7 - 8	2028	3	0.0007	0.0245	0.0262	0.014	0.003	0.0002	0.02
9	1	8 - 9	2029	3	0.0007	0.0245	0.0262	0.014	0.003	0.0002	0.02
10	1	9 - 10	2030	3	0.0007	0.0245	0.0262	0.014	0.003	0.0002	0.02
11	1	10 - 11	2031	3	0.0007	0.0245	0.0262	0.014	0.003	0.0002	0.02
12	1	11 - 12	2032	3	0.0007	0.0245	0.0262	0.014	0.003	0.0002	0.02
13	1	12 - 13	2033	3	0.0007	0.0245	0.0262	0.014	0.003	0.0002	0.02
14	1	13 - 14	2034	3	0.0007	0.0245	0.0262	0.014	0.003	0.0002	0.02
15	1	14 - 15	2035	3	0.0007	0.0245	0.0262	0.014	0.003	0.0002	0.02
16	1	15 - 16	2036	3	0.0007	0.0245	0.0262	0.014	0.003	0.0002	0.02
17	1	16-17	2037	1	0.0007	0.0245	0.0262	0.002	0.000	0.0000	0.00
18	1	17-18	2038	1	0.0007	0.0245	0.0262	0.002	0.000	0.0000	0.00
19	1	18-19	2039	1	0.0007	0.0245	0.0262	0.002	0.000	0.0000	0.00
20	1	19-20	2040	1	0.0007	0.0245	0.0262	0.002	0.000	0.0000	0.00
21	1	20-21	2041	1	0.0007	0.0245	0.0262	0.002	0.000	0.0000	0.00
22	1	21-22	2042	1	0.0007	0.0245	0.0262	0.002	0.000	0.0000	0.00
23	1	22-23	2043	1	0.0007	0.0245	0.0262	0.002	0.000	0.0000	0.00
24	1	23-24	2044	1	0.0007	0.0245	0.0262	0.002	0.000	0.0000	0.00
25	1	24-25	2045	1	0.0007	0.0245	0.0262	0.002	0.000	0.0000	0.00
26	1	25-26	2046	1	0.0007	0.0245	0.0262	0.002	0.000	0.0000	0.00
27	1	26-27	2047	1	0.0007	0.0245	0.0262	0.002	0.000	0.0000	0.00
28	1	27-28	2048	1	0.0007	0.0245	0.0262	0.002	0.000	0.0000	0.00
29	1	28-29	2049	1	0.0007	0.0245	0.0262	0.002	0.000	0.0000	0.00
30	1	29-30	2050	1	0.0007	0.0245	0.0262	0.002	0.000	0.0000	0.00
Total Increased Cancer Risk								0.43	0.083	0.005	**0.5**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00015	0.02	0.02

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at El Paseo Building 3 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0010	0.0337	0.0360	0.011	0.002	0.0001	0.01
1	1	0 - 1	2021	10	0.0010	0.0337	0.0360	0.135	0.027	0.0017	0.16
2	1	1 - 2	2022	10	0.0010	0.0337	0.0360	0.135	0.027	0.0017	0.16
3	1	2 - 3	2023	3	0.0010	0.0337	0.0360	0.018	0.004	0.0002	0.02
4	1	3 - 4	2024	3	0.0010	0.0337	0.0360	0.018	0.004	0.0002	0.02
5	1	4 - 5	2025	3	0.0010	0.0337	0.0360	0.018	0.004	0.0002	0.02
6	1	5 - 6	2026	3	0.0010	0.0337	0.0360	0.018	0.004	0.0002	0.02
7	1	6 - 7	2027	3	0.0010	0.0337	0.0360	0.018	0.004	0.0002	0.02
8	1	7 - 8	2028	3	0.0010	0.0337	0.0360	0.018	0.004	0.0002	0.02
9	1	8 - 9	2029	3	0.0010	0.0337	0.0360	0.018	0.004	0.0002	0.02
10	1	9 - 10	2030	3	0.0010	0.0337	0.0360	0.018	0.004	0.0002	0.02
11	1	10 - 11	2031	3	0.0010	0.0337	0.0360	0.018	0.004	0.0002	0.02
12	1	11 - 12	2032	3	0.0010	0.0337	0.0360	0.018	0.004	0.0002	0.02
13	1	12 - 13	2033	3	0.0010	0.0337	0.0360	0.018	0.004	0.0002	0.02
14	1	13 - 14	2034	3	0.0010	0.0337	0.0360	0.018	0.004	0.0002	0.02
15	1	14 - 15	2035	3	0.0010	0.0337	0.0360	0.018	0.004	0.0002	0.02
16	1	15 - 16	2036	3	0.0010	0.0337	0.0360	0.018	0.004	0.0002	0.02
17	1	16-17	2037	1	0.0010	0.0337	0.0360	0.003	0.001	0.0000	0.00
18	1	17-18	2038	1	0.0010	0.0337	0.0360	0.003	0.001	0.0000	0.00
19	1	18-19	2039	1	0.0010	0.0337	0.0360	0.003	0.001	0.0000	0.00
20	1	19-20	2040	1	0.0010	0.0337	0.0360	0.003	0.001	0.0000	0.00
21	1	20-21	2041	1	0.0010	0.0337	0.0360	0.003	0.001	0.0000	0.00
22	1	21-22	2042	1	0.0010	0.0337	0.0360	0.003	0.001	0.0000	0.00
23	1	22-23	2043	1	0.0010	0.0337	0.0360	0.003	0.001	0.0000	0.00
24	1	23-24	2044	1	0.0010	0.0337	0.0360	0.003	0.001	0.0000	0.00
25	1	24-25	2045	1	0.0010	0.0337	0.0360	0.003	0.001	0.0000	0.00
26	1	25-26	2046	1	0.0010	0.0337	0.0360	0.003	0.001	0.0000	0.00
27	1	26-27	2047	1	0.0010	0.0337	0.0360	0.003	0.001	0.0000	0.00
28	1	27-28	2048	1	0.0010	0.0337	0.0360	0.003	0.001	0.0000	0.00
29	1	28-29	2049	1	0.0010	0.0337	0.0360	0.003	0.001	0.0000	0.00
30	1	29-30	2050	1	0.0010	0.0337	0.0360	0.003	0.001	0.0000	0.00
Total Increased Cancer Risk								0.57	0.114	0.007	**0.69**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00019	0.03	0.03

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at El Paseo Building 3 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0010	0.0326	0.0349	0.011	0.002	0.0001	0.01
1	1	0 - 1	2021	10	0.0010	0.0326	0.0349	0.133	0.026	0.0016	0.16
2	1	1 - 2	2022	10	0.0010	0.0326	0.0349	0.133	0.026	0.0016	0.16
3	1	2 - 3	2023	3	0.0010	0.0326	0.0349	0.018	0.003	0.0002	0.02
4	1	3 - 4	2024	3	0.0010	0.0326	0.0349	0.018	0.003	0.0002	0.02
5	1	4 - 5	2025	3	0.0010	0.0326	0.0349	0.018	0.003	0.0002	0.02
6	1	5 - 6	2026	3	0.0010	0.0326	0.0349	0.018	0.003	0.0002	0.02
7	1	6 - 7	2027	3	0.0010	0.0326	0.0349	0.018	0.003	0.0002	0.02
8	1	7 - 8	2028	3	0.0010	0.0326	0.0349	0.018	0.003	0.0002	0.02
9	1	8 - 9	2029	3	0.0010	0.0326	0.0349	0.018	0.003	0.0002	0.02
10	1	9 - 10	2030	3	0.0010	0.0326	0.0349	0.018	0.003	0.0002	0.02
11	1	10 - 11	2031	3	0.0010	0.0326	0.0349	0.018	0.003	0.0002	0.02
12	1	11 - 12	2032	3	0.0010	0.0326	0.0349	0.018	0.003	0.0002	0.02
13	1	12 - 13	2033	3	0.0010	0.0326	0.0349	0.018	0.003	0.0002	0.02
14	1	13 - 14	2034	3	0.0010	0.0326	0.0349	0.018	0.003	0.0002	0.02
15	1	14 - 15	2035	3	0.0010	0.0326	0.0349	0.018	0.003	0.0002	0.02
16	1	15 - 16	2036	3	0.0010	0.0326	0.0349	0.018	0.003	0.0002	0.02
17	1	16-17	2037	1	0.0010	0.0326	0.0349	0.003	0.001	0.0000	0.00
18	1	17-18	2038	1	0.0010	0.0326	0.0349	0.003	0.001	0.0000	0.00
19	1	18-19	2039	1	0.0010	0.0326	0.0349	0.003	0.001	0.0000	0.00
20	1	19-20	2040	1	0.0010	0.0326	0.0349	0.003	0.001	0.0000	0.00
21	1	20-21	2041	1	0.0010	0.0326	0.0349	0.003	0.001	0.0000	0.00
22	1	21-22	2042	1	0.0010	0.0326	0.0349	0.003	0.001	0.0000	0.00
23	1	22-23	2043	1	0.0010	0.0326	0.0349	0.003	0.001	0.0000	0.00
24	1	23-24	2044	1	0.0010	0.0326	0.0349	0.003	0.001	0.0000	0.00
25	1	24-25	2045	1	0.0010	0.0326	0.0349	0.003	0.001	0.0000	0.00
26	1	25-26	2046	1	0.0010	0.0326	0.0349	0.003	0.001	0.0000	0.00
27	1	26-27	2047	1	0.0010	0.0326	0.0349	0.003	0.001	0.0000	0.00
28	1	27-28	2048	1	0.0010	0.0326	0.0349	0.003	0.001	0.0000	0.00
29	1	28-29	2049	1	0.0010	0.0326	0.0349	0.003	0.001	0.0000	0.00
30	1	29-30	2050	1	0.0010	0.0326	0.0349	0.003	0.001	0.0000	0.00
Total Increased Cancer Risk								0.56	0.110	0.007	**0.7**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00019	0.03	0.03

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at El Paseo Building 4 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0020	0.0718	0.0766	0.023	0.005	0.0003	0.03
1	1	0 - 1	2021	10	0.0020	0.0718	0.0766	0.283	0.057	0.0036	0.34
2	1	1 - 2	2022	10	0.0020	0.0718	0.0766	0.283	0.057	0.0036	0.34
3	1	2 - 3	2023	3	0.0020	0.0718	0.0766	0.038	0.008	0.0005	0.05
4	1	3 - 4	2024	3	0.0020	0.0718	0.0766	0.038	0.008	0.0005	0.05
5	1	4 - 5	2025	3	0.0020	0.0718	0.0766	0.038	0.008	0.0005	0.05
6	1	5 - 6	2026	3	0.0020	0.0718	0.0766	0.038	0.008	0.0005	0.05
7	1	6 - 7	2027	3	0.0020	0.0718	0.0766	0.038	0.008	0.0005	0.05
8	1	7 - 8	2028	3	0.0020	0.0718	0.0766	0.038	0.008	0.0005	0.05
9	1	8 - 9	2029	3	0.0020	0.0718	0.0766	0.038	0.008	0.0005	0.05
10	1	9 - 10	2030	3	0.0020	0.0718	0.0766	0.038	0.008	0.0005	0.05
11	1	10 - 11	2031	3	0.0020	0.0718	0.0766	0.038	0.008	0.0005	0.05
12	1	11 - 12	2032	3	0.0020	0.0718	0.0766	0.038	0.008	0.0005	0.05
13	1	12 - 13	2033	3	0.0020	0.0718	0.0766	0.038	0.008	0.0005	0.05
14	1	13 - 14	2034	3	0.0020	0.0718	0.0766	0.038	0.008	0.0005	0.05
15	1	14 - 15	2035	3	0.0020	0.0718	0.0766	0.038	0.008	0.0005	0.05
16	1	15 - 16	2036	3	0.0020	0.0718	0.0766	0.038	0.008	0.0005	0.05
17	1	16-17	2037	1	0.0020	0.0718	0.0766	0.006	0.001	0.0001	0.01
18	1	17-18	2038	1	0.0020	0.0718	0.0766	0.006	0.001	0.0001	0.01
19	1	18-19	2039	1	0.0020	0.0718	0.0766	0.006	0.001	0.0001	0.01
20	1	19-20	2040	1	0.0020	0.0718	0.0766	0.006	0.001	0.0001	0.01
21	1	20-21	2041	1	0.0020	0.0718	0.0766	0.006	0.001	0.0001	0.01
22	1	21-22	2042	1	0.0020	0.0718	0.0766	0.006	0.001	0.0001	0.01
23	1	22-23	2043	1	0.0020	0.0718	0.0766	0.006	0.001	0.0001	0.01
24	1	23-24	2044	1	0.0020	0.0718	0.0766	0.006	0.001	0.0001	0.01
25	1	24-25	2045	1	0.0020	0.0718	0.0766	0.006	0.001	0.0001	0.01
26	1	25-26	2046	1	0.0020	0.0718	0.0766	0.006	0.001	0.0001	0.01
27	1	26-27	2047	1	0.0020	0.0718	0.0766	0.006	0.001	0.0001	0.01
28	1	27-28	2048	1	0.0020	0.0718	0.0766	0.006	0.001	0.0001	0.01
29	1	28-29	2049	1	0.0020	0.0718	0.0766	0.006	0.001	0.0001	0.01
30	1	29-30	2050	1	0.0020	0.0718	0.0766	0.006	0.001	0.0001	0.01
Total Increased Cancer Risk								1.20	0.243	0.015	**1.46**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00041	0.06	0.06

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at El Paseo Building 4 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0020	0.0688	0.0734	0.023	0.005	0.0003	0.03
1	1	0 - 1	2021	10	0.0020	0.0688	0.0734	0.272	0.055	0.0034	0.33
2	1	1 - 2	2022	10	0.0020	0.0688	0.0734	0.272	0.055	0.0034	0.33
3	1	2 - 3	2023	3	0.0020	0.0688	0.0734	0.036	0.007	0.0005	0.04
4	1	3 - 4	2024	3	0.0020	0.0688	0.0734	0.036	0.007	0.0005	0.04
5	1	4 - 5	2025	3	0.0020	0.0688	0.0734	0.036	0.007	0.0005	0.04
6	1	5 - 6	2026	3	0.0020	0.0688	0.0734	0.036	0.007	0.0005	0.04
7	1	6 - 7	2027	3	0.0020	0.0688	0.0734	0.036	0.007	0.0005	0.04
8	1	7 - 8	2028	3	0.0020	0.0688	0.0734	0.036	0.007	0.0005	0.04
9	1	8 - 9	2029	3	0.0020	0.0688	0.0734	0.036	0.007	0.0005	0.04
10	1	9 - 10	2030	3	0.0020	0.0688	0.0734	0.036	0.007	0.0005	0.04
11	1	10 - 11	2031	3	0.0020	0.0688	0.0734	0.036	0.007	0.0005	0.04
12	1	11 - 12	2032	3	0.0020	0.0688	0.0734	0.036	0.007	0.0005	0.04
13	1	12 - 13	2033	3	0.0020	0.0688	0.0734	0.036	0.007	0.0005	0.04
14	1	13 - 14	2034	3	0.0020	0.0688	0.0734	0.036	0.007	0.0005	0.04
15	1	14 - 15	2035	3	0.0020	0.0688	0.0734	0.036	0.007	0.0005	0.04
16	1	15 - 16	2036	3	0.0020	0.0688	0.0734	0.036	0.007	0.0005	0.04
17	1	16-17	2037	1	0.0020	0.0688	0.0734	0.006	0.001	0.0001	0.01
18	1	17-18	2038	1	0.0020	0.0688	0.0734	0.006	0.001	0.0001	0.01
19	1	18-19	2039	1	0.0020	0.0688	0.0734	0.006	0.001	0.0001	0.01
20	1	19-20	2040	1	0.0020	0.0688	0.0734	0.006	0.001	0.0001	0.01
21	1	20-21	2041	1	0.0020	0.0688	0.0734	0.006	0.001	0.0001	0.01
22	1	21-22	2042	1	0.0020	0.0688	0.0734	0.006	0.001	0.0001	0.01
23	1	22-23	2043	1	0.0020	0.0688	0.0734	0.006	0.001	0.0001	0.01
24	1	23-24	2044	1	0.0020	0.0688	0.0734	0.006	0.001	0.0001	0.01
25	1	24-25	2045	1	0.0020	0.0688	0.0734	0.006	0.001	0.0001	0.01
26	1	25-26	2046	1	0.0020	0.0688	0.0734	0.006	0.001	0.0001	0.01
27	1	26-27	2047	1	0.0020	0.0688	0.0734	0.006	0.001	0.0001	0.01
28	1	27-28	2048	1	0.0020	0.0688	0.0734	0.006	0.001	0.0001	0.01
29	1	28-29	2049	1	0.0020	0.0688	0.0734	0.006	0.001	0.0001	0.01
30	1	29-30	2050	1	0.0020	0.0688	0.0734	0.006	0.001	0.0001	0.01
Total Increased Cancer Risk								1.15	0.232	0.015	**1.4**

* Third trimester of pregnancy

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00039	0.05	0.06

El Paseo Option 1 Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at Saratoga On-Site 1st Level (2nd Floor) Residential Receptors - 8.2 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0021	0.0764	0.0815	0.024	0.005	0.0003	0.03
1	1	0 - 1	2021	10	0.0021	0.0764	0.0815	0.292	0.061	0.0038	0.36
2	1	1 - 2	2022	10	0.0021	0.0764	0.0815	0.292	0.061	0.0038	0.36
3	1	2 - 3	2023	3	0.0021	0.0764	0.0815	0.039	0.008	0.0005	0.05
4	1	3 - 4	2024	3	0.0021	0.0764	0.0815	0.039	0.008	0.0005	0.05
5	1	4 - 5	2025	3	0.0021	0.0764	0.0815	0.039	0.008	0.0005	0.05
6	1	5 - 6	2026	3	0.0021	0.0764	0.0815	0.039	0.008	0.0005	0.05
7	1	6 - 7	2027	3	0.0021	0.0764	0.0815	0.039	0.008	0.0005	0.05
8	1	7 - 8	2028	3	0.0021	0.0764	0.0815	0.039	0.008	0.0005	0.05
9	1	8 - 9	2029	3	0.0021	0.0764	0.0815	0.039	0.008	0.0005	0.05
10	1	9 - 10	2030	3	0.0021	0.0764	0.0815	0.039	0.008	0.0005	0.05
11	1	10 - 11	2031	3	0.0021	0.0764	0.0815	0.039	0.008	0.0005	0.05
12	1	11 - 12	2032	3	0.0021	0.0764	0.0815	0.039	0.008	0.0005	0.05
13	1	12 - 13	2033	3	0.0021	0.0764	0.0815	0.039	0.008	0.0005	0.05
14	1	13 - 14	2034	3	0.0021	0.0764	0.0815	0.039	0.008	0.0005	0.05
15	1	14 - 15	2035	3	0.0021	0.0764	0.0815	0.039	0.008	0.0005	0.05
16	1	15 - 16	2036	3	0.0021	0.0764	0.0815	0.039	0.008	0.0005	0.05
17	1	16-17	2037	1	0.0021	0.0764	0.0815	0.006	0.001	0.0001	0.01
18	1	17-18	2038	1	0.0021	0.0764	0.0815	0.006	0.001	0.0001	0.01
19	1	18-19	2039	1	0.0021	0.0764	0.0815	0.006	0.001	0.0001	0.01
20	1	19-20	2040	1	0.0021	0.0764	0.0815	0.006	0.001	0.0001	0.01
21	1	20-21	2041	1	0.0021	0.0764	0.0815	0.006	0.001	0.0001	0.01
22	1	21-22	2042	1	0.0021	0.0764	0.0815	0.006	0.001	0.0001	0.01
23	1	22-23	2043	1	0.0021	0.0764	0.0815	0.006	0.001	0.0001	0.01
24	1	23-24	2044	1	0.0021	0.0764	0.0815	0.006	0.001	0.0001	0.01
25	1	24-25	2045	1	0.0021	0.0764	0.0815	0.006	0.001	0.0001	0.01
26	1	25-26	2046	1	0.0021	0.0764	0.0815	0.006	0.001	0.0001	0.01
27	1	26-27	2047	1	0.0021	0.0764	0.0815	0.006	0.001	0.0001	0.01
28	1	27-28	2048	1	0.0021	0.0764	0.0815	0.006	0.001	0.0001	0.01
29	1	28-29	2049	1	0.0021	0.0764	0.0815	0.006	0.001	0.0001	0.01
30	1	29-30	2050	1	0.0021	0.0764	0.0815	0.006	0.001	0.0001	0.01
Total Increased Cancer Risk								1.24	0.258	0.016	**1.51**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00042	0.06	0.06

* Third trimester of pregnancy

El Paseo Option 1 Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at Saratoga On-Site 2nd Level (3rd Floor) Residential Receptors - 11.3 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0017	0.0612	0.0652	0.020	0.004	0.0003	0.02
1	1	0 - 1	2021	10	0.0017	0.0612	0.0652	0.240	0.049	0.0031	0.29
2	1	1 - 2	2022	10	0.0017	0.0612	0.0652	0.240	0.049	0.0031	0.29
3	1	2 - 3	2023	3	0.0017	0.0612	0.0652	0.032	0.007	0.0004	0.04
4	1	3 - 4	2024	3	0.0017	0.0612	0.0652	0.032	0.007	0.0004	0.04
5	1	4 - 5	2025	3	0.0017	0.0612	0.0652	0.032	0.007	0.0004	0.04
6	1	5 - 6	2026	3	0.0017	0.0612	0.0652	0.032	0.007	0.0004	0.04
7	1	6 - 7	2027	3	0.0017	0.0612	0.0652	0.032	0.007	0.0004	0.04
8	1	7 - 8	2028	3	0.0017	0.0612	0.0652	0.032	0.007	0.0004	0.04
9	1	8 - 9	2029	3	0.0017	0.0612	0.0652	0.032	0.007	0.0004	0.04
10	1	9 - 10	2030	3	0.0017	0.0612	0.0652	0.032	0.007	0.0004	0.04
11	1	10 - 11	2031	3	0.0017	0.0612	0.0652	0.032	0.007	0.0004	0.04
12	1	11 - 12	2032	3	0.0017	0.0612	0.0652	0.032	0.007	0.0004	0.04
13	1	12 - 13	2033	3	0.0017	0.0612	0.0652	0.032	0.007	0.0004	0.04
14	1	13 - 14	2034	3	0.0017	0.0612	0.0652	0.032	0.007	0.0004	0.04
15	1	14 - 15	2035	3	0.0017	0.0612	0.0652	0.032	0.007	0.0004	0.04
16	1	15 - 16	2036	3	0.0017	0.0612	0.0652	0.032	0.007	0.0004	0.04
17	1	16-17	2037	1	0.0017	0.0612	0.0652	0.005	0.001	0.0001	0.01
18	1	17-18	2038	1	0.0017	0.0612	0.0652	0.005	0.001	0.0001	0.01
19	1	18-19	2039	1	0.0017	0.0612	0.0652	0.005	0.001	0.0001	0.01
20	1	19-20	2040	1	0.0017	0.0612	0.0652	0.005	0.001	0.0001	0.01
21	1	20-21	2041	1	0.0017	0.0612	0.0652	0.005	0.001	0.0001	0.01
22	1	21-22	2042	1	0.0017	0.0612	0.0652	0.005	0.001	0.0001	0.01
23	1	22-23	2043	1	0.0017	0.0612	0.0652	0.005	0.001	0.0001	0.01
24	1	23-24	2044	1	0.0017	0.0612	0.0652	0.005	0.001	0.0001	0.01
25	1	24-25	2045	1	0.0017	0.0612	0.0652	0.005	0.001	0.0001	0.01
26	1	25-26	2046	1	0.0017	0.0612	0.0652	0.005	0.001	0.0001	0.01
27	1	26-27	2047	1	0.0017	0.0612	0.0652	0.005	0.001	0.0001	0.01
28	1	27-28	2048	1	0.0017	0.0612	0.0652	0.005	0.001	0.0001	0.01
29	1	28-29	2049	1	0.0017	0.0612	0.0652	0.005	0.001	0.0001	0.01
30	1	29-30	2050	1	0.0017	0.0612	0.0652	0.005	0.001	0.0001	0.01
Total Increased Cancer Risk								1.02	0.207	0.013	**1.2**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00034	0.05	0.05

* Third trimester of pregnancy

El Paseo Non-Education Option 2 with Saratoga Site

Lawrence Expressway Traffic Emissions and Health Risk Calculations

Analysis Year = ***2021***

Vehicle Type	2018 Caltrans Vehicles (veh/day)	2021 Vehicles (veh/day)
Total	**24,075**	**24,797**

Increase From 2018	1.03
Vehicles/Direction	**12,399**
Avg Vehicles/Hour/Direction	517

Traffic Data Year = ***2018***

El Paeso & Saratoga Traffic Report Volumes	AADT Total
Background + EP2 No Ed Condition - Lawrence Expy	24,075

Percent of Total Vehicles

Traffic Increase per Year (%) = *1.00%*

El Paseo Option 2 No Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Lawrence Expressway/Quito Road
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2021 16.9728

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
DPM_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	55.7	3.4	Varied	12,399	19,558	210,518	6.987E-09	5.152E-09	6.8	3.16
DPM_SB_LAW	Lawrence Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	55.7	3.4	Varied	12,399	19,281	207,540	6.987E-09	5.152E-09	6.8	3.16
									Total	24,797						

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle (g/VMT)	0.00133	0.001141		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and DPM Emissions - DPM_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.82%	473	1.25E-04	9	6.42%	796	1.81E-04	17	5.55%	688	1.56E-04
2	2.60%	323	8.53E-05	10	7.23%	896	2.37E-04	18	3.24%	401	9.11E-05
3	2.83%	351	9.29E-05	11	6.30%	781	2.07E-04	19	2.43%	301	7.96E-05
4	3.41%	423	1.12E-04	12	6.99%	867	2.29E-04	20	0.92%	115	3.03E-05
5	2.20%	272	7.20E-05	13	6.18%	767	2.03E-04	21	3.06%	380	1.00E-04
6	3.35%	416	1.10E-04	14	6.13%	760	2.01E-04	22	4.16%	516	1.36E-04
7	6.13%	760	2.01E-04	15	5.14%	638	1.69E-04	23	2.43%	301	7.96E-05
8	4.74%	588	1.33E-04	16	3.87%	480	1.27E-04	24	0.87%	108	2.84E-05
								Total		12,399	

2021 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.82%	473	1.23E-04	9	6.42%	796	1.78E-04	17	5.55%	688	1.54E-04
2	2.60%	323	8.41E-05	10	7.23%	896	2.34E-04	18	3.24%	401	8.98E-05
3	2.83%	351	9.16E-05	11	6.30%	781	2.04E-04	19	2.43%	301	7.85E-05
4	3.41%	423	1.10E-04	12	6.99%	867	2.26E-04	20	0.92%	115	2.99E-05
5	2.20%	272	7.10E-05	13	6.18%	767	2.00E-04	21	3.06%	380	9.91E-05
6	3.35%	416	1.08E-04	14	6.13%	760	1.98E-04	22	4.16%	516	1.35E-04
7	6.13%	760	1.98E-04	15	5.14%	638	1.66E-04	23	2.43%	301	7.85E-05
8	4.74%	588	1.31E-04	16	3.87%	480	1.25E-04	24	0.87%	108	2.80E-05
								Total		12,399	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Lawrence Expressway/Quito Road
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
PM2.5_NB_LAW	Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	12,399	19,558	210,518	1.186E-08	8.747E-09	2.6	1.21
PM2.5_SB_LAW	Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	12,399	19,281	207,540	1.186E-08	8.747E-09	2.6	1.21
									Total	24,797						

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle (g/VMT)	0.002258	0.00221		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and PM2.5 Emissions - PM2.5_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	143	6.44E-05	9	7.11%	881	3.87E-04	17	7.38%	915	4.02E-04
2	0.42%	52	2.34E-05	10	4.39%	544	2.44E-04	18	8.17%	1013	4.44E-04
3	0.41%	51	2.27E-05	11	4.67%	579	2.60E-04	19	5.70%	707	3.17E-04
4	0.27%	33	1.49E-05	12	5.89%	730	3.28E-04	20	4.27%	530	2.38E-04
5	0.50%	62	2.81E-05	13	6.15%	763	3.43E-04	21	3.25%	403	1.81E-04
6	0.91%	113	5.06E-05	14	6.03%	748	3.36E-04	22	3.30%	409	1.84E-04
7	3.79%	470	2.11E-04	15	7.01%	869	3.90E-04	23	2.46%	305	1.37E-04
8	7.76%	963	4.22E-04	16	7.14%	885	3.97E-04	24	1.87%	231	1.04E-04
								Total		12,399	

2021 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM2.5_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	143	6.35E-05	9	7.11%	881	3.81E-04	17	7.38%	915	3.96E-04
2	0.42%	52	2.31E-05	10	4.39%	544	2.41E-04	18	8.17%	1013	4.38E-04
3	0.41%	51	2.24E-05	11	4.67%	579	2.56E-04	19	5.70%	707	3.13E-04
4	0.27%	33	1.47E-05	12	5.89%	730	3.23E-04	20	4.27%	530	2.34E-04
5	0.50%	62	2.77E-05	13	6.15%	763	3.38E-04	21	3.25%	403	1.79E-04
6	0.91%	113	4.99E-05	14	6.03%	748	3.31E-04	22	3.30%	409	1.81E-04
7	3.79%	470	2.08E-04	15	7.01%	869	3.85E-04	23	2.46%	305	1.35E-04
8	7.76%	963	4.16E-04	16	7.14%	885	3.92E-04	24	1.87%	231	1.02E-04
								Total		12,399	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Lawrence Expressway/Quito Road
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEXH_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	12,399	19,558	210,518	1.584E-07	1.168E-07	2.6	1.21
TEXH_SB_LAW	Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	12,399	19,281	207,540	1.584E-07	1.168E-07	2.6	1.21
									Total	24,797						

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle (g/VMT)	0.03014	0.03401		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	143	8.60E-04	9	7.11%	881	5.96E-03	17	7.38%	915	6.19E-03
2	0.42%	52	3.13E-04	10	4.39%	544	3.26E-03	18	8.17%	1013	6.85E-03
3	0.41%	51	3.04E-04	11	4.67%	579	3.47E-03	19	5.70%	707	4.24E-03
4	0.27%	33	1.99E-04	12	5.89%	730	4.38E-03	20	4.27%	530	3.18E-03
5	0.50%	62	3.75E-04	13	6.15%	763	4.57E-03	21	3.25%	403	2.42E-03
6	0.91%	113	6.75E-04	14	6.03%	748	4.49E-03	22	3.30%	409	2.45E-03
7	3.79%	470	2.82E-03	15	7.01%	869	5.21E-03	23	2.46%	305	1.83E-03
8	7.76%	963	6.51E-03	16	7.14%	885	5.30E-03	24	1.87%	231	1.39E-03
								Total		12,399	

2021 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	143	8.47E-04	9	7.11%	881	5.88E-03	17	7.38%	915	6.10E-03
2	0.42%	52	3.08E-04	10	4.39%	544	3.22E-03	18	8.17%	1013	6.75E-03
3	0.41%	51	2.99E-04	11	4.67%	579	3.42E-03	19	5.70%	707	4.18E-03
4	0.27%	33	1.97E-04	12	5.89%	730	4.32E-03	20	4.27%	530	3.13E-03
5	0.50%	62	3.69E-04	13	6.15%	763	4.51E-03	21	3.25%	403	2.38E-03
6	0.91%	113	6.66E-04	14	6.03%	748	4.42E-03	22	3.30%	409	2.42E-03
7	3.79%	470	2.78E-03	15	7.01%	869	5.14E-03	23	2.46%	305	1.80E-03
8	7.76%	963	6.42E-03	16	7.14%	885	5.23E-03	24	1.87%	231	1.37E-03
								Total		12,399	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Lawrence Expressway/Quito Road
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEVAP_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	12,399	19,558	210,518	1.561E-07	1.151E-07	2.6	1.21
TEVAP_SB_LAW	Lawrence Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	12,399	19,281	207,540	1.561E-07	1.151E-07	2.6	1.21
									Total	24,797						

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Emissions per Vehicle per Hour (g/hour)	1.48576	1.48576		
Emissions per Vehicle per Mile (g/VMT)	0.02972	0.03714		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	143	8.47E-04	9	7.11%	881	6.51E-03	17	7.38%	915	6.76E-03
2	0.42%	52	3.08E-04	10	4.39%	544	3.22E-03	18	8.17%	1013	7.48E-03
3	0.41%	51	2.99E-04	11	4.67%	579	3.42E-03	19	5.70%	707	4.18E-03
4	0.27%	33	1.97E-04	12	5.89%	730	4.32E-03	20	4.27%	530	3.13E-03
5	0.50%	62	3.69E-04	13	6.15%	763	4.51E-03	21	3.25%	403	2.38E-03
6	0.91%	113	6.66E-04	14	6.03%	748	4.42E-03	22	3.30%	409	2.42E-03
7	3.79%	470	2.78E-03	15	7.01%	869	5.13E-03	23	2.46%	305	1.80E-03
8	7.76%	963	7.11E-03	16	7.14%	885	5.23E-03	24	1.87%	231	1.37E-03
								Total		12,399	

2021 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	143	8.35E-04	9	7.11%	881	6.42E-03	17	7.38%	915	6.67E-03
2	0.42%	52	3.04E-04	10	4.39%	544	3.17E-03	18	8.17%	1013	7.38E-03
3	0.41%	51	2.95E-04	11	4.67%	579	3.37E-03	19	5.70%	707	4.12E-03
4	0.27%	33	1.94E-04	12	5.89%	730	4.25E-03	20	4.27%	530	3.09E-03
5	0.50%	62	3.64E-04	13	6.15%	763	4.44E-03	21	3.25%	403	2.35E-03
6	0.91%	113	6.56E-04	14	6.03%	748	4.36E-03	22	3.30%	409	2.38E-03
7	3.79%	470	2.74E-03	15	7.01%	869	5.06E-03	23	2.46%	305	1.77E-03
8	7.76%	963	7.01E-03	16	7.14%	885	5.15E-03	24	1.87%	231	1.35E-03
								Total		12,399	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Lawrence Expressway/Quito Road
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
FUG_NB_LAW	Lawrence Expressway/Quito Road Northbound	NB	3	1152.3	0.72	17.0	56	1.3	Varied	12,399	19,558	210,518	1.776E-07	1.310E-07	2.6	1.21
FUG_SB_LAW	Lawrence Expressway/Quito Road Southbound	SB	3	1136.0	0.71	17.0	56	1.3	Varied	12,399	19,281	207,540	1.776E-07	1.310E-07	2.6	1.21
									Total	24,797						

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	50	40		
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211	0.00211		
Brake Wear - Emissions per Vehicle (g/VMT)	0.01681	0.01681		
Road Dust - Emissions per Vehicle (g/VMT)	0.01489	0.01489		
otal Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03381	0.03381		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_NB_LAW

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	143	9.64E-04	9	7.11%	881	5.93E-03	17	7.38%	915	6.16E-03
2	0.42%	52	3.51E-04	10	4.39%	544	3.66E-03	18	8.17%	1013	6.81E-03
3	0.41%	51	3.41E-04	11	4.67%	579	3.89E-03	19	5.70%	707	4.75E-03
4	0.27%	33	2.24E-04	12	5.89%	730	4.91E-03	20	4.27%	530	3.56E-03
5	0.50%	62	4.20E-04	13	6.15%	763	5.13E-03	21	3.25%	403	2.71E-03
6	0.91%	113	7.57E-04	14	6.03%	748	5.03E-03	22	3.30%	409	2.75E-03
7	3.79%	470	3.16E-03	15	7.01%	869	5.84E-03	23	2.46%	305	2.05E-03
8	7.76%	963	6.47E-03	16	7.14%	885	5.95E-03	24	1.87%	231	1.56E-03
								Total		12,399	

2021 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_SB_LAW

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	143	9.51E-04	9	7.11%	881	5.84E-03	17	7.38%	915	6.07E-03
2	0.42%	52	3.46E-04	10	4.39%	544	3.61E-03	18	8.17%	1013	6.71E-03
3	0.41%	51	3.36E-04	11	4.67%	579	3.84E-03	19	5.70%	707	4.68E-03
4	0.27%	33	2.21E-04	12	5.89%	730	4.84E-03	20	4.27%	530	3.51E-03
5	0.50%	62	4.14E-04	13	6.15%	763	5.06E-03	21	3.25%	403	2.67E-03
6	0.91%	113	7.47E-04	14	6.03%	748	4.96E-03	22	3.30%	409	2.71E-03
7	3.79%	470	3.12E-03	15	7.01%	869	5.76E-03	23	2.46%	305	2.02E-03
8	7.76%	963	6.38E-03	16	7.14%	885	5.87E-03	24	1.87%	231	1.53E-03
								Total		12,399	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at Construction MEI - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0023	0.0638	0.0629	0.027	0.004	0.0002	0.03
1	1	0 - 1	2021	10	0.0023	0.0638	0.0629	0.321	0.051	0.0030	0.37
2	1	1 - 2	2022	10	0.0023	0.0638	0.0629	0.321	0.051	0.0030	0.37
3	1	2 - 3	2023	3	0.0023	0.0638	0.0629	0.043	0.007	0.0004	0.05
4	1	3 - 4	2024	3	0.0023	0.0638	0.0629	0.043	0.007	0.0004	0.05
5	1	4 - 5	2025	3	0.0023	0.0638	0.0629	0.043	0.007	0.0004	0.05
6	1	5 - 6	2026	3	0.0023	0.0638	0.0629	0.043	0.007	0.0004	0.05
7	1	6 - 7	2027	3	0.0023	0.0638	0.0629	0.043	0.007	0.0004	0.05
8	1	7 - 8	2028	3	0.0023	0.0638	0.0629	0.043	0.007	0.0004	0.05
9	1	8 - 9	2029	3	0.0023	0.0638	0.0629	0.043	0.007	0.0004	0.05
10	1	9 - 10	2030	3	0.0023	0.0638	0.0629	0.043	0.007	0.0004	0.05
11	1	10 - 11	2031	3	0.0023	0.0638	0.0629	0.043	0.007	0.0004	0.05
12	1	11 - 12	2032	3	0.0023	0.0638	0.0629	0.043	0.007	0.0004	0.05
13	1	12 - 13	2033	3	0.0023	0.0638	0.0629	0.043	0.007	0.0004	0.05
14	1	13 - 14	2034	3	0.0023	0.0638	0.0629	0.043	0.007	0.0004	0.05
15	1	14 - 15	2035	3	0.0023	0.0638	0.0629	0.043	0.007	0.0004	0.05
16	1	15 - 16	2036	3	0.0023	0.0638	0.0629	0.043	0.007	0.0004	0.05
17	1	16-17	2037	1	0.0023	0.0638	0.0629	0.007	0.001	0.0001	0.01
18	1	17-18	2038	1	0.0023	0.0638	0.0629	0.007	0.001	0.0001	0.01
19	1	18-19	2039	1	0.0023	0.0638	0.0629	0.007	0.001	0.0001	0.01
20	1	19-20	2040	1	0.0023	0.0638	0.0629	0.007	0.001	0.0001	0.01
21	1	20-21	2041	1	0.0023	0.0638	0.0629	0.007	0.001	0.0001	0.01
22	1	21-22	2042	1	0.0023	0.0638	0.0629	0.007	0.001	0.0001	0.01
23	1	22-23	2043	1	0.0023	0.0638	0.0629	0.007	0.001	0.0001	0.01
24	1	23-24	2044	1	0.0023	0.0638	0.0629	0.007	0.001	0.0001	0.01
25	1	24-25	2045	1	0.0023	0.0638	0.0629	0.007	0.001	0.0001	0.01
26	1	25-26	2046	1	0.0023	0.0638	0.0629	0.007	0.001	0.0001	0.01
27	1	26-27	2047	1	0.0023	0.0638	0.0629	0.007	0.001	0.0001	0.01
28	1	27-28	2048	1	0.0023	0.0638	0.0629	0.007	0.001	0.0001	0.01
29	1	28-29	2049	1	0.0023	0.0638	0.0629	0.007	0.001	0.0001	0.01
30	1	29-30	2050	1	0.0023	0.0638	0.0629	0.007	0.001	0.0001	0.01
Total Increased Cancer Risk								1.36	0.215	0.013	**1.59**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.0005	0.07	0.07

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 1 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - With MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0042	0.4764	0.4837	0.049	0.031	0.0019	0.08
1	1	0 - 1	2021	10	0.0042	0.4764	0.4837	0.590	0.380	0.0227	0.99
2	1	1 - 2	2022	10	0.0042	0.4764	0.4837	0.590	0.380	0.0227	0.99
3	1	2 - 3	2023	3	0.0042	0.4764	0.4837	0.079	0.051	0.0030	0.13
4	1	3 - 4	2024	3	0.0042	0.4764	0.4837	0.079	0.051	0.0030	0.13
5	1	4 - 5	2025	3	0.0042	0.4764	0.4837	0.079	0.051	0.0030	0.13
6	1	5 - 6	2026	3	0.0042	0.4764	0.4837	0.079	0.051	0.0030	0.13
7	1	6 - 7	2027	3	0.0042	0.4764	0.4837	0.079	0.051	0.0030	0.13
8	1	7 - 8	2028	3	0.0042	0.4764	0.4837	0.079	0.051	0.0030	0.13
9	1	8 - 9	2029	3	0.0042	0.4764	0.4837	0.079	0.051	0.0030	0.13
10	1	9 - 10	2030	3	0.0042	0.4764	0.4837	0.079	0.051	0.0030	0.13
11	1	10 - 11	2031	3	0.0042	0.4764	0.4837	0.079	0.051	0.0030	0.13
12	1	11 - 12	2032	3	0.0042	0.4764	0.4837	0.079	0.051	0.0030	0.13
13	1	12 - 13	2033	3	0.0042	0.4764	0.4837	0.079	0.051	0.0030	0.13
14	1	13 - 14	2034	3	0.0042	0.4764	0.4837	0.079	0.051	0.0030	0.13
15	1	14 - 15	2035	3	0.0042	0.4764	0.4837	0.079	0.051	0.0030	0.13
16	1	15 - 16	2036	3	0.0042	0.4764	0.4837	0.079	0.051	0.0030	0.13
17	1	16-17	2037	1	0.0042	0.4764	0.4837	0.012	0.008	0.0005	0.02
18	1	17-18	2038	1	0.0042	0.4764	0.4837	0.012	0.008	0.0005	0.02
19	1	18-19	2039	1	0.0042	0.4764	0.4837	0.012	0.008	0.0005	0.02
20	1	19-20	2040	1	0.0042	0.4764	0.4837	0.012	0.008	0.0005	0.02
21	1	20-21	2041	1	0.0042	0.4764	0.4837	0.012	0.008	0.0005	0.02
22	1	21-22	2042	1	0.0042	0.4764	0.4837	0.012	0.008	0.0005	0.02
23	1	22-23	2043	1	0.0042	0.4764	0.4837	0.012	0.008	0.0005	0.02
24	1	23-24	2044	1	0.0042	0.4764	0.4837	0.012	0.008	0.0005	0.02
25	1	24-25	2045	1	0.0042	0.4764	0.4837	0.012	0.008	0.0005	0.02
26	1	25-26	2046	1	0.0042	0.4764	0.4837	0.012	0.008	0.0005	0.02
27	1	26-27	2047	1	0.0042	0.4764	0.4837	0.012	0.008	0.0005	0.02
28	1	27-28	2048	1	0.0042	0.4764	0.4837	0.012	0.008	0.0005	0.02
29	1	28-29	2049	1	0.0042	0.4764	0.4837	0.012	0.008	0.0005	0.02
30	1	29-30	2050	1	0.0042	0.4764	0.4837	0.012	0.008	0.0005	0.02
Total Increased Cancer Risk								2.50	1.609	0.096	**4.21**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00085	0.16	0.17

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 1 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0118	0.2825	0.2869	0.137	0.019	0.0011	0.16
1	1	0 - 1	2021	10	0.0118	0.2825	0.2869	1.653	0.225	0.0135	1.89
2	1	1 - 2	2022	10	0.0118	0.2825	0.2869	1.653	0.225	0.0135	1.89
3	1	2 - 3	2023	3	0.0118	0.2825	0.2869	0.220	0.030	0.0018	0.25
4	1	3 - 4	2024	3	0.0118	0.2825	0.2869	0.220	0.030	0.0018	0.25
5	1	4 - 5	2025	3	0.0118	0.2825	0.2869	0.220	0.030	0.0018	0.25
6	1	5 - 6	2026	3	0.0118	0.2825	0.2869	0.220	0.030	0.0018	0.25
7	1	6 - 7	2027	3	0.0118	0.2825	0.2869	0.220	0.030	0.0018	0.25
8	1	7 - 8	2028	3	0.0118	0.2825	0.2869	0.220	0.030	0.0018	0.25
9	1	8 - 9	2029	3	0.0118	0.2825	0.2869	0.220	0.030	0.0018	0.25
10	1	9 - 10	2030	3	0.0118	0.2825	0.2869	0.220	0.030	0.0018	0.25
11	1	10 - 11	2031	3	0.0118	0.2825	0.2869	0.220	0.030	0.0018	0.25
12	1	11 - 12	2032	3	0.0118	0.2825	0.2869	0.220	0.030	0.0018	0.25
13	1	12 - 13	2033	3	0.0118	0.2825	0.2869	0.220	0.030	0.0018	0.25
14	1	13 - 14	2034	3	0.0118	0.2825	0.2869	0.220	0.030	0.0018	0.25
15	1	14 - 15	2035	3	0.0118	0.2825	0.2869	0.220	0.030	0.0018	0.25
16	1	15 - 16	2036	3	0.0118	0.2825	0.2869	0.220	0.030	0.0018	0.25
17	1	16-17	2037	1	0.0118	0.2825	0.2869	0.034	0.005	0.0003	0.04
18	1	17-18	2038	1	0.0118	0.2825	0.2869	0.034	0.005	0.0003	0.04
19	1	18-19	2039	1	0.0118	0.2825	0.2869	0.034	0.005	0.0003	0.04
20	1	19-20	2040	1	0.0118	0.2825	0.2869	0.034	0.005	0.0003	0.04
21	1	20-21	2041	1	0.0118	0.2825	0.2869	0.034	0.005	0.0003	0.04
22	1	21-22	2042	1	0.0118	0.2825	0.2869	0.034	0.005	0.0003	0.04
23	1	22-23	2043	1	0.0118	0.2825	0.2869	0.034	0.005	0.0003	0.04
24	1	23-24	2044	1	0.0118	0.2825	0.2869	0.034	0.005	0.0003	0.04
25	1	24-25	2045	1	0.0118	0.2825	0.2869	0.034	0.005	0.0003	0.04
26	1	25-26	2046	1	0.0118	0.2825	0.2869	0.034	0.005	0.0003	0.04
27	1	26-27	2047	1	0.0118	0.2825	0.2869	0.034	0.005	0.0003	0.04
28	1	27-28	2048	1	0.0118	0.2825	0.2869	0.034	0.005	0.0003	0.04
29	1	28-29	2049	1	0.0118	0.2825	0.2869	0.034	0.005	0.0003	0.04
30	1	29-30	2050	1	0.0118	0.2825	0.2869	0.034	0.005	0.0003	0.04
Total Increased Cancer Risk								7.00	0.954	0.057	**8.0**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00237	0.31	0.33

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 2 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0088	0.2597	0.2636	0.102	0.017	0.0010	0.12
1	1	0 - 1	2021	10	0.0088	0.2597	0.2636	1.227	0.207	0.0124	1.45
2	1	1 - 2	2022	10	0.0088	0.2597	0.2636	1.227	0.207	0.0124	1.45
3	1	2 - 3	2023	3	0.0088	0.2597	0.2636	0.164	0.028	0.0017	0.19
4	1	3 - 4	2024	3	0.0088	0.2597	0.2636	0.164	0.028	0.0017	0.19
5	1	4 - 5	2025	3	0.0088	0.2597	0.2636	0.164	0.028	0.0017	0.19
6	1	5 - 6	2026	3	0.0088	0.2597	0.2636	0.164	0.028	0.0017	0.19
7	1	6 - 7	2027	3	0.0088	0.2597	0.2636	0.164	0.028	0.0017	0.19
8	1	7 - 8	2028	3	0.0088	0.2597	0.2636	0.164	0.028	0.0017	0.19
9	1	8 - 9	2029	3	0.0088	0.2597	0.2636	0.164	0.028	0.0017	0.19
10	1	9 - 10	2030	3	0.0088	0.2597	0.2636	0.164	0.028	0.0017	0.19
11	1	10 - 11	2031	3	0.0088	0.2597	0.2636	0.164	0.028	0.0017	0.19
12	1	11 - 12	2032	3	0.0088	0.2597	0.2636	0.164	0.028	0.0017	0.19
13	1	12 - 13	2033	3	0.0088	0.2597	0.2636	0.164	0.028	0.0017	0.19
14	1	13 - 14	2034	3	0.0088	0.2597	0.2636	0.164	0.028	0.0017	0.19
15	1	14 - 15	2035	3	0.0088	0.2597	0.2636	0.164	0.028	0.0017	0.19
16	1	15 - 16	2036	3	0.0088	0.2597	0.2636	0.164	0.028	0.0017	0.19
17	1	16-17	2037	1	0.0088	0.2597	0.2636	0.025	0.004	0.0003	0.03
18	1	17-18	2038	1	0.0088	0.2597	0.2636	0.025	0.004	0.0003	0.03
19	1	18-19	2039	1	0.0088	0.2597	0.2636	0.025	0.004	0.0003	0.03
20	1	19-20	2040	1	0.0088	0.2597	0.2636	0.025	0.004	0.0003	0.03
21	1	20-21	2041	1	0.0088	0.2597	0.2636	0.025	0.004	0.0003	0.03
22	1	21-22	2042	1	0.0088	0.2597	0.2636	0.025	0.004	0.0003	0.03
23	1	22-23	2043	1	0.0088	0.2597	0.2636	0.025	0.004	0.0003	0.03
24	1	23-24	2044	1	0.0088	0.2597	0.2636	0.025	0.004	0.0003	0.03
25	1	24-25	2045	1	0.0088	0.2597	0.2636	0.025	0.004	0.0003	0.03
26	1	25-26	2046	1	0.0088	0.2597	0.2636	0.025	0.004	0.0003	0.03
27	1	26-27	2047	1	0.0088	0.2597	0.2636	0.025	0.004	0.0003	0.03
28	1	27-28	2048	1	0.0088	0.2597	0.2636	0.025	0.004	0.0003	0.03
29	1	28-29	2049	1	0.0088	0.2597	0.2636	0.025	0.004	0.0003	0.03
30	1	29-30	2050	1	0.0088	0.2597	0.2636	0.025	0.004	0.0003	0.03
Total Increased Cancer Risk								5.20	0.877	0.052	**6.13**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00176	0.28	0.30

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 2 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - With MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0026	0.2597	0.2636	0.030	0.017	0.0010	0.05
1	1	0 - 1	2021	10	0.0026	0.2597	0.2636	0.368	0.207	0.0124	0.59
2	1	1 - 2	2022	10	0.0026	0.2597	0.2636	0.368	0.207	0.0124	0.59
3	1	2 - 3	2023	3	0.0026	0.2597	0.2636	0.049	0.028	0.0017	0.08
4	1	3 - 4	2024	3	0.0026	0.2597	0.2636	0.049	0.028	0.0017	0.08
5	1	4 - 5	2025	3	0.0026	0.2597	0.2636	0.049	0.028	0.0017	0.08
6	1	5 - 6	2026	3	0.0026	0.2597	0.2636	0.049	0.028	0.0017	0.08
7	1	6 - 7	2027	3	0.0026	0.2597	0.2636	0.049	0.028	0.0017	0.08
8	1	7 - 8	2028	3	0.0026	0.2597	0.2636	0.049	0.028	0.0017	0.08
9	1	8 - 9	2029	3	0.0026	0.2597	0.2636	0.049	0.028	0.0017	0.08
10	1	9 - 10	2030	3	0.0026	0.2597	0.2636	0.049	0.028	0.0017	0.08
11	1	10 - 11	2031	3	0.0026	0.2597	0.2636	0.049	0.028	0.0017	0.08
12	1	11 - 12	2032	3	0.0026	0.2597	0.2636	0.049	0.028	0.0017	0.08
13	1	12 - 13	2033	3	0.0026	0.2597	0.2636	0.049	0.028	0.0017	0.08
14	1	13 - 14	2034	3	0.0026	0.2597	0.2636	0.049	0.028	0.0017	0.08
15	1	14 - 15	2035	3	0.0026	0.2597	0.2636	0.049	0.028	0.0017	0.08
16	1	15 - 16	2036	3	0.0026	0.2597	0.2636	0.049	0.028	0.0017	0.08
17	1	16-17	2037	1	0.0026	0.2597	0.2636	0.008	0.004	0.0003	0.01
18	1	17-18	2038	1	0.0026	0.2597	0.2636	0.008	0.004	0.0003	0.01
19	1	18-19	2039	1	0.0026	0.2597	0.2636	0.008	0.004	0.0003	0.01
20	1	19-20	2040	1	0.0026	0.2597	0.2636	0.008	0.004	0.0003	0.01
21	1	20-21	2041	1	0.0026	0.2597	0.2636	0.008	0.004	0.0003	0.01
22	1	21-22	2042	1	0.0026	0.2597	0.2636	0.008	0.004	0.0003	0.01
23	1	22-23	2043	1	0.0026	0.2597	0.2636	0.008	0.004	0.0003	0.01
24	1	23-24	2044	1	0.0026	0.2597	0.2636	0.008	0.004	0.0003	0.01
25	1	24-25	2045	1	0.0026	0.2597	0.2636	0.008	0.004	0.0003	0.01
26	1	25-26	2046	1	0.0026	0.2597	0.2636	0.008	0.004	0.0003	0.01
27	1	26-27	2047	1	0.0026	0.2597	0.2636	0.008	0.004	0.0003	0.01
28	1	27-28	2048	1	0.0026	0.2597	0.2636	0.008	0.004	0.0003	0.01
29	1	28-29	2049	1	0.0026	0.2597	0.2636	0.008	0.004	0.0003	0.01
30	1	29-30	2050	1	0.0026	0.2597	0.2636	0.008	0.004	0.0003	0.01
Total Increased Cancer Risk								1.56	0.877	0.052	**2.49**

Maximum Hazard Index	Maximum Fugitive PM2.5	Maximum Total PM2.5
0.00053	0.08	0.09

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 2 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0077	0.2046	0.2076	0.089	0.014	0.0008	0.10
1	1	0 - 1	2021	10	0.0077	0.2046	0.2076	1.078	0.163	0.0098	1.25
2	1	1 - 2	2022	10	0.0077	0.2046	0.2076	1.078	0.163	0.0098	1.25
3	1	2 - 3	2023	3	0.0077	0.2046	0.2076	0.144	0.022	0.0013	0.17
4	1	3 - 4	2024	3	0.0077	0.2046	0.2076	0.144	0.022	0.0013	0.17
5	1	4 - 5	2025	3	0.0077	0.2046	0.2076	0.144	0.022	0.0013	0.17
6	1	5 - 6	2026	3	0.0077	0.2046	0.2076	0.144	0.022	0.0013	0.17
7	1	6 - 7	2027	3	0.0077	0.2046	0.2076	0.144	0.022	0.0013	0.17
8	1	7 - 8	2028	3	0.0077	0.2046	0.2076	0.144	0.022	0.0013	0.17
9	1	8 - 9	2029	3	0.0077	0.2046	0.2076	0.144	0.022	0.0013	0.17
10	1	9 - 10	2030	3	0.0077	0.2046	0.2076	0.144	0.022	0.0013	0.17
11	1	10 - 11	2031	3	0.0077	0.2046	0.2076	0.144	0.022	0.0013	0.17
12	1	11 - 12	2032	3	0.0077	0.2046	0.2076	0.144	0.022	0.0013	0.17
13	1	12 - 13	2033	3	0.0077	0.2046	0.2076	0.144	0.022	0.0013	0.17
14	1	13 - 14	2034	3	0.0077	0.2046	0.2076	0.144	0.022	0.0013	0.17
15	1	14 - 15	2035	3	0.0077	0.2046	0.2076	0.144	0.022	0.0013	0.17
16	1	15 - 16	2036	3	0.0077	0.2046	0.2076	0.144	0.022	0.0013	0.17
17	1	16-17	2037	1	0.0077	0.2046	0.2076	0.022	0.003	0.0002	0.03
18	1	17-18	2038	1	0.0077	0.2046	0.2076	0.022	0.003	0.0002	0.03
19	1	18-19	2039	1	0.0077	0.2046	0.2076	0.022	0.003	0.0002	0.03
20	1	19-20	2040	1	0.0077	0.2046	0.2076	0.022	0.003	0.0002	0.03
21	1	20-21	2041	1	0.0077	0.2046	0.2076	0.022	0.003	0.0002	0.03
22	1	21-22	2042	1	0.0077	0.2046	0.2076	0.022	0.003	0.0002	0.03
23	1	22-23	2043	1	0.0077	0.2046	0.2076	0.022	0.003	0.0002	0.03
24	1	23-24	2044	1	0.0077	0.2046	0.2076	0.022	0.003	0.0002	0.03
25	1	24-25	2045	1	0.0077	0.2046	0.2076	0.022	0.003	0.0002	0.03
26	1	25-26	2046	1	0.0077	0.2046	0.2076	0.022	0.003	0.0002	0.03
27	1	26-27	2047	1	0.0077	0.2046	0.2076	0.022	0.003	0.0002	0.03
28	1	27-28	2048	1	0.0077	0.2046	0.2076	0.022	0.003	0.0002	0.03
29	1	28-29	2049	1	0.0077	0.2046	0.2076	0.022	0.003	0.0002	0.03
30	1	29-30	2050	1	0.0077	0.2046	0.2076	0.022	0.003	0.0002	0.03
Total Increased Cancer Risk								4.57	0.691	0.041	**5.3**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00154	0.22	0.24

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 3 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0044	0.1245	0.1265	0.051	0.008	0.0005	0.06
1	1	0 - 1	2021	10	0.0044	0.1245	0.1265	0.618	0.099	0.0059	0.72
2	1	1 - 2	2022	10	0.0044	0.1245	0.1265	0.618	0.099	0.0059	0.72
3	1	2 - 3	2023	3	0.0044	0.1245	0.1265	0.082	0.013	0.0008	0.10
4	1	3 - 4	2024	3	0.0044	0.1245	0.1265	0.082	0.013	0.0008	0.10
5	1	4 - 5	2025	3	0.0044	0.1245	0.1265	0.082	0.013	0.0008	0.10
6	1	5 - 6	2026	3	0.0044	0.1245	0.1265	0.082	0.013	0.0008	0.10
7	1	6 - 7	2027	3	0.0044	0.1245	0.1265	0.082	0.013	0.0008	0.10
8	1	7 - 8	2028	3	0.0044	0.1245	0.1265	0.082	0.013	0.0008	0.10
9	1	8 - 9	2029	3	0.0044	0.1245	0.1265	0.082	0.013	0.0008	0.10
10	1	9 - 10	2030	3	0.0044	0.1245	0.1265	0.082	0.013	0.0008	0.10
11	1	10 - 11	2031	3	0.0044	0.1245	0.1265	0.082	0.013	0.0008	0.10
12	1	11 - 12	2032	3	0.0044	0.1245	0.1265	0.082	0.013	0.0008	0.10
13	1	12 - 13	2033	3	0.0044	0.1245	0.1265	0.082	0.013	0.0008	0.10
14	1	13 - 14	2034	3	0.0044	0.1245	0.1265	0.082	0.013	0.0008	0.10
15	1	14 - 15	2035	3	0.0044	0.1245	0.1265	0.082	0.013	0.0008	0.10
16	1	15 - 16	2036	3	0.0044	0.1245	0.1265	0.082	0.013	0.0008	0.10
17	1	16-17	2037	1	0.0044	0.1245	0.1265	0.013	0.002	0.0001	0.01
18	1	17-18	2038	1	0.0044	0.1245	0.1265	0.013	0.002	0.0001	0.01
19	1	18-19	2039	1	0.0044	0.1245	0.1265	0.013	0.002	0.0001	0.01
20	1	19-20	2040	1	0.0044	0.1245	0.1265	0.013	0.002	0.0001	0.01
21	1	20-21	2041	1	0.0044	0.1245	0.1265	0.013	0.002	0.0001	0.01
22	1	21-22	2042	1	0.0044	0.1245	0.1265	0.013	0.002	0.0001	0.01
23	1	22-23	2043	1	0.0044	0.1245	0.1265	0.013	0.002	0.0001	0.01
24	1	23-24	2044	1	0.0044	0.1245	0.1265	0.013	0.002	0.0001	0.01
25	1	24-25	2045	1	0.0044	0.1245	0.1265	0.013	0.002	0.0001	0.01
26	1	25-26	2046	1	0.0044	0.1245	0.1265	0.013	0.002	0.0001	0.01
27	1	26-27	2047	1	0.0044	0.1245	0.1265	0.013	0.002	0.0001	0.01
28	1	27-28	2048	1	0.0044	0.1245	0.1265	0.013	0.002	0.0001	0.01
29	1	28-29	2049	1	0.0044	0.1245	0.1265	0.013	0.002	0.0001	0.01
30	1	29-30	2050	1	0.0044	0.1245	0.1265	0.013	0.002	0.0001	0.01
Total Increased Cancer Risk								2.62	0.420	0.025	**3.07**

Maximum Hazard Index	Fugitive PM2.5	Total PM2.5
0.00089	0.13	0.14

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at El Paseo Building 3 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0042	0.1140	0.1159	0.048	0.008	0.0005	0.06
1	1	0 - 1	2021	10	0.0042	0.1140	0.1159	0.581	0.091	0.0054	0.68
2	1	1 - 2	2022	10	0.0042	0.1140	0.1159	0.581	0.091	0.0054	0.68
3	1	2 - 3	2023	3	0.0042	0.1140	0.1159	0.077	0.012	0.0007	0.09
4	1	3 - 4	2024	3	0.0042	0.1140	0.1159	0.077	0.012	0.0007	0.09
5	1	4 - 5	2025	3	0.0042	0.1140	0.1159	0.077	0.012	0.0007	0.09
6	1	5 - 6	2026	3	0.0042	0.1140	0.1159	0.077	0.012	0.0007	0.09
7	1	6 - 7	2027	3	0.0042	0.1140	0.1159	0.077	0.012	0.0007	0.09
8	1	7 - 8	2028	3	0.0042	0.1140	0.1159	0.077	0.012	0.0007	0.09
9	1	8 - 9	2029	3	0.0042	0.1140	0.1159	0.077	0.012	0.0007	0.09
10	1	9 - 10	2030	3	0.0042	0.1140	0.1159	0.077	0.012	0.0007	0.09
11	1	10 - 11	2031	3	0.0042	0.1140	0.1159	0.077	0.012	0.0007	0.09
12	1	11 - 12	2032	3	0.0042	0.1140	0.1159	0.077	0.012	0.0007	0.09
13	1	12 - 13	2033	3	0.0042	0.1140	0.1159	0.077	0.012	0.0007	0.09
14	1	13 - 14	2034	3	0.0042	0.1140	0.1159	0.077	0.012	0.0007	0.09
15	1	14 - 15	2035	3	0.0042	0.1140	0.1159	0.077	0.012	0.0007	0.09
16	1	15 - 16	2036	3	0.0042	0.1140	0.1159	0.077	0.012	0.0007	0.09
17	1	16-17	2037	1	0.0042	0.1140	0.1159	0.012	0.002	0.0001	0.01
18	1	17-18	2038	1	0.0042	0.1140	0.1159	0.012	0.002	0.0001	0.01
19	1	18-19	2039	1	0.0042	0.1140	0.1159	0.012	0.002	0.0001	0.01
20	1	19-20	2040	1	0.0042	0.1140	0.1159	0.012	0.002	0.0001	0.01
21	1	20-21	2041	1	0.0042	0.1140	0.1159	0.012	0.002	0.0001	0.01
22	1	21-22	2042	1	0.0042	0.1140	0.1159	0.012	0.002	0.0001	0.01
23	1	22-23	2043	1	0.0042	0.1140	0.1159	0.012	0.002	0.0001	0.01
24	1	23-24	2044	1	0.0042	0.1140	0.1159	0.012	0.002	0.0001	0.01
25	1	24-25	2045	1	0.0042	0.1140	0.1159	0.012	0.002	0.0001	0.01
26	1	25-26	2046	1	0.0042	0.1140	0.1159	0.012	0.002	0.0001	0.01
27	1	26-27	2047	1	0.0042	0.1140	0.1159	0.012	0.002	0.0001	0.01
28	1	27-28	2048	1	0.0042	0.1140	0.1159	0.012	0.002	0.0001	0.01
29	1	28-29	2049	1	0.0042	0.1140	0.1159	0.012	0.002	0.0001	0.01
30	1	29-30	2050	1	0.0042	0.1140	0.1159	0.012	0.002	0.0001	0.01
Total Increased Cancer Risk								2.46	0.385	0.023	**2.9**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00083	0.12	0.13

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at Saratoga On-Site 1st Level (2nd Floor) Residential Receptors - 8.2 meter receptor height
30 Year Residential Exposure - Cumulative Traffic

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0072	0.1496	0.1523	0.083	0.010	0.0006	0.09
1	1	0 - 1	2021	10	0.0072	0.1496	0.1523	1.004	0.119	0.0072	1.13
2	1	1 - 2	2022	10	0.0072	0.1496	0.1523	1.004	0.119	0.0072	1.13
3	1	2 - 3	2023	3	0.0072	0.1496	0.1523	0.134	0.016	0.0010	0.15
4	1	3 - 4	2024	3	0.0072	0.1496	0.1523	0.134	0.016	0.0010	0.15
5	1	4 - 5	2025	3	0.0072	0.1496	0.1523	0.134	0.016	0.0010	0.15
6	1	5 - 6	2026	3	0.0072	0.1496	0.1523	0.134	0.016	0.0010	0.15
7	1	6 - 7	2027	3	0.0072	0.1496	0.1523	0.134	0.016	0.0010	0.15
8	1	7 - 8	2028	3	0.0072	0.1496	0.1523	0.134	0.016	0.0010	0.15
9	1	8 - 9	2029	3	0.0072	0.1496	0.1523	0.134	0.016	0.0010	0.15
10	1	9 - 10	2030	3	0.0072	0.1496	0.1523	0.134	0.016	0.0010	0.15
11	1	10 - 11	2031	3	0.0072	0.1496	0.1523	0.134	0.016	0.0010	0.15
12	1	11 - 12	2032	3	0.0072	0.1496	0.1523	0.134	0.016	0.0010	0.15
13	1	12 - 13	2033	3	0.0072	0.1496	0.1523	0.134	0.016	0.0010	0.15
14	1	13 - 14	2034	3	0.0072	0.1496	0.1523	0.134	0.016	0.0010	0.15
15	1	14 - 15	2035	3	0.0072	0.1496	0.1523	0.134	0.016	0.0010	0.15
16	1	15 - 16	2036	3	0.0072	0.1496	0.1523	0.134	0.016	0.0010	0.15
17	1	16-17	2037	1	0.0072	0.1496	0.1523	0.021	0.002	0.0001	0.02
18	1	17-18	2038	1	0.0072	0.1496	0.1523	0.021	0.002	0.0001	0.02
19	1	18-19	2039	1	0.0072	0.1496	0.1523	0.021	0.002	0.0001	0.02
20	1	19-20	2040	1	0.0072	0.1496	0.1523	0.021	0.002	0.0001	0.02
21	1	20-21	2041	1	0.0072	0.1496	0.1523	0.021	0.002	0.0001	0.02
22	1	21-22	2042	1	0.0072	0.1496	0.1523	0.021	0.002	0.0001	0.02
23	1	22-23	2043	1	0.0072	0.1496	0.1523	0.021	0.002	0.0001	0.02
24	1	23-24	2044	1	0.0072	0.1496	0.1523	0.021	0.002	0.0001	0.02
25	1	24-25	2045	1	0.0072	0.1496	0.1523	0.021	0.002	0.0001	0.02
26	1	25-26	2046	1	0.0072	0.1496	0.1523	0.021	0.002	0.0001	0.02
27	1	26-27	2047	1	0.0072	0.1496	0.1523	0.021	0.002	0.0001	0.02
28	1	27-28	2048	1	0.0072	0.1496	0.1523	0.021	0.002	0.0001	0.02
29	1	28-29	2049	1	0.0072	0.1496	0.1523	0.021	0.002	0.0001	0.02
30	1	29-30	2050	1	0.0072	0.1496	0.1523	0.021	0.002	0.0001	0.02
Total Increased Cancer Risk								4.25	0.505	0.030	**4.79**

Maximum Hazard Index	Fugitive PM2.5	Total PM2.5
0.00144	0.16	0.17

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Lawrence Expressway Cancer Risk
Impacts at Saratoga On-Site 2nd Level (3rd Floor) Residential Receptors - 11.3 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0047	0.0948	0.0965	0.054	0.006	0.0004	0.06
1	1	0 - 1	2021	10	0.0047	0.0948	0.0965	0.649	0.076	0.0045	0.73
2	1	1 - 2	2022	10	0.0047	0.0948	0.0965	0.649	0.076	0.0045	0.73
3	1	2 - 3	2023	3	0.0047	0.0948	0.0965	0.087	0.010	0.0006	0.10
4	1	3 - 4	2024	3	0.0047	0.0948	0.0965	0.087	0.010	0.0006	0.10
5	1	4 - 5	2025	3	0.0047	0.0948	0.0965	0.087	0.010	0.0006	0.10
6	1	5 - 6	2026	3	0.0047	0.0948	0.0965	0.087	0.010	0.0006	0.10
7	1	6 - 7	2027	3	0.0047	0.0948	0.0965	0.087	0.010	0.0006	0.10
8	1	7 - 8	2028	3	0.0047	0.0948	0.0965	0.087	0.010	0.0006	0.10
9	1	8 - 9	2029	3	0.0047	0.0948	0.0965	0.087	0.010	0.0006	0.10
10	1	9 - 10	2030	3	0.0047	0.0948	0.0965	0.087	0.010	0.0006	0.10
11	1	10 - 11	2031	3	0.0047	0.0948	0.0965	0.087	0.010	0.0006	0.10
12	1	11 - 12	2032	3	0.0047	0.0948	0.0965	0.087	0.010	0.0006	0.10
13	1	12 - 13	2033	3	0.0047	0.0948	0.0965	0.087	0.010	0.0006	0.10
14	1	13 - 14	2034	3	0.0047	0.0948	0.0965	0.087	0.010	0.0006	0.10
15	1	14 - 15	2035	3	0.0047	0.0948	0.0965	0.087	0.010	0.0006	0.10
16	1	15 - 16	2036	3	0.0047	0.0948	0.0965	0.087	0.010	0.0006	0.10
17	1	16-17	2037	1	0.0047	0.0948	0.0965	0.013	0.002	0.0001	0.01
18	1	17-18	2038	1	0.0047	0.0948	0.0965	0.013	0.002	0.0001	0.01
19	1	18-19	2039	1	0.0047	0.0948	0.0965	0.013	0.002	0.0001	0.01
20	1	19-20	2040	1	0.0047	0.0948	0.0965	0.013	0.002	0.0001	0.01
21	1	20-21	2041	1	0.0047	0.0948	0.0965	0.013	0.002	0.0001	0.01
22	1	21-22	2042	1	0.0047	0.0948	0.0965	0.013	0.002	0.0001	0.01
23	1	22-23	2043	1	0.0047	0.0948	0.0965	0.013	0.002	0.0001	0.01
24	1	23-24	2044	1	0.0047	0.0948	0.0965	0.013	0.002	0.0001	0.01
25	1	24-25	2045	1	0.0047	0.0948	0.0965	0.013	0.002	0.0001	0.01
26	1	25-26	2046	1	0.0047	0.0948	0.0965	0.013	0.002	0.0001	0.01
27	1	26-27	2047	1	0.0047	0.0948	0.0965	0.013	0.002	0.0001	0.01
28	1	27-28	2048	1	0.0047	0.0948	0.0965	0.013	0.002	0.0001	0.01
29	1	28-29	2049	1	0.0047	0.0948	0.0965	0.013	0.002	0.0001	0.01
30	1	29-30	2050	1	0.0047	0.0948	0.0965	0.013	0.002	0.0001	0.01
Total Increased Cancer Risk								2.75	0.320	0.019	**3.1**

Maximum Hazard Index	Maximum Fugitive PM2.5	Maximum Total PM2.5
0.00093	0.10	0.11

* Third trimester of pregnancy

Saratoga Ave Traffic Emissions and Health Risk Calculations

Analysis Year = ***2021***

Vehicle Type	2018 Caltrans Vehicles (veh/day)	2021 Vehicles (veh/day)
Total	**25,400**	**26,162**

Increase From 2018	1.03
Vehicles/Direction	**13,081**
Avg Vehicles/Hour/Direction	545

Traffic Data Year = ***2018***

El Paeso & Saratoga Traffic Report Volumes	AADT Total
Background + EP2 No Ed Condition - Saratoga Rd	25,400

Percent of Total Vehicles

Traffic Increase per Year (%) = *1.00%*

El Paseo Option 2 No Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Saratoga Avenue
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
DPM_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	55.7	3.4	Varied	13,081	17,820	191,810	6.324E-09	4.663E-09	6.8	3.16
DPM_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	55.7	3.4	Varied	13,081	17,703	190,550	6.324E-09	4.663E-09	6.8	3.16
									Total	26,162						

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle (g/VMT)	0.00114	0.001194		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and DPM Emissions - DPM_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.82%	499	1.03E-04	9	6.42%	839	1.82E-04	17	5.55%	726	1.57E-04
2	2.60%	340	7.04E-05	10	7.23%	945	1.95E-04	18	3.24%	423	9.16E-05
3	2.83%	371	7.66E-05	11	6.30%	824	1.70E-04	19	2.43%	318	6.57E-05
4	3.41%	446	9.22E-05	12	6.99%	915	1.89E-04	20	0.92%	121	2.50E-05
5	2.20%	287	5.94E-05	13	6.18%	809	1.67E-04	21	3.06%	401	8.29E-05
6	3.35%	439	9.07E-05	14	6.13%	801	1.66E-04	22	4.16%	544	1.13E-04
7	6.13%	801	1.66E-04	15	5.14%	673	1.39E-04	23	2.43%	318	6.57E-05
8	4.74%	620	1.34E-04	16	3.87%	507	1.05E-04	24	0.87%	113	2.35E-05
								Total		13,081	

2021 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.82%	499	1.03E-04	9	6.42%	839	1.80E-04	17	5.55%	726	1.56E-04
2	2.60%	340	6.99E-05	10	7.23%	945	1.94E-04	18	3.24%	423	9.10E-05
3	2.83%	371	7.61E-05	11	6.30%	824	1.69E-04	19	2.43%	318	6.52E-05
4	3.41%	446	9.16E-05	12	6.99%	915	1.88E-04	20	0.92%	121	2.49E-05
5	2.20%	287	5.90E-05	13	6.18%	809	1.66E-04	21	3.06%	401	8.23E-05
6	3.35%	439	9.01E-05	14	6.13%	801	1.65E-04	22	4.16%	544	1.12E-04
7	6.13%	801	1.65E-04	15	5.14%	673	1.38E-04	23	2.43%	318	6.52E-05
8	4.74%	620	1.33E-04	16	3.87%	507	1.04E-04	24	0.87%	113	2.33E-05
								Total		13,081	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Saratoga Avenue
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
PM2.5_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	13,081	17,820	191,810	1.223E-08	9.015E-09	2.6	1.21
PM2.5_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	13,081	17,703	190,550	1.223E-08	9.015E-09	2.6	1.21
									Total	26,162						

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle (g/VMT)	0.002206	0.00270		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and PM2.5 Emissions - PM2.5_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	151	6.05E-05	9	7.11%	930	4.55E-04	17	7.38%	966	4.73E-04
2	0.42%	55	2.20E-05	10	4.39%	574	2.30E-04	18	8.17%	1068	5.23E-04
3	0.41%	53	2.14E-05	11	4.67%	611	2.44E-04	19	5.70%	745	2.98E-04
4	0.27%	35	1.40E-05	12	5.89%	770	3.08E-04	20	4.27%	559	2.23E-04
5	0.50%	66	2.64E-05	13	6.15%	805	3.22E-04	21	3.25%	426	1.70E-04
6	0.91%	119	4.75E-05	14	6.03%	789	3.16E-04	22	3.30%	431	1.72E-04
7	3.79%	496	1.98E-04	15	7.01%	917	3.66E-04	23	2.46%	321	1.28E-04
8	7.76%	1016	4.97E-04	16	7.14%	933	3.73E-04	24	1.87%	244	9.76E-05
								Total		13,081	

2021 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM2.5_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	151	6.01E-05	9	7.11%	930	4.52E-04	17	7.38%	966	4.70E-04
2	0.42%	55	2.19E-05	10	4.39%	574	2.28E-04	18	8.17%	1068	5.20E-04
3	0.41%	53	2.12E-05	11	4.67%	611	2.43E-04	19	5.70%	745	2.96E-04
4	0.27%	35	1.39E-05	12	5.89%	770	3.06E-04	20	4.27%	559	2.22E-04
5	0.50%	66	2.62E-05	13	6.15%	805	3.20E-04	21	3.25%	426	1.69E-04
6	0.91%	119	4.72E-05	14	6.03%	789	3.13E-04	22	3.30%	431	1.71E-04
7	3.79%	496	1.97E-04	15	7.01%	917	3.64E-04	23	2.46%	321	1.28E-04
8	7.76%	1016	4.94E-04	16	7.14%	933	3.71E-04	24	1.87%	244	9.69E-05
								Total		13,081	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Saratoga Avenue
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEXH_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	13,081	17,820	191,810	1.885E-07	1.390E-07	2.6	1.21
TEXH_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	13,081	17,703	190,550	1.885E-07	1.390E-07	2.6	1.21
									Total	26,162						

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle (g/VMT)	0.03401	0.04648		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	151	9.32E-04	9	7.11%	930	7.83E-03	17	7.38%	966	8.13E-03
2	0.42%	55	3.39E-04	10	4.39%	574	3.54E-03	18	8.17%	1068	9.00E-03
3	0.41%	53	3.29E-04	11	4.67%	611	3.76E-03	19	5.70%	745	4.59E-03
4	0.27%	35	2.16E-04	12	5.89%	770	4.75E-03	20	4.27%	559	3.44E-03
5	0.50%	66	4.06E-04	13	6.15%	805	4.96E-03	21	3.25%	426	2.62E-03
6	0.91%	119	7.32E-04	14	6.03%	789	4.86E-03	22	3.30%	431	2.66E-03
7	3.79%	496	3.06E-03	15	7.01%	917	5.65E-03	23	2.46%	321	1.98E-03
8	7.76%	1016	8.55E-03	16	7.14%	933	5.75E-03	24	1.87%	244	1.50E-03
								Total		13,081	

2021 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	151	9.26E-04	9	7.11%	930	7.78E-03	17	7.38%	966	8.08E-03
2	0.42%	55	3.37E-04	10	4.39%	574	3.52E-03	18	8.17%	1068	8.94E-03
3	0.41%	53	3.27E-04	11	4.67%	611	3.74E-03	19	5.70%	745	4.56E-03
4	0.27%	35	2.15E-04	12	5.89%	770	4.72E-03	20	4.27%	559	3.42E-03
5	0.50%	66	4.04E-04	13	6.15%	805	4.93E-03	21	3.25%	426	2.61E-03
6	0.91%	119	7.27E-04	14	6.03%	789	4.83E-03	22	3.30%	431	2.64E-03
7	3.79%	496	3.04E-03	15	7.01%	917	5.61E-03	23	2.46%	321	1.97E-03
8	7.76%	1016	8.50E-03	16	7.14%	933	5.71E-03	24	1.87%	244	1.49E-03
								Total		13,081	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Saratoga Avenue
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEVAP_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	13,081	17,820	191,810	2.059E-07	1.518E-07	2.6	1.21
TEVAP_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	13,081	17,703	190,550	2.059E-07	1.518E-07	2.6	1.21
									Total	26,162						

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Emissions per Vehicle per Hour (g/hour)	1.48576	1.48576		
Emissions per Vehicle per Mile (g/VMT)	0.03714	0.04953		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	151	1.02E-03	9	7.11%	930	8.34E-03	17	7.38%	966	8.67E-03
2	0.42%	55	3.70E-04	10	4.39%	574	3.87E-03	18	8.17%	1068	9.59E-03
3	0.41%	53	3.60E-04	11	4.67%	611	4.11E-03	19	5.70%	745	5.02E-03
4	0.27%	35	2.36E-04	12	5.89%	770	5.19E-03	20	4.27%	559	3.76E-03
5	0.50%	66	4.44E-04	13	6.15%	805	5.42E-03	21	3.25%	426	2.86E-03
6	0.91%	119	8.00E-04	14	6.03%	789	5.31E-03	22	3.30%	431	2.90E-03
7	3.79%	496	3.34E-03	15	7.01%	917	6.17E-03	23	2.46%	321	2.16E-03
8	7.76%	1016	9.11E-03	16	7.14%	933	6.28E-03	24	1.87%	244	1.64E-03
								Total		13,081	

2021 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	151	1.01E-03	9	7.11%	930	8.29E-03	17	7.38%	966	8.61E-03
2	0.42%	55	3.68E-04	10	4.39%	574	3.84E-03	18	8.17%	1068	9.53E-03
3	0.41%	53	3.57E-04	11	4.67%	611	4.08E-03	19	5.70%	745	4.98E-03
4	0.27%	35	2.35E-04	12	5.89%	770	5.15E-03	20	4.27%	559	3.74E-03
5	0.50%	66	4.41E-04	13	6.15%	805	5.38E-03	21	3.25%	426	2.85E-03
6	0.91%	119	7.95E-04	14	6.03%	789	5.28E-03	22	3.30%	431	2.89E-03
7	3.79%	496	3.32E-03	15	7.01%	917	6.13E-03	23	2.46%	321	2.15E-03
8	7.76%	1016	9.05E-03	16	7.14%	933	6.24E-03	24	1.87%	244	1.63E-03
								Total		13,081	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Saratoga Avenue
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
FUG_EB_SAR	Saratoga Avenue Eastbound	EB	3	1049.9	0.65	17.0	56	1.3	Varied	13,081	17,820	191,810	1.874E-07	1.382E-07	2.6	1.21
FUG_WB_SAR	Saratoga Avenue Westbound	WB	3	1043.0	0.65	17.0	56	1.3	Varied	13,081	17,703	190,550	1.874E-07	1.382E-07	2.6	1.21
									Total	26,162						

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	40	30		
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211	0.00211		
Brake Wear - Emissions per Vehicle (g/VMT)	0.01681	0.01681		
Road Dust - Emissions per Vehicle (g/VMT)	0.01489	0.01489		
otal Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03381	0.03381		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_EB_SAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	151	9.27E-04	9	7.11%	930	5.70E-03	17	7.38%	966	5.92E-03
2	0.42%	55	3.37E-04	10	4.39%	574	3.52E-03	18	8.17%	1068	6.55E-03
3	0.41%	53	3.27E-04	11	4.67%	611	3.74E-03	19	5.70%	745	4.57E-03
4	0.27%	35	2.15E-04	12	5.89%	770	4.72E-03	20	4.27%	559	3.42E-03
5	0.50%	66	4.04E-04	13	6.15%	805	4.93E-03	21	3.25%	426	2.61E-03
6	0.91%	119	7.28E-04	14	6.03%	789	4.84E-03	22	3.30%	431	2.64E-03
7	3.79%	496	3.04E-03	15	7.01%	917	5.62E-03	23	2.46%	321	1.97E-03
8	7.76%	1016	6.22E-03	16	7.14%	933	5.72E-03	24	1.87%	244	1.50E-03
								Total		13,081	

2021 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_WB_SAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	151	9.21E-04	9	7.11%	930	5.66E-03	17	7.38%	966	5.88E-03
2	0.42%	55	3.35E-04	10	4.39%	574	3.50E-03	18	8.17%	1068	6.50E-03
3	0.41%	53	3.25E-04	11	4.67%	611	3.72E-03	19	5.70%	745	4.54E-03
4	0.27%	35	2.14E-04	12	5.89%	770	4.69E-03	20	4.27%	559	3.40E-03
5	0.50%	66	4.01E-04	13	6.15%	805	4.90E-03	21	3.25%	426	2.59E-03
6	0.91%	119	7.23E-04	14	6.03%	789	4.80E-03	22	3.30%	431	2.63E-03
7	3.79%	496	3.02E-03	15	7.01%	917	5.58E-03	23	2.46%	321	1.96E-03
8	7.76%	1016	6.18E-03	16	7.14%	933	5.68E-03	24	1.87%	244	1.49E-03
								Total		13,081	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Saratoga Avenue Traffic Cancer Risk
Impacts at Construction MEI - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0015	0.0528	0.0572	0.017	0.003	0.0002	0.02
1	1	0 - 1	2021	10	0.0015	0.0528	0.0572	0.205	0.042	0.0027	0.25
2	1	1 - 2	2022	10	0.0015	0.0528	0.0572	0.205	0.042	0.0027	0.25
3	1	2 - 3	2023	3	0.0015	0.0528	0.0572	0.027	0.006	0.0004	0.03
4	1	3 - 4	2024	3	0.0015	0.0528	0.0572	0.027	0.006	0.0004	0.03
5	1	4 - 5	2025	3	0.0015	0.0528	0.0572	0.027	0.006	0.0004	0.03
6	1	5 - 6	2026	3	0.0015	0.0528	0.0572	0.027	0.006	0.0004	0.03
7	1	6 - 7	2027	3	0.0015	0.0528	0.0572	0.027	0.006	0.0004	0.03
8	1	7 - 8	2028	3	0.0015	0.0528	0.0572	0.027	0.006	0.0004	0.03
9	1	8 - 9	2029	3	0.0015	0.0528	0.0572	0.027	0.006	0.0004	0.03
10	1	9 - 10	2030	3	0.0015	0.0528	0.0572	0.027	0.006	0.0004	0.03
11	1	10 - 11	2031	3	0.0015	0.0528	0.0572	0.027	0.006	0.0004	0.03
12	1	11 - 12	2032	3	0.0015	0.0528	0.0572	0.027	0.006	0.0004	0.03
13	1	12 - 13	2033	3	0.0015	0.0528	0.0572	0.027	0.006	0.0004	0.03
14	1	13 - 14	2034	3	0.0015	0.0528	0.0572	0.027	0.006	0.0004	0.03
15	1	14 - 15	2035	3	0.0015	0.0528	0.0572	0.027	0.006	0.0004	0.03
16	1	15 - 16	2036	3	0.0015	0.0528	0.0572	0.027	0.006	0.0004	0.03
17	1	16-17	2037	1	0.0015	0.0528	0.0572	0.004	0.001	0.0001	0.01
18	1	17-18	2038	1	0.0015	0.0528	0.0572	0.004	0.001	0.0001	0.01
19	1	18-19	2039	1	0.0015	0.0528	0.0572	0.004	0.001	0.0001	0.01
20	1	19-20	2040	1	0.0015	0.0528	0.0572	0.004	0.001	0.0001	0.01
21	1	20-21	2041	1	0.0015	0.0528	0.0572	0.004	0.001	0.0001	0.01
22	1	21-22	2042	1	0.0015	0.0528	0.0572	0.004	0.001	0.0001	0.01
23	1	22-23	2043	1	0.0015	0.0528	0.0572	0.004	0.001	0.0001	0.01
24	1	23-24	2044	1	0.0015	0.0528	0.0572	0.004	0.001	0.0001	0.01
25	1	24-25	2045	1	0.0015	0.0528	0.0572	0.004	0.001	0.0001	0.01
26	1	25-26	2046	1	0.0015	0.0528	0.0572	0.004	0.001	0.0001	0.01
27	1	26-27	2047	1	0.0015	0.0528	0.0572	0.004	0.001	0.0001	0.01
28	1	27-28	2048	1	0.0015	0.0528	0.0572	0.004	0.001	0.0001	0.01
29	1	28-29	2049	1	0.0015	0.0528	0.0572	0.004	0.001	0.0001	0.01
30	1	29-30	2050	1	0.0015	0.0528	0.0572	0.004	0.001	0.0001	0.01
Total Increased Cancer Risk								0.87	0.178	0.011	**1.06**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.0003	0.05	0.05

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 1 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0098	0.5041	0.5463	0.113	0.033	0.0021	0.15
1	1	0 - 1	2021	10	0.0098	0.5041	0.5463	1.363	0.402	0.0257	1.79
2	1	1 - 2	2022	10	0.0098	0.5041	0.5463	1.363	0.402	0.0257	1.79
3	1	2 - 3	2023	3	0.0098	0.5041	0.5463	0.182	0.054	0.0034	0.24
4	1	3 - 4	2024	3	0.0098	0.5041	0.5463	0.182	0.054	0.0034	0.24
5	1	4 - 5	2025	3	0.0098	0.5041	0.5463	0.182	0.054	0.0034	0.24
6	1	5 - 6	2026	3	0.0098	0.5041	0.5463	0.182	0.054	0.0034	0.24
7	1	6 - 7	2027	3	0.0098	0.5041	0.5463	0.182	0.054	0.0034	0.24
8	1	7 - 8	2028	3	0.0098	0.5041	0.5463	0.182	0.054	0.0034	0.24
9	1	8 - 9	2029	3	0.0098	0.5041	0.5463	0.182	0.054	0.0034	0.24
10	1	9 - 10	2030	3	0.0098	0.5041	0.5463	0.182	0.054	0.0034	0.24
11	1	10 - 11	2031	3	0.0098	0.5041	0.5463	0.182	0.054	0.0034	0.24
12	1	11 - 12	2032	3	0.0098	0.5041	0.5463	0.182	0.054	0.0034	0.24
13	1	12 - 13	2033	3	0.0098	0.5041	0.5463	0.182	0.054	0.0034	0.24
14	1	13 - 14	2034	3	0.0098	0.5041	0.5463	0.182	0.054	0.0034	0.24
15	1	14 - 15	2035	3	0.0098	0.5041	0.5463	0.182	0.054	0.0034	0.24
16	1	15 - 16	2036	3	0.0098	0.5041	0.5463	0.182	0.054	0.0034	0.24
17	1	16-17	2037	1	0.0098	0.5041	0.5463	0.028	0.008	0.0005	0.04
18	1	17-18	2038	1	0.0098	0.5041	0.5463	0.028	0.008	0.0005	0.04
19	1	18-19	2039	1	0.0098	0.5041	0.5463	0.028	0.008	0.0005	0.04
20	1	19-20	2040	1	0.0098	0.5041	0.5463	0.028	0.008	0.0005	0.04
21	1	20-21	2041	1	0.0098	0.5041	0.5463	0.028	0.008	0.0005	0.04
22	1	21-22	2042	1	0.0098	0.5041	0.5463	0.028	0.008	0.0005	0.04
23	1	22-23	2043	1	0.0098	0.5041	0.5463	0.028	0.008	0.0005	0.04
24	1	23-24	2044	1	0.0098	0.5041	0.5463	0.028	0.008	0.0005	0.04
25	1	24-25	2045	1	0.0098	0.5041	0.5463	0.028	0.008	0.0005	0.04
26	1	25-26	2046	1	0.0098	0.5041	0.5463	0.028	0.008	0.0005	0.04
27	1	26-27	2047	1	0.0098	0.5041	0.5463	0.028	0.008	0.0005	0.04
28	1	27-28	2048	1	0.0098	0.5041	0.5463	0.028	0.008	0.0005	0.04
29	1	28-29	2049	1	0.0098	0.5041	0.5463	0.028	0.008	0.0005	0.04
30	1	29-30	2050	1	0.0098	0.5041	0.5463	0.028	0.008	0.0005	0.04
Total Increased Cancer Risk								5.77	1.703	0.109	**7.59**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00195	0.46	0.49

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 1 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - With MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0029	0.5041	0.5463	0.034	0.033	0.0021	0.07
1	1	0 - 1	2021	10	0.0029	0.5041	0.5463	0.409	0.402	0.0257	0.84
2	1	1 - 2	2022	10	0.0029	0.5041	0.5463	0.409	0.402	0.0257	0.84
3	1	2 - 3	2023	3	0.0029	0.5041	0.5463	0.055	0.054	0.0034	0.11
4	1	3 - 4	2024	3	0.0029	0.5041	0.5463	0.055	0.054	0.0034	0.11
5	1	4 - 5	2025	3	0.0029	0.5041	0.5463	0.055	0.054	0.0034	0.11
6	1	5 - 6	2026	3	0.0029	0.5041	0.5463	0.055	0.054	0.0034	0.11
7	1	6 - 7	2027	3	0.0029	0.5041	0.5463	0.055	0.054	0.0034	0.11
8	1	7 - 8	2028	3	0.0029	0.5041	0.5463	0.055	0.054	0.0034	0.11
9	1	8 - 9	2029	3	0.0029	0.5041	0.5463	0.055	0.054	0.0034	0.11
10	1	9 - 10	2030	3	0.0029	0.5041	0.5463	0.055	0.054	0.0034	0.11
11	1	10 - 11	2031	3	0.0029	0.5041	0.5463	0.055	0.054	0.0034	0.11
12	1	11 - 12	2032	3	0.0029	0.5041	0.5463	0.055	0.054	0.0034	0.11
13	1	12 - 13	2033	3	0.0029	0.5041	0.5463	0.055	0.054	0.0034	0.11
14	1	13 - 14	2034	3	0.0029	0.5041	0.5463	0.055	0.054	0.0034	0.11
15	1	14 - 15	2035	3	0.0029	0.5041	0.5463	0.055	0.054	0.0034	0.11
16	1	15 - 16	2036	3	0.0029	0.5041	0.5463	0.055	0.054	0.0034	0.11
17	1	16-17	2037	1	0.0029	0.5041	0.5463	0.008	0.008	0.0005	0.02
18	1	17-18	2038	1	0.0029	0.5041	0.5463	0.008	0.008	0.0005	0.02
19	1	18-19	2039	1	0.0029	0.5041	0.5463	0.008	0.008	0.0005	0.02
20	1	19-20	2040	1	0.0029	0.5041	0.5463	0.008	0.008	0.0005	0.02
21	1	20-21	2041	1	0.0029	0.5041	0.5463	0.008	0.008	0.0005	0.02
22	1	21-22	2042	1	0.0029	0.5041	0.5463	0.008	0.008	0.0005	0.02
23	1	22-23	2043	1	0.0029	0.5041	0.5463	0.008	0.008	0.0005	0.02
24	1	23-24	2044	1	0.0029	0.5041	0.5463	0.008	0.008	0.0005	0.02
25	1	24-25	2045	1	0.0029	0.5041	0.5463	0.008	0.008	0.0005	0.02
26	1	25-26	2046	1	0.0029	0.5041	0.5463	0.008	0.008	0.0005	0.02
27	1	26-27	2047	1	0.0029	0.5041	0.5463	0.008	0.008	0.0005	0.02
28	1	27-28	2048	1	0.0029	0.5041	0.5463	0.008	0.008	0.0005	0.02
29	1	28-29	2049	1	0.0029	0.5041	0.5463	0.008	0.008	0.0005	0.02
30	1	29-30	2050	1	0.0029	0.5041	0.5463	0.008	0.008	0.0005	0.02
Total Increased Cancer Risk								1.73	1.703	0.109	**3.54**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00059	0.14	0.15

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 1 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0080	0.2084	0.2260	0.092	0.014	0.0009	0.11
1	1	0 - 1	2021	10	0.0080	0.2084	0.2260	1.110	0.166	0.0106	1.29
2	1	1 - 2	2022	10	0.0080	0.2084	0.2260	1.110	0.166	0.0106	1.29
3	1	2 - 3	2023	3	0.0080	0.2084	0.2260	0.148	0.022	0.0014	0.17
4	1	3 - 4	2024	3	0.0080	0.2084	0.2260	0.148	0.022	0.0014	0.17
5	1	4 - 5	2025	3	0.0080	0.2084	0.2260	0.148	0.022	0.0014	0.17
6	1	5 - 6	2026	3	0.0080	0.2084	0.2260	0.148	0.022	0.0014	0.17
7	1	6 - 7	2027	3	0.0080	0.2084	0.2260	0.148	0.022	0.0014	0.17
8	1	7 - 8	2028	3	0.0080	0.2084	0.2260	0.148	0.022	0.0014	0.17
9	1	8 - 9	2029	3	0.0080	0.2084	0.2260	0.148	0.022	0.0014	0.17
10	1	9 - 10	2030	3	0.0080	0.2084	0.2260	0.148	0.022	0.0014	0.17
11	1	10 - 11	2031	3	0.0080	0.2084	0.2260	0.148	0.022	0.0014	0.17
12	1	11 - 12	2032	3	0.0080	0.2084	0.2260	0.148	0.022	0.0014	0.17
13	1	12 - 13	2033	3	0.0080	0.2084	0.2260	0.148	0.022	0.0014	0.17
14	1	13 - 14	2034	3	0.0080	0.2084	0.2260	0.148	0.022	0.0014	0.17
15	1	14 - 15	2035	3	0.0080	0.2084	0.2260	0.148	0.022	0.0014	0.17
16	1	15 - 16	2036	3	0.0080	0.2084	0.2260	0.148	0.022	0.0014	0.17
17	1	16-17	2037	1	0.0080	0.2084	0.2260	0.023	0.003	0.0002	0.03
18	1	17-18	2038	1	0.0080	0.2084	0.2260	0.023	0.003	0.0002	0.03
19	1	18-19	2039	1	0.0080	0.2084	0.2260	0.023	0.003	0.0002	0.03
20	1	19-20	2040	1	0.0080	0.2084	0.2260	0.023	0.003	0.0002	0.03
21	1	20-21	2041	1	0.0080	0.2084	0.2260	0.023	0.003	0.0002	0.03
22	1	21-22	2042	1	0.0080	0.2084	0.2260	0.023	0.003	0.0002	0.03
23	1	22-23	2043	1	0.0080	0.2084	0.2260	0.023	0.003	0.0002	0.03
24	1	23-24	2044	1	0.0080	0.2084	0.2260	0.023	0.003	0.0002	0.03
25	1	24-25	2045	1	0.0080	0.2084	0.2260	0.023	0.003	0.0002	0.03
26	1	25-26	2046	1	0.0080	0.2084	0.2260	0.023	0.003	0.0002	0.03
27	1	26-27	2047	1	0.0080	0.2084	0.2260	0.023	0.003	0.0002	0.03
28	1	27-28	2048	1	0.0080	0.2084	0.2260	0.023	0.003	0.0002	0.03
29	1	28-29	2049	1	0.0080	0.2084	0.2260	0.023	0.003	0.0002	0.03
30	1	29-30	2050	1	0.0080	0.2084	0.2260	0.023	0.003	0.0002	0.03
Total Increased Cancer Risk								4.70	0.704	0.045	**5.5**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00159	0.19	0.20

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 2 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0036	0.1352	0.1465	0.042	0.009	0.0006	0.05
1	1	0 - 1	2021	10	0.0036	0.1352	0.1465	0.503	0.108	0.0069	0.62
2	1	1 - 2	2022	10	0.0036	0.1352	0.1465	0.503	0.108	0.0069	0.62
3	1	2 - 3	2023	3	0.0036	0.1352	0.1465	0.067	0.014	0.0009	0.08
4	1	3 - 4	2024	3	0.0036	0.1352	0.1465	0.067	0.014	0.0009	0.08
5	1	4 - 5	2025	3	0.0036	0.1352	0.1465	0.067	0.014	0.0009	0.08
6	1	5 - 6	2026	3	0.0036	0.1352	0.1465	0.067	0.014	0.0009	0.08
7	1	6 - 7	2027	3	0.0036	0.1352	0.1465	0.067	0.014	0.0009	0.08
8	1	7 - 8	2028	3	0.0036	0.1352	0.1465	0.067	0.014	0.0009	0.08
9	1	8 - 9	2029	3	0.0036	0.1352	0.1465	0.067	0.014	0.0009	0.08
10	1	9 - 10	2030	3	0.0036	0.1352	0.1465	0.067	0.014	0.0009	0.08
11	1	10 - 11	2031	3	0.0036	0.1352	0.1465	0.067	0.014	0.0009	0.08
12	1	11 - 12	2032	3	0.0036	0.1352	0.1465	0.067	0.014	0.0009	0.08
13	1	12 - 13	2033	3	0.0036	0.1352	0.1465	0.067	0.014	0.0009	0.08
14	1	13 - 14	2034	3	0.0036	0.1352	0.1465	0.067	0.014	0.0009	0.08
15	1	14 - 15	2035	3	0.0036	0.1352	0.1465	0.067	0.014	0.0009	0.08
16	1	15 - 16	2036	3	0.0036	0.1352	0.1465	0.067	0.014	0.0009	0.08
17	1	16-17	2037	1	0.0036	0.1352	0.1465	0.010	0.002	0.0001	0.01
18	1	17-18	2038	1	0.0036	0.1352	0.1465	0.010	0.002	0.0001	0.01
19	1	18-19	2039	1	0.0036	0.1352	0.1465	0.010	0.002	0.0001	0.01
20	1	19-20	2040	1	0.0036	0.1352	0.1465	0.010	0.002	0.0001	0.01
21	1	20-21	2041	1	0.0036	0.1352	0.1465	0.010	0.002	0.0001	0.01
22	1	21-22	2042	1	0.0036	0.1352	0.1465	0.010	0.002	0.0001	0.01
23	1	22-23	2043	1	0.0036	0.1352	0.1465	0.010	0.002	0.0001	0.01
24	1	23-24	2044	1	0.0036	0.1352	0.1465	0.010	0.002	0.0001	0.01
25	1	24-25	2045	1	0.0036	0.1352	0.1465	0.010	0.002	0.0001	0.01
26	1	25-26	2046	1	0.0036	0.1352	0.1465	0.010	0.002	0.0001	0.01
27	1	26-27	2047	1	0.0036	0.1352	0.1465	0.010	0.002	0.0001	0.01
28	1	27-28	2048	1	0.0036	0.1352	0.1465	0.010	0.002	0.0001	0.01
29	1	28-29	2049	1	0.0036	0.1352	0.1465	0.010	0.002	0.0001	0.01
30	1	29-30	2050	1	0.0036	0.1352	0.1465	0.010	0.002	0.0001	0.01
Total Increased Cancer Risk								2.13	0.457	0.029	**2.62**

Maximum Hazard Index	Fugitive PM2.5	Total PM2.5
0.00072	0.12	0.13

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 2 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0033	0.1173	0.1271	0.038	0.008	0.0005	0.05
1	1	0 - 1	2021	10	0.0033	0.1173	0.1271	0.458	0.093	0.0060	0.56
2	1	1 - 2	2022	10	0.0033	0.1173	0.1271	0.458	0.093	0.0060	0.56
3	1	2 - 3	2023	3	0.0033	0.1173	0.1271	0.061	0.012	0.0008	0.07
4	1	3 - 4	2024	3	0.0033	0.1173	0.1271	0.061	0.012	0.0008	0.07
5	1	4 - 5	2025	3	0.0033	0.1173	0.1271	0.061	0.012	0.0008	0.07
6	1	5 - 6	2026	3	0.0033	0.1173	0.1271	0.061	0.012	0.0008	0.07
7	1	6 - 7	2027	3	0.0033	0.1173	0.1271	0.061	0.012	0.0008	0.07
8	1	7 - 8	2028	3	0.0033	0.1173	0.1271	0.061	0.012	0.0008	0.07
9	1	8 - 9	2029	3	0.0033	0.1173	0.1271	0.061	0.012	0.0008	0.07
10	1	9 - 10	2030	3	0.0033	0.1173	0.1271	0.061	0.012	0.0008	0.07
11	1	10 - 11	2031	3	0.0033	0.1173	0.1271	0.061	0.012	0.0008	0.07
12	1	11 - 12	2032	3	0.0033	0.1173	0.1271	0.061	0.012	0.0008	0.07
13	1	12 - 13	2033	3	0.0033	0.1173	0.1271	0.061	0.012	0.0008	0.07
14	1	13 - 14	2034	3	0.0033	0.1173	0.1271	0.061	0.012	0.0008	0.07
15	1	14 - 15	2035	3	0.0033	0.1173	0.1271	0.061	0.012	0.0008	0.07
16	1	15 - 16	2036	3	0.0033	0.1173	0.1271	0.061	0.012	0.0008	0.07
17	1	16-17	2037	1	0.0033	0.1173	0.1271	0.009	0.002	0.0001	0.01
18	1	17-18	2038	1	0.0033	0.1173	0.1271	0.009	0.002	0.0001	0.01
19	1	18-19	2039	1	0.0033	0.1173	0.1271	0.009	0.002	0.0001	0.01
20	1	19-20	2040	1	0.0033	0.1173	0.1271	0.009	0.002	0.0001	0.01
21	1	20-21	2041	1	0.0033	0.1173	0.1271	0.009	0.002	0.0001	0.01
22	1	21-22	2042	1	0.0033	0.1173	0.1271	0.009	0.002	0.0001	0.01
23	1	22-23	2043	1	0.0033	0.1173	0.1271	0.009	0.002	0.0001	0.01
24	1	23-24	2044	1	0.0033	0.1173	0.1271	0.009	0.002	0.0001	0.01
25	1	24-25	2045	1	0.0033	0.1173	0.1271	0.009	0.002	0.0001	0.01
26	1	25-26	2046	1	0.0033	0.1173	0.1271	0.009	0.002	0.0001	0.01
27	1	26-27	2047	1	0.0033	0.1173	0.1271	0.009	0.002	0.0001	0.01
28	1	27-28	2048	1	0.0033	0.1173	0.1271	0.009	0.002	0.0001	0.01
29	1	28-29	2049	1	0.0033	0.1173	0.1271	0.009	0.002	0.0001	0.01
30	1	29-30	2050	1	0.0033	0.1173	0.1271	0.009	0.002	0.0001	0.01
Total Increased Cancer Risk								1.94	0.396	0.025	**2.4**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00066	0.11	0.11

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 3 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0049	0.1910	0.2070	0.056	0.013	0.0008	0.07
1	1	0 - 1	2021	10	0.0049	0.1910	0.2070	0.681	0.152	0.0097	0.84
2	1	1 - 2	2022	10	0.0049	0.1910	0.2070	0.681	0.152	0.0097	0.84
3	1	2 - 3	2023	3	0.0049	0.1910	0.2070	0.091	0.020	0.0013	0.11
4	1	3 - 4	2024	3	0.0049	0.1910	0.2070	0.091	0.020	0.0013	0.11
5	1	4 - 5	2025	3	0.0049	0.1910	0.2070	0.091	0.020	0.0013	0.11
6	1	5 - 6	2026	3	0.0049	0.1910	0.2070	0.091	0.020	0.0013	0.11
7	1	6 - 7	2027	3	0.0049	0.1910	0.2070	0.091	0.020	0.0013	0.11
8	1	7 - 8	2028	3	0.0049	0.1910	0.2070	0.091	0.020	0.0013	0.11
9	1	8 - 9	2029	3	0.0049	0.1910	0.2070	0.091	0.020	0.0013	0.11
10	1	9 - 10	2030	3	0.0049	0.1910	0.2070	0.091	0.020	0.0013	0.11
11	1	10 - 11	2031	3	0.0049	0.1910	0.2070	0.091	0.020	0.0013	0.11
12	1	11 - 12	2032	3	0.0049	0.1910	0.2070	0.091	0.020	0.0013	0.11
13	1	12 - 13	2033	3	0.0049	0.1910	0.2070	0.091	0.020	0.0013	0.11
14	1	13 - 14	2034	3	0.0049	0.1910	0.2070	0.091	0.020	0.0013	0.11
15	1	14 - 15	2035	3	0.0049	0.1910	0.2070	0.091	0.020	0.0013	0.11
16	1	15 - 16	2036	3	0.0049	0.1910	0.2070	0.091	0.020	0.0013	0.11
17	1	16-17	2037	1	0.0049	0.1910	0.2070	0.014	0.003	0.0002	0.02
18	1	17-18	2038	1	0.0049	0.1910	0.2070	0.014	0.003	0.0002	0.02
19	1	18-19	2039	1	0.0049	0.1910	0.2070	0.014	0.003	0.0002	0.02
20	1	19-20	2040	1	0.0049	0.1910	0.2070	0.014	0.003	0.0002	0.02
21	1	20-21	2041	1	0.0049	0.1910	0.2070	0.014	0.003	0.0002	0.02
22	1	21-22	2042	1	0.0049	0.1910	0.2070	0.014	0.003	0.0002	0.02
23	1	22-23	2043	1	0.0049	0.1910	0.2070	0.014	0.003	0.0002	0.02
24	1	23-24	2044	1	0.0049	0.1910	0.2070	0.014	0.003	0.0002	0.02
25	1	24-25	2045	1	0.0049	0.1910	0.2070	0.014	0.003	0.0002	0.02
26	1	25-26	2046	1	0.0049	0.1910	0.2070	0.014	0.003	0.0002	0.02
27	1	26-27	2047	1	0.0049	0.1910	0.2070	0.014	0.003	0.0002	0.02
28	1	27-28	2048	1	0.0049	0.1910	0.2070	0.014	0.003	0.0002	0.02
29	1	28-29	2049	1	0.0049	0.1910	0.2070	0.014	0.003	0.0002	0.02
30	1	29-30	2050	1	0.0049	0.1910	0.2070	0.014	0.003	0.0002	0.02
Total Increased Cancer Risk								2.89	0.645	0.041	**3.57**

* Third trimester of pregnancy

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00098	0.17	0.19

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at El Paseo Building 3 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0043	0.1529	0.1658	0.049	0.010	0.0006	0.06
1	1	0 - 1	2021	10	0.0043	0.1529	0.1658	0.598	0.122	0.0078	0.73
2	1	1 - 2	2022	10	0.0043	0.1529	0.1658	0.598	0.122	0.0078	0.73
3	1	2 - 3	2023	3	0.0043	0.1529	0.1658	0.080	0.016	0.0010	0.10
4	1	3 - 4	2024	3	0.0043	0.1529	0.1658	0.080	0.016	0.0010	0.10
5	1	4 - 5	2025	3	0.0043	0.1529	0.1658	0.080	0.016	0.0010	0.10
6	1	5 - 6	2026	3	0.0043	0.1529	0.1658	0.080	0.016	0.0010	0.10
7	1	6 - 7	2027	3	0.0043	0.1529	0.1658	0.080	0.016	0.0010	0.10
8	1	7 - 8	2028	3	0.0043	0.1529	0.1658	0.080	0.016	0.0010	0.10
9	1	8 - 9	2029	3	0.0043	0.1529	0.1658	0.080	0.016	0.0010	0.10
10	1	9 - 10	2030	3	0.0043	0.1529	0.1658	0.080	0.016	0.0010	0.10
11	1	10 - 11	2031	3	0.0043	0.1529	0.1658	0.080	0.016	0.0010	0.10
12	1	11 - 12	2032	3	0.0043	0.1529	0.1658	0.080	0.016	0.0010	0.10
13	1	12 - 13	2033	3	0.0043	0.1529	0.1658	0.080	0.016	0.0010	0.10
14	1	13 - 14	2034	3	0.0043	0.1529	0.1658	0.080	0.016	0.0010	0.10
15	1	14 - 15	2035	3	0.0043	0.1529	0.1658	0.080	0.016	0.0010	0.10
16	1	15 - 16	2036	3	0.0043	0.1529	0.1658	0.080	0.016	0.0010	0.10
17	1	16-17	2037	1	0.0043	0.1529	0.1658	0.012	0.003	0.0002	0.01
18	1	17-18	2038	1	0.0043	0.1529	0.1658	0.012	0.003	0.0002	0.01
19	1	18-19	2039	1	0.0043	0.1529	0.1658	0.012	0.003	0.0002	0.01
20	1	19-20	2040	1	0.0043	0.1529	0.1658	0.012	0.003	0.0002	0.01
21	1	20-21	2041	1	0.0043	0.1529	0.1658	0.012	0.003	0.0002	0.01
22	1	21-22	2042	1	0.0043	0.1529	0.1658	0.012	0.003	0.0002	0.01
23	1	22-23	2043	1	0.0043	0.1529	0.1658	0.012	0.003	0.0002	0.01
24	1	23-24	2044	1	0.0043	0.1529	0.1658	0.012	0.003	0.0002	0.01
25	1	24-25	2045	1	0.0043	0.1529	0.1658	0.012	0.003	0.0002	0.01
26	1	25-26	2046	1	0.0043	0.1529	0.1658	0.012	0.003	0.0002	0.01
27	1	26-27	2047	1	0.0043	0.1529	0.1658	0.012	0.003	0.0002	0.01
28	1	27-28	2048	1	0.0043	0.1529	0.1658	0.012	0.003	0.0002	0.01
29	1	28-29	2049	1	0.0043	0.1529	0.1658	0.012	0.003	0.0002	0.01
30	1	29-30	2050	1	0.0043	0.1529	0.1658	0.012	0.003	0.0002	0.01
Total Increased Cancer Risk								2.53	0.517	0.033	**3.1**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00086	0.14	0.15

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at Saratoga On-Site 1st Level (2nd Floor) Residential Receptors - 8.2 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0036	0.0618	0.0667	0.042	0.004	0.0003	0.05
1	1	0 - 1	2021	10	0.0036	0.0618	0.0667	0.507	0.049	0.0031	0.56
2	1	1 - 2	2022	10	0.0036	0.0618	0.0667	0.507	0.049	0.0031	0.56
3	1	2 - 3	2023	3	0.0036	0.0618	0.0667	0.068	0.007	0.0004	0.07
4	1	3 - 4	2024	3	0.0036	0.0618	0.0667	0.068	0.007	0.0004	0.07
5	1	4 - 5	2025	3	0.0036	0.0618	0.0667	0.068	0.007	0.0004	0.07
6	1	5 - 6	2026	3	0.0036	0.0618	0.0667	0.068	0.007	0.0004	0.07
7	1	6 - 7	2027	3	0.0036	0.0618	0.0667	0.068	0.007	0.0004	0.07
8	1	7 - 8	2028	3	0.0036	0.0618	0.0667	0.068	0.007	0.0004	0.07
9	1	8 - 9	2029	3	0.0036	0.0618	0.0667	0.068	0.007	0.0004	0.07
10	1	9 - 10	2030	3	0.0036	0.0618	0.0667	0.068	0.007	0.0004	0.07
11	1	10 - 11	2031	3	0.0036	0.0618	0.0667	0.068	0.007	0.0004	0.07
12	1	11 - 12	2032	3	0.0036	0.0618	0.0667	0.068	0.007	0.0004	0.07
13	1	12 - 13	2033	3	0.0036	0.0618	0.0667	0.068	0.007	0.0004	0.07
14	1	13 - 14	2034	3	0.0036	0.0618	0.0667	0.068	0.007	0.0004	0.07
15	1	14 - 15	2035	3	0.0036	0.0618	0.0667	0.068	0.007	0.0004	0.07
16	1	15 - 16	2036	3	0.0036	0.0618	0.0667	0.068	0.007	0.0004	0.07
17	1	16-17	2037	1	0.0036	0.0618	0.0667	0.010	0.001	0.0001	0.01
18	1	17-18	2038	1	0.0036	0.0618	0.0667	0.010	0.001	0.0001	0.01
19	1	18-19	2039	1	0.0036	0.0618	0.0667	0.010	0.001	0.0001	0.01
20	1	19-20	2040	1	0.0036	0.0618	0.0667	0.010	0.001	0.0001	0.01
21	1	20-21	2041	1	0.0036	0.0618	0.0667	0.010	0.001	0.0001	0.01
22	1	21-22	2042	1	0.0036	0.0618	0.0667	0.010	0.001	0.0001	0.01
23	1	22-23	2043	1	0.0036	0.0618	0.0667	0.010	0.001	0.0001	0.01
24	1	23-24	2044	1	0.0036	0.0618	0.0667	0.010	0.001	0.0001	0.01
25	1	24-25	2045	1	0.0036	0.0618	0.0667	0.010	0.001	0.0001	0.01
26	1	25-26	2046	1	0.0036	0.0618	0.0667	0.010	0.001	0.0001	0.01
27	1	26-27	2047	1	0.0036	0.0618	0.0667	0.010	0.001	0.0001	0.01
28	1	27-28	2048	1	0.0036	0.0618	0.0667	0.010	0.001	0.0001	0.01
29	1	28-29	2049	1	0.0036	0.0618	0.0667	0.010	0.001	0.0001	0.01
30	1	29-30	2050	1	0.0036	0.0618	0.0667	0.010	0.001	0.0001	0.01
Total Increased Cancer Risk								2.15	0.209	0.013	**2.37**

* Third trimester of pregnancy

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00073	0.05	0.06

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Saratoga Avenue Cancer Risk
Impacts at Saratoga On-Site 2nd Level (3rd Floor) Residential Receptors - 11.3 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0017	0.0340	0.0367	0.020	0.002	0.0001	0.02
1	1	0 - 1	2021	10	0.0017	0.0340	0.0367	0.243	0.027	0.0017	0.27
2	1	1 - 2	2022	10	0.0017	0.0340	0.0367	0.243	0.027	0.0017	0.27
3	1	2 - 3	2023	3	0.0017	0.0340	0.0367	0.032	0.004	0.0002	0.04
4	1	3 - 4	2024	3	0.0017	0.0340	0.0367	0.032	0.004	0.0002	0.04
5	1	4 - 5	2025	3	0.0017	0.0340	0.0367	0.032	0.004	0.0002	0.04
6	1	5 - 6	2026	3	0.0017	0.0340	0.0367	0.032	0.004	0.0002	0.04
7	1	6 - 7	2027	3	0.0017	0.0340	0.0367	0.032	0.004	0.0002	0.04
8	1	7 - 8	2028	3	0.0017	0.0340	0.0367	0.032	0.004	0.0002	0.04
9	1	8 - 9	2029	3	0.0017	0.0340	0.0367	0.032	0.004	0.0002	0.04
10	1	9 - 10	2030	3	0.0017	0.0340	0.0367	0.032	0.004	0.0002	0.04
11	1	10 - 11	2031	3	0.0017	0.0340	0.0367	0.032	0.004	0.0002	0.04
12	1	11 - 12	2032	3	0.0017	0.0340	0.0367	0.032	0.004	0.0002	0.04
13	1	12 - 13	2033	3	0.0017	0.0340	0.0367	0.032	0.004	0.0002	0.04
14	1	13 - 14	2034	3	0.0017	0.0340	0.0367	0.032	0.004	0.0002	0.04
15	1	14 - 15	2035	3	0.0017	0.0340	0.0367	0.032	0.004	0.0002	0.04
16	1	15 - 16	2036	3	0.0017	0.0340	0.0367	0.032	0.004	0.0002	0.04
17	1	16-17	2037	1	0.0017	0.0340	0.0367	0.005	0.001	0.0000	0.01
18	1	17-18	2038	1	0.0017	0.0340	0.0367	0.005	0.001	0.0000	0.01
19	1	18-19	2039	1	0.0017	0.0340	0.0367	0.005	0.001	0.0000	0.01
20	1	19-20	2040	1	0.0017	0.0340	0.0367	0.005	0.001	0.0000	0.01
21	1	20-21	2041	1	0.0017	0.0340	0.0367	0.005	0.001	0.0000	0.01
22	1	21-22	2042	1	0.0017	0.0340	0.0367	0.005	0.001	0.0000	0.01
23	1	22-23	2043	1	0.0017	0.0340	0.0367	0.005	0.001	0.0000	0.01
24	1	23-24	2044	1	0.0017	0.0340	0.0367	0.005	0.001	0.0000	0.01
25	1	24-25	2045	1	0.0017	0.0340	0.0367	0.005	0.001	0.0000	0.01
26	1	25-26	2046	1	0.0017	0.0340	0.0367	0.005	0.001	0.0000	0.01
27	1	26-27	2047	1	0.0017	0.0340	0.0367	0.005	0.001	0.0000	0.01
28	1	27-28	2048	1	0.0017	0.0340	0.0367	0.005	0.001	0.0000	0.01
29	1	28-29	2049	1	0.0017	0.0340	0.0367	0.005	0.001	0.0000	0.01
30	1	29-30	2050	1	0.0017	0.0340	0.0367	0.005	0.001	0.0000	0.01
Total Increased Cancer Risk								1.03	0.115	0.007	**1.2**

Maximum Hazard Index	Maximum Fugitive PM2.5	Maximum Total PM2.5
0.00035	0.03	0.03

* Third trimester of pregnancy

Prospect Road Traffic Emissions and Health Risk Calculations

Analysis Year = ***2021***

Vehicle Type	2016 Caltrans Vehicles (veh/day)	2021 Vehicles (veh/day)
Total	**21,940**	**23,037**

Increase From 2016	1.05
Vehicles/Direction	**11,519**
Avg Vehicles/Hour/Direction	480

Traffic Data Year = ***2016***

El Paeso & Saratoga Traffic Report Volumes	AADT Total
Background + EP2 No Ed Condition - Prospect Rd	21,940

Percent of Total Vehicles

Traffic Increase per Year (%) = *1.00%*

El Paseo Option 2 No Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Prospect Road / Campbell Avenue
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
DPM_EB_PRO	Prospect Road / Campbell Ave Eastbound	EB	2	1144.4	0.71	13.3	43.7	3.4	Varied	11,519	15,238	164,020	7.074E-09	5.216E-09	6.8	3.16
DPM_WB_PRO	Prospect Road / Cambell Ave Westbound	WB	2	1137.5	0.71	13.3	43.7	3.4	Varied	11,519	15,146	163,031	7.074E-09	5.216E-09	6.8	3.16
									Total	23,037						

Emission Factors

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle (g/VMT)	0.00114	0.001319		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and DPM Emissions - DPM_EB_PRO

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.82%	439	9.87E-05	9	6.42%	739	1.93E-04	17	5.55%	639	1.67E-04
2	2.60%	300	6.73E-05	10	7.23%	832	1.87E-04	18	3.24%	373	9.71E-05
3	2.83%	326	7.33E-05	11	6.30%	726	1.63E-04	19	2.43%	280	6.28E-05
4	3.41%	393	8.82E-05	12	6.99%	806	1.81E-04	20	0.92%	107	2.39E-05
5	2.20%	253	5.68E-05	13	6.18%	712	1.60E-04	21	3.06%	353	7.93E-05
6	3.35%	386	8.67E-05	14	6.13%	706	1.59E-04	22	4.16%	479	1.08E-04
7	6.13%	706	1.59E-04	15	5.14%	593	1.33E-04	23	2.43%	280	6.28E-05
8	4.74%	546	1.42E-04	16	3.87%	446	1.00E-04	24	0.87%	100	2.24E-05
								Total		11,519	

2021 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_WB_PRO

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.82%	439	9.81E-05	9	6.42%	739	1.91E-04	17	5.55%	639	1.66E-04
2	2.60%	300	6.69E-05	10	7.23%	832	1.86E-04	18	3.24%	373	9.66E-05
3	2.83%	326	7.28E-05	11	6.30%	726	1.62E-04	19	2.43%	280	6.24E-05
4	3.41%	393	8.77E-05	12	6.99%	806	1.80E-04	20	0.92%	107	2.38E-05
5	2.20%	253	5.65E-05	13	6.18%	712	1.59E-04	21	3.06%	353	7.88E-05
6	3.35%	386	8.62E-05	14	6.13%	706	1.58E-04	22	4.16%	479	1.07E-04
7	6.13%	706	1.58E-04	15	5.14%	593	1.32E-04	23	2.43%	280	6.24E-05
8	4.74%	546	1.41E-04	16	3.87%	446	9.96E-05	24	0.87%	100	2.23E-05
								Total		11,519	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Prospect Road / Campbell Avenue
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height (m)	(Sigma z) Initial Vertical Dimension
PM2.5_EB_PRO	Prospect Road / Campbell Ave Eastbound	EB	2	1144.4	0.71	13.3	44	1.3	Varied	11,519	15,238	164,020	1.475E-08	1.088E-08	2.6	1.21
PM2.5_WB_PRO	Prospect Road / Cambell Ave Westbound	WB	2	1137.5	0.71	13.3	44	1.3	Varied	11,519	15,146	163,031	1.475E-08	1.088E-08	2.6	1.21
									Total	23,037						

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle (g/VMT)	0.002371	0.00326		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and PM2.5 Emissions - PM2.5_EB_PRO

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	133	6.24E-05	9	7.11%	819	5.27E-04	17	7.38%	850	5.48E-04
2	0.42%	48	2.27E-05	10	4.39%	506	2.37E-04	18	8.17%	941	6.06E-04
3	0.41%	47	2.20E-05	11	4.67%	538	2.52E-04	19	5.70%	656	3.07E-04
4	0.27%	31	1.45E-05	12	5.89%	678	3.18E-04	20	4.27%	492	2.30E-04
5	0.50%	58	2.72E-05	13	6.15%	709	3.32E-04	21	3.25%	375	1.76E-04
6	0.91%	105	4.90E-05	14	6.03%	695	3.25E-04	22	3.30%	380	1.78E-04
7	3.79%	437	2.05E-04	15	7.01%	807	3.78E-04	23	2.46%	283	1.33E-04
8	7.76%	894	5.76E-04	16	7.14%	822	3.85E-04	24	1.87%	215	1.01E-04
								Total		11,519	

2021 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM2.5_WB_PRO

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	133	6.20E-05	9	7.11%	819	5.24E-04	17	7.38%	850	5.44E-04
2	0.42%	48	2.26E-05	10	4.39%	506	2.35E-04	18	8.17%	941	6.02E-04
3	0.41%	47	2.19E-05	11	4.67%	538	2.50E-04	19	5.70%	656	3.06E-04
4	0.27%	31	1.44E-05	12	5.89%	678	3.16E-04	20	4.27%	492	2.29E-04
5	0.50%	58	2.70E-05	13	6.15%	709	3.30E-04	21	3.25%	375	1.74E-04
6	0.91%	105	4.87E-05	14	6.03%	695	3.24E-04	22	3.30%	380	1.77E-04
7	3.79%	437	2.03E-04	15	7.01%	807	3.76E-04	23	2.46%	283	1.32E-04
8	7.76%	894	5.73E-04	16	7.14%	822	3.83E-04	24	1.87%	215	1.00E-04
								Total		11,519	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Prospect Road / Campbell Avenue
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEXH_EB_PRO	Prospect Road / Campbell Ave Eastbound	EB	2	1144.4	0.71	13.3	44	1.3	Varied	11,519	15,238	164,020	2.416E-07	1.781E-07	2.6	1.21
TEXH_WB_PRO	Prospect Road / Cambell Ave Westbound	WB	2	1137.5	0.71	13.3	44	1.3	Varied	11,519	15,146	163,031	2.416E-07	1.781E-07	2.6	1.21
									Total	23,037						

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle (g/VMT)	0.03883	0.05828		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_EB_PRO

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	133	1.02E-03	9	7.11%	819	9.42E-03	17	7.38%	850	9.79E-03
2	0.42%	48	3.72E-04	10	4.39%	506	3.88E-03	18	8.17%	941	1.08E-02
3	0.41%	47	3.61E-04	11	4.67%	538	4.12E-03	19	5.70%	656	5.03E-03
4	0.27%	31	2.37E-04	12	5.89%	678	5.20E-03	20	4.27%	492	3.77E-03
5	0.50%	58	4.45E-04	13	6.15%	709	5.44E-03	21	3.25%	375	2.87E-03
6	0.91%	105	8.03E-04	14	6.03%	695	5.33E-03	22	3.30%	380	2.91E-03
7	3.79%	437	3.35E-03	15	7.01%	807	6.19E-03	23	2.46%	283	2.17E-03
8	7.76%	894	1.03E-02	16	7.14%	822	6.30E-03	24	1.87%	215	1.65E-03
								Total		11,519	

2021 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_WB_PRO

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	133	1.02E-03	9	7.11%	819	9.37E-03	17	7.38%	850	9.73E-03
2	0.42%	48	3.69E-04	10	4.39%	506	3.86E-03	18	8.17%	941	1.08E-02
3	0.41%	47	3.59E-04	11	4.67%	538	4.10E-03	19	5.70%	656	5.00E-03
4	0.27%	31	2.36E-04	12	5.89%	678	5.17E-03	20	4.27%	492	3.75E-03
5	0.50%	58	4.43E-04	13	6.15%	709	5.40E-03	21	3.25%	375	2.86E-03
6	0.91%	105	7.98E-04	14	6.03%	695	5.30E-03	22	3.30%	380	2.90E-03
7	3.79%	437	3.33E-03	15	7.01%	807	6.15E-03	23	2.46%	283	2.16E-03
8	7.76%	894	1.02E-02	16	7.14%	822	6.27E-03	24	1.87%	215	1.64E-03
								Total		11,519	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Prospect Road / Campbell Avenue
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
TEVAP_EB_PRO	Prospect Road / Campbell Ave Eastbound	EB	2	1144.4	0.71	13.3	44	1.3	Varied	11,519	15,238	164,020	2.641E-07	1.947E-07	2.6	1.21
TEVAP_WB_PRO	Prospect Road / Cambell Ave Westbound	WB	2	1137.5	0.71	13.3	44	1.3	Varied	11,519	15,146	163,031	2.641E-07	1.947E-07	2.6	1.21
									Total	23,037						

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Emissions per Vehicle per Hour (g/hour)	1.48576	1.48576		
Emissions per Vehicle per Mile (g/VMT)	0.04245	0.05943		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_EB_PRO

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	133	1.12E-03	9	7.11%	819	9.61E-03	17	7.38%	850	9.98E-03
2	0.42%	48	4.06E-04	10	4.39%	506	4.24E-03	18	8.17%	941	1.10E-02
3	0.41%	47	3.95E-04	11	4.67%	538	4.51E-03	19	5.70%	656	5.50E-03
4	0.27%	31	2.59E-04	12	5.89%	678	5.69E-03	20	4.27%	492	4.13E-03
5	0.50%	58	4.87E-04	13	6.15%	709	5.94E-03	21	3.25%	375	3.14E-03
6	0.91%	105	8.77E-04	14	6.03%	695	5.83E-03	22	3.30%	380	3.19E-03
7	3.79%	437	3.66E-03	15	7.01%	807	6.77E-03	23	2.46%	283	2.37E-03
8	7.76%	894	1.05E-02	16	7.14%	822	6.89E-03	24	1.87%	215	1.80E-03
								Total		11,519	

2021 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_WB_PRO

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	133	1.11E-03	9	7.11%	819	9.55E-03	17	7.38%	850	9.92E-03
2	0.42%	48	4.04E-04	10	4.39%	506	4.21E-03	18	8.17%	941	1.10E-02
3	0.41%	47	3.92E-04	11	4.67%	538	4.48E-03	19	5.70%	656	5.47E-03
4	0.27%	31	2.58E-04	12	5.89%	678	5.65E-03	20	4.27%	492	4.10E-03
5	0.50%	58	4.84E-04	13	6.15%	709	5.91E-03	21	3.25%	375	3.12E-03
6	0.91%	105	8.72E-04	14	6.03%	695	5.79E-03	22	3.30%	380	3.17E-03
7	3.79%	437	3.64E-03	15	7.01%	807	6.73E-03	23	2.46%	283	2.36E-03
8	7.76%	894	1.04E-02	16	7.14%	822	6.85E-03	24	1.87%	215	1.79E-03
								Total		11,519	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - On- and Off-Site Residential
Cumulative Operation - Prospect Road / Campbell Avenue
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2021

											Line Area					
Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day	Area (sq m)	Area (sq ft)	Emission (g/s/m2)	Emission (lb/hr/ft2)	Initial Vertical height	(Sigma z) Initial Vertical Dimension
FUG_EB_PRO	Prospect Road / Campbell Ave Eastbound	EB	2	1144.4	0.71	13.3	44	1.3	Varied	11,519	15,238	164,020	2.104E-07	1.551E-07	2.6	1.21
FUG_WB_PRO	Prospect Road / Cambell Ave Westbound	WB	2	1137.5	0.71	13.3	44	1.3	Varied	11,519	15,146	163,031	2.104E-07	1.551E-07	2.6	1.21
									Total	23,037						

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	35	25		
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211	0.00211		
Brake Wear - Emissions per Vehicle (g/VMT)	0.01681	0.01681		
Road Dust - Emissions per Vehicle (g/VMT)	0.01489	0.01489		
otal Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03381	0.03381		

Emisson Factors from CT-EMFAC2017

2021 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_EB_PRO

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.16%	133	8.90E-04	9	7.11%	819	5.47E-03	17	7.38%	850	5.68E-03
2	0.42%	48	3.24E-04	10	4.39%	506	3.38E-03	18	8.17%	941	6.28E-03
3	0.41%	47	3.14E-04	11	4.67%	538	3.59E-03	19	5.70%	656	4.38E-03
4	0.27%	31	2.06E-04	12	5.89%	678	4.53E-03	20	4.27%	492	3.29E-03
5	0.50%	58	3.88E-04	13	6.15%	709	4.73E-03	21	3.25%	375	2.50E-03
6	0.91%	105	6.99E-04	14	6.03%	695	4.64E-03	22	3.30%	380	2.54E-03
7	3.79%	437	2.92E-03	15	7.01%	807	5.39E-03	23	2.46%	283	1.89E-03
8	7.76%	894	5.97E-03	16	7.14%	822	5.49E-03	24	1.87%	215	1.44E-03
								Total		11,519	

2021 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_WB_PRO

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.16%	133	8.84E-04	9	7.11%	819	5.43E-03	17	7.38%	850	5.65E-03
2	0.42%	48	3.22E-04	10	4.39%	506	3.36E-03	18	8.17%	941	6.25E-03
3	0.41%	47	3.12E-04	11	4.67%	538	3.57E-03	19	5.70%	656	4.36E-03
4	0.27%	31	2.05E-04	12	5.89%	678	4.50E-03	20	4.27%	492	3.27E-03
5	0.50%	58	3.85E-04	13	6.15%	709	4.70E-03	21	3.25%	375	2.49E-03
6	0.91%	105	6.95E-04	14	6.03%	695	4.61E-03	22	3.30%	380	2.52E-03
7	3.79%	437	2.90E-03	15	7.01%	807	5.36E-03	23	2.46%	283	1.88E-03
8	7.76%	894	5.94E-03	16	7.14%	822	5.46E-03	24	1.87%	215	1.43E-03
								Total		11,519	

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Prospect Road Traffic Cancer Risk
Impacts at Construction MEI - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0006	0.0199	0.0213	0.007	0.001	0.0001	0.01
1	1	0 - 1	2021	10	0.0006	0.0199	0.0213	0.081	0.016	0.0010	0.10
2	1	1 - 2	2022	10	0.0006	0.0199	0.0213	0.081	0.016	0.0010	0.10
3	1	2 - 3	2023	3	0.0006	0.0199	0.0213	0.011	0.002	0.0001	0.01
4	1	3 - 4	2024	3	0.0006	0.0199	0.0213	0.011	0.002	0.0001	0.01
5	1	4 - 5	2025	3	0.0006	0.0199	0.0213	0.011	0.002	0.0001	0.01
6	1	5 - 6	2026	3	0.0006	0.0199	0.0213	0.011	0.002	0.0001	0.01
7	1	6 - 7	2027	3	0.0006	0.0199	0.0213	0.011	0.002	0.0001	0.01
8	1	7 - 8	2028	3	0.0006	0.0199	0.0213	0.011	0.002	0.0001	0.01
9	1	8 - 9	2029	3	0.0006	0.0199	0.0213	0.011	0.002	0.0001	0.01
10	1	9 - 10	2030	3	0.0006	0.0199	0.0213	0.011	0.002	0.0001	0.01
11	1	10 - 11	2031	3	0.0006	0.0199	0.0213	0.011	0.002	0.0001	0.01
12	1	11 - 12	2032	3	0.0006	0.0199	0.0213	0.011	0.002	0.0001	0.01
13	1	12 - 13	2033	3	0.0006	0.0199	0.0213	0.011	0.002	0.0001	0.01
14	1	13 - 14	2034	3	0.0006	0.0199	0.0213	0.011	0.002	0.0001	0.01
15	1	14 - 15	2035	3	0.0006	0.0199	0.0213	0.011	0.002	0.0001	0.01
16	1	15 - 16	2036	3	0.0006	0.0199	0.0213	0.011	0.002	0.0001	0.01
17	1	16-17	2037	1	0.0006	0.0199	0.0213	0.002	0.000	0.0000	0.00
18	1	17-18	2038	1	0.0006	0.0199	0.0213	0.002	0.000	0.0000	0.00
19	1	18-19	2039	1	0.0006	0.0199	0.0213	0.002	0.000	0.0000	0.00
20	1	19-20	2040	1	0.0006	0.0199	0.0213	0.002	0.000	0.0000	0.00
21	1	20-21	2041	1	0.0006	0.0199	0.0213	0.002	0.000	0.0000	0.00
22	1	21-22	2042	1	0.0006	0.0199	0.0213	0.002	0.000	0.0000	0.00
23	1	22-23	2043	1	0.0006	0.0199	0.0213	0.002	0.000	0.0000	0.00
24	1	23-24	2044	1	0.0006	0.0199	0.0213	0.002	0.000	0.0000	0.00
25	1	24-25	2045	1	0.0006	0.0199	0.0213	0.002	0.000	0.0000	0.00
26	1	25-26	2046	1	0.0006	0.0199	0.0213	0.002	0.000	0.0000	0.00
27	1	26-27	2047	1	0.0006	0.0199	0.0213	0.002	0.000	0.0000	0.00
28	1	27-28	2048	1	0.0006	0.0199	0.0213	0.002	0.000	0.0000	0.00
29	1	28-29	2049	1	0.0006	0.0199	0.0213	0.002	0.000	0.0000	0.00
30	1	29-30	2050	1	0.0006	0.0199	0.0213	0.002	0.000	0.0000	0.00
Total Increased Cancer Risk								0.34	0.067	0.004	**0.41**

Maximum Hazard Index	Fugitive PM2.5	Total PM2.5
0.0001	0.02	0.02

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at El Paseo Building 1 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0012	0.0405	0.0432	0.014	0.003	0.0002	0.02
1	1	0 - 1	2021	10	0.0012	0.0405	0.0432	0.163	0.032	0.0020	0.20
2	1	1 - 2	2022	10	0.0012	0.0405	0.0432	0.163	0.032	0.0020	0.20
3	1	2 - 3	2023	3	0.0012	0.0405	0.0432	0.022	0.004	0.0003	0.03
4	1	3 - 4	2024	3	0.0012	0.0405	0.0432	0.022	0.004	0.0003	0.03
5	1	4 - 5	2025	3	0.0012	0.0405	0.0432	0.022	0.004	0.0003	0.03
6	1	5 - 6	2026	3	0.0012	0.0405	0.0432	0.022	0.004	0.0003	0.03
7	1	6 - 7	2027	3	0.0012	0.0405	0.0432	0.022	0.004	0.0003	0.03
8	1	7 - 8	2028	3	0.0012	0.0405	0.0432	0.022	0.004	0.0003	0.03
9	1	8 - 9	2029	3	0.0012	0.0405	0.0432	0.022	0.004	0.0003	0.03
10	1	9 - 10	2030	3	0.0012	0.0405	0.0432	0.022	0.004	0.0003	0.03
11	1	10 - 11	2031	3	0.0012	0.0405	0.0432	0.022	0.004	0.0003	0.03
12	1	11 - 12	2032	3	0.0012	0.0405	0.0432	0.022	0.004	0.0003	0.03
13	1	12 - 13	2033	3	0.0012	0.0405	0.0432	0.022	0.004	0.0003	0.03
14	1	13 - 14	2034	3	0.0012	0.0405	0.0432	0.022	0.004	0.0003	0.03
15	1	14 - 15	2035	3	0.0012	0.0405	0.0432	0.022	0.004	0.0003	0.03
16	1	15 - 16	2036	3	0.0012	0.0405	0.0432	0.022	0.004	0.0003	0.03
17	1	16-17	2037	1	0.0012	0.0405	0.0432	0.003	0.001	0.0000	0.00
18	1	17-18	2038	1	0.0012	0.0405	0.0432	0.003	0.001	0.0000	0.00
19	1	18-19	2039	1	0.0012	0.0405	0.0432	0.003	0.001	0.0000	0.00
20	1	19-20	2040	1	0.0012	0.0405	0.0432	0.003	0.001	0.0000	0.00
21	1	20-21	2041	1	0.0012	0.0405	0.0432	0.003	0.001	0.0000	0.00
22	1	21-22	2042	1	0.0012	0.0405	0.0432	0.003	0.001	0.0000	0.00
23	1	22-23	2043	1	0.0012	0.0405	0.0432	0.003	0.001	0.0000	0.00
24	1	23-24	2044	1	0.0012	0.0405	0.0432	0.003	0.001	0.0000	0.00
25	1	24-25	2045	1	0.0012	0.0405	0.0432	0.003	0.001	0.0000	0.00
26	1	25-26	2046	1	0.0012	0.0405	0.0432	0.003	0.001	0.0000	0.00
27	1	26-27	2047	1	0.0012	0.0405	0.0432	0.003	0.001	0.0000	0.00
28	1	27-28	2048	1	0.0012	0.0405	0.0432	0.003	0.001	0.0000	0.00
29	1	28-29	2049	1	0.0012	0.0405	0.0432	0.003	0.001	0.0000	0.00
30	1	29-30	2050	1	0.0012	0.0405	0.0432	0.003	0.001	0.0000	0.00
Total Increased Cancer Risk								0.69	0.137	0.009	**0.84**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00023	0.03	0.03

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at El Paseo Building 1 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0011	0.0389	0.0415	0.013	0.003	0.0002	0.02
1	1	0 - 1	2021	10	0.0011	0.0389	0.0415	0.158	0.031	0.0019	0.19
2	1	1 - 2	2022	10	0.0011	0.0389	0.0415	0.158	0.031	0.0019	0.19
3	1	2 - 3	2023	3	0.0011	0.0389	0.0415	0.021	0.004	0.0003	0.03
4	1	3 - 4	2024	3	0.0011	0.0389	0.0415	0.021	0.004	0.0003	0.03
5	1	4 - 5	2025	3	0.0011	0.0389	0.0415	0.021	0.004	0.0003	0.03
6	1	5 - 6	2026	3	0.0011	0.0389	0.0415	0.021	0.004	0.0003	0.03
7	1	6 - 7	2027	3	0.0011	0.0389	0.0415	0.021	0.004	0.0003	0.03
8	1	7 - 8	2028	3	0.0011	0.0389	0.0415	0.021	0.004	0.0003	0.03
9	1	8 - 9	2029	3	0.0011	0.0389	0.0415	0.021	0.004	0.0003	0.03
10	1	9 - 10	2030	3	0.0011	0.0389	0.0415	0.021	0.004	0.0003	0.03
11	1	10 - 11	2031	3	0.0011	0.0389	0.0415	0.021	0.004	0.0003	0.03
12	1	11 - 12	2032	3	0.0011	0.0389	0.0415	0.021	0.004	0.0003	0.03
13	1	12 - 13	2033	3	0.0011	0.0389	0.0415	0.021	0.004	0.0003	0.03
14	1	13 - 14	2034	3	0.0011	0.0389	0.0415	0.021	0.004	0.0003	0.03
15	1	14 - 15	2035	3	0.0011	0.0389	0.0415	0.021	0.004	0.0003	0.03
16	1	15 - 16	2036	3	0.0011	0.0389	0.0415	0.021	0.004	0.0003	0.03
17	1	16-17	2037	1	0.0011	0.0389	0.0415	0.003	0.001	0.0000	0.00
18	1	17-18	2038	1	0.0011	0.0389	0.0415	0.003	0.001	0.0000	0.00
19	1	18-19	2039	1	0.0011	0.0389	0.0415	0.003	0.001	0.0000	0.00
20	1	19-20	2040	1	0.0011	0.0389	0.0415	0.003	0.001	0.0000	0.00
21	1	20-21	2041	1	0.0011	0.0389	0.0415	0.003	0.001	0.0000	0.00
22	1	21-22	2042	1	0.0011	0.0389	0.0415	0.003	0.001	0.0000	0.00
23	1	22-23	2043	1	0.0011	0.0389	0.0415	0.003	0.001	0.0000	0.00
24	1	23-24	2044	1	0.0011	0.0389	0.0415	0.003	0.001	0.0000	0.00
25	1	24-25	2045	1	0.0011	0.0389	0.0415	0.003	0.001	0.0000	0.00
26	1	25-26	2046	1	0.0011	0.0389	0.0415	0.003	0.001	0.0000	0.00
27	1	26-27	2047	1	0.0011	0.0389	0.0415	0.003	0.001	0.0000	0.00
28	1	27-28	2048	1	0.0011	0.0389	0.0415	0.003	0.001	0.0000	0.00
29	1	28-29	2049	1	0.0011	0.0389	0.0415	0.003	0.001	0.0000	0.00
30	1	29-30	2050	1	0.0011	0.0389	0.0415	0.003	0.001	0.0000	0.00
Total Increased Cancer Risk								0.67	0.131	0.008	**0.8**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00023	0.03	0.03

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at El Paseo Building 2 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0009	0.0323	0.0345	0.011	0.002	0.0001	0.01
1	1	0 - 1	2021	10	0.0009	0.0323	0.0345	0.130	0.026	0.0016	0.16
2	1	1 - 2	2022	10	0.0009	0.0323	0.0345	0.130	0.026	0.0016	0.16
3	1	2 - 3	2023	3	0.0009	0.0323	0.0345	0.017	0.003	0.0002	0.02
4	1	3 - 4	2024	3	0.0009	0.0323	0.0345	0.017	0.003	0.0002	0.02
5	1	4 - 5	2025	3	0.0009	0.0323	0.0345	0.017	0.003	0.0002	0.02
6	1	5 - 6	2026	3	0.0009	0.0323	0.0345	0.017	0.003	0.0002	0.02
7	1	6 - 7	2027	3	0.0009	0.0323	0.0345	0.017	0.003	0.0002	0.02
8	1	7 - 8	2028	3	0.0009	0.0323	0.0345	0.017	0.003	0.0002	0.02
9	1	8 - 9	2029	3	0.0009	0.0323	0.0345	0.017	0.003	0.0002	0.02
10	1	9 - 10	2030	3	0.0009	0.0323	0.0345	0.017	0.003	0.0002	0.02
11	1	10 - 11	2031	3	0.0009	0.0323	0.0345	0.017	0.003	0.0002	0.02
12	1	11 - 12	2032	3	0.0009	0.0323	0.0345	0.017	0.003	0.0002	0.02
13	1	12 - 13	2033	3	0.0009	0.0323	0.0345	0.017	0.003	0.0002	0.02
14	1	13 - 14	2034	3	0.0009	0.0323	0.0345	0.017	0.003	0.0002	0.02
15	1	14 - 15	2035	3	0.0009	0.0323	0.0345	0.017	0.003	0.0002	0.02
16	1	15 - 16	2036	3	0.0009	0.0323	0.0345	0.017	0.003	0.0002	0.02
17	1	16-17	2037	1	0.0009	0.0323	0.0345	0.003	0.001	0.0000	0.00
18	1	17-18	2038	1	0.0009	0.0323	0.0345	0.003	0.001	0.0000	0.00
19	1	18-19	2039	1	0.0009	0.0323	0.0345	0.003	0.001	0.0000	0.00
20	1	19-20	2040	1	0.0009	0.0323	0.0345	0.003	0.001	0.0000	0.00
21	1	20-21	2041	1	0.0009	0.0323	0.0345	0.003	0.001	0.0000	0.00
22	1	21-22	2042	1	0.0009	0.0323	0.0345	0.003	0.001	0.0000	0.00
23	1	22-23	2043	1	0.0009	0.0323	0.0345	0.003	0.001	0.0000	0.00
24	1	23-24	2044	1	0.0009	0.0323	0.0345	0.003	0.001	0.0000	0.00
25	1	24-25	2045	1	0.0009	0.0323	0.0345	0.003	0.001	0.0000	0.00
26	1	25-26	2046	1	0.0009	0.0323	0.0345	0.003	0.001	0.0000	0.00
27	1	26-27	2047	1	0.0009	0.0323	0.0345	0.003	0.001	0.0000	0.00
28	1	27-28	2048	1	0.0009	0.0323	0.0345	0.003	0.001	0.0000	0.00
29	1	28-29	2049	1	0.0009	0.0323	0.0345	0.003	0.001	0.0000	0.00
30	1	29-30	2050	1	0.0009	0.0323	0.0345	0.003	0.001	0.0000	0.00
Total Increased Cancer Risk								0.55	0.109	0.007	**0.67**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00019	0.02	0.03

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at El Paseo Building 2 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2021	10	0.0009	0.0314	0.0335	0.011	0.002	0.0001	0.01
1	1	0 - 1	2021	10	0.0009	0.0314	0.0335	0.127	0.025	0.0016	0.15
2	1	1 - 2	2022	10	0.0009	0.0314	0.0335	0.127	0.025	0.0016	0.15
3	1	2 - 3	2023	3	0.0009	0.0314	0.0335	0.017	0.003	0.0002	0.02
4	1	3 - 4	2024	3	0.0009	0.0314	0.0335	0.017	0.003	0.0002	0.02
5	1	4 - 5	2025	3	0.0009	0.0314	0.0335	0.017	0.003	0.0002	0.02
6	1	5 - 6	2026	3	0.0009	0.0314	0.0335	0.017	0.003	0.0002	0.02
7	1	6 - 7	2027	3	0.0009	0.0314	0.0335	0.017	0.003	0.0002	0.02
8	1	7 - 8	2028	3	0.0009	0.0314	0.0335	0.017	0.003	0.0002	0.02
9	1	8 - 9	2029	3	0.0009	0.0314	0.0335	0.017	0.003	0.0002	0.02
10	1	9 - 10	2030	3	0.0009	0.0314	0.0335	0.017	0.003	0.0002	0.02
11	1	10 - 11	2031	3	0.0009	0.0314	0.0335	0.017	0.003	0.0002	0.02
12	1	11 - 12	2032	3	0.0009	0.0314	0.0335	0.017	0.003	0.0002	0.02
13	1	12 - 13	2033	3	0.0009	0.0314	0.0335	0.017	0.003	0.0002	0.02
14	1	13 - 14	2034	3	0.0009	0.0314	0.0335	0.017	0.003	0.0002	0.02
15	1	14 - 15	2035	3	0.0009	0.0314	0.0335	0.017	0.003	0.0002	0.02
16	1	15 - 16	2036	3	0.0009	0.0314	0.0335	0.017	0.003	0.0002	0.02
17	1	16-17	2037	1	0.0009	0.0314	0.0335	0.003	0.001	0.0000	0.00
18	1	17-18	2038	1	0.0009	0.0314	0.0335	0.003	0.001	0.0000	0.00
19	1	18-19	2039	1	0.0009	0.0314	0.0335	0.003	0.001	0.0000	0.00
20	1	19-20	2040	1	0.0009	0.0314	0.0335	0.003	0.001	0.0000	0.00
21	1	20-21	2041	1	0.0009	0.0314	0.0335	0.003	0.001	0.0000	0.00
22	1	21-22	2042	1	0.0009	0.0314	0.0335	0.003	0.001	0.0000	0.00
23	1	22-23	2043	1	0.0009	0.0314	0.0335	0.003	0.001	0.0000	0.00
24	1	23-24	2044	1	0.0009	0.0314	0.0335	0.003	0.001	0.0000	0.00
25	1	24-25	2045	1	0.0009	0.0314	0.0335	0.003	0.001	0.0000	0.00
26	1	25-26	2046	1	0.0009	0.0314	0.0335	0.003	0.001	0.0000	0.00
27	1	26-27	2047	1	0.0009	0.0314	0.0335	0.003	0.001	0.0000	0.00
28	1	27-28	2048	1	0.0009	0.0314	0.0335	0.003	0.001	0.0000	0.00
29	1	28-29	2049	1	0.0009	0.0314	0.0335	0.003	0.001	0.0000	0.00
30	1	29-30	2050	1	0.0009	0.0314	0.0335	0.003	0.001	0.0000	0.00
Total Increased Cancer Risk								0.54	0.106	0.007	**0.7**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00018	0.02	0.03

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at El Paseo Building 3 On-Site 1st Level (1st Floor) School/Residential Receptors - 1.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0018	0.0643	0.0686	0.021	0.004	0.0003	0.03
1	1	0 - 1	2021	10	0.0018	0.0643	0.0686	0.254	0.051	0.0032	0.31
2	1	1 - 2	2022	10	0.0018	0.0643	0.0686	0.254	0.051	0.0032	0.31
3	1	2 - 3	2023	3	0.0018	0.0643	0.0686	0.034	0.007	0.0004	0.04
4	1	3 - 4	2024	3	0.0018	0.0643	0.0686	0.034	0.007	0.0004	0.04
5	1	4 - 5	2025	3	0.0018	0.0643	0.0686	0.034	0.007	0.0004	0.04
6	1	5 - 6	2026	3	0.0018	0.0643	0.0686	0.034	0.007	0.0004	0.04
7	1	6 - 7	2027	3	0.0018	0.0643	0.0686	0.034	0.007	0.0004	0.04
8	1	7 - 8	2028	3	0.0018	0.0643	0.0686	0.034	0.007	0.0004	0.04
9	1	8 - 9	2029	3	0.0018	0.0643	0.0686	0.034	0.007	0.0004	0.04
10	1	9 - 10	2030	3	0.0018	0.0643	0.0686	0.034	0.007	0.0004	0.04
11	1	10 - 11	2031	3	0.0018	0.0643	0.0686	0.034	0.007	0.0004	0.04
12	1	11 - 12	2032	3	0.0018	0.0643	0.0686	0.034	0.007	0.0004	0.04
13	1	12 - 13	2033	3	0.0018	0.0643	0.0686	0.034	0.007	0.0004	0.04
14	1	13 - 14	2034	3	0.0018	0.0643	0.0686	0.034	0.007	0.0004	0.04
15	1	14 - 15	2035	3	0.0018	0.0643	0.0686	0.034	0.007	0.0004	0.04
16	1	15 - 16	2036	3	0.0018	0.0643	0.0686	0.034	0.007	0.0004	0.04
17	1	16-17	2037	1	0.0018	0.0643	0.0686	0.005	0.001	0.0001	0.01
18	1	17-18	2038	1	0.0018	0.0643	0.0686	0.005	0.001	0.0001	0.01
19	1	18-19	2039	1	0.0018	0.0643	0.0686	0.005	0.001	0.0001	0.01
20	1	19-20	2040	1	0.0018	0.0643	0.0686	0.005	0.001	0.0001	0.01
21	1	20-21	2041	1	0.0018	0.0643	0.0686	0.005	0.001	0.0001	0.01
22	1	21-22	2042	1	0.0018	0.0643	0.0686	0.005	0.001	0.0001	0.01
23	1	22-23	2043	1	0.0018	0.0643	0.0686	0.005	0.001	0.0001	0.01
24	1	23-24	2044	1	0.0018	0.0643	0.0686	0.005	0.001	0.0001	0.01
25	1	24-25	2045	1	0.0018	0.0643	0.0686	0.005	0.001	0.0001	0.01
26	1	25-26	2046	1	0.0018	0.0643	0.0686	0.005	0.001	0.0001	0.01
27	1	26-27	2047	1	0.0018	0.0643	0.0686	0.005	0.001	0.0001	0.01
28	1	27-28	2048	1	0.0018	0.0643	0.0686	0.005	0.001	0.0001	0.01
29	1	28-29	2049	1	0.0018	0.0643	0.0686	0.005	0.001	0.0001	0.01
30	1	29-30	2050	1	0.0018	0.0643	0.0686	0.005	0.001	0.0001	0.01
Total Increased Cancer Risk								1.08	0.217	0.014	**1.31**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00036	0.05	0.05

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at El Paseo Building 3 On-Site 2nd Level (2nd Floor) School/Residential Receptors - 4.5 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0018	0.0620	0.0661	0.020	0.004	0.0003	0.02
1	1	0 - 1	2021	10	0.0018	0.0620	0.0661	0.246	0.049	0.0031	0.30
2	1	1 - 2	2022	10	0.0018	0.0620	0.0661	0.246	0.049	0.0031	0.30
3	1	2 - 3	2023	3	0.0018	0.0620	0.0661	0.033	0.007	0.0004	0.04
4	1	3 - 4	2024	3	0.0018	0.0620	0.0661	0.033	0.007	0.0004	0.04
5	1	4 - 5	2025	3	0.0018	0.0620	0.0661	0.033	0.007	0.0004	0.04
6	1	5 - 6	2026	3	0.0018	0.0620	0.0661	0.033	0.007	0.0004	0.04
7	1	6 - 7	2027	3	0.0018	0.0620	0.0661	0.033	0.007	0.0004	0.04
8	1	7 - 8	2028	3	0.0018	0.0620	0.0661	0.033	0.007	0.0004	0.04
9	1	8 - 9	2029	3	0.0018	0.0620	0.0661	0.033	0.007	0.0004	0.04
10	1	9 - 10	2030	3	0.0018	0.0620	0.0661	0.033	0.007	0.0004	0.04
11	1	10 - 11	2031	3	0.0018	0.0620	0.0661	0.033	0.007	0.0004	0.04
12	1	11 - 12	2032	3	0.0018	0.0620	0.0661	0.033	0.007	0.0004	0.04
13	1	12 - 13	2033	3	0.0018	0.0620	0.0661	0.033	0.007	0.0004	0.04
14	1	13 - 14	2034	3	0.0018	0.0620	0.0661	0.033	0.007	0.0004	0.04
15	1	14 - 15	2035	3	0.0018	0.0620	0.0661	0.033	0.007	0.0004	0.04
16	1	15 - 16	2036	3	0.0018	0.0620	0.0661	0.033	0.007	0.0004	0.04
17	1	16-17	2037	1	0.0018	0.0620	0.0661	0.005	0.001	0.0001	0.01
18	1	17-18	2038	1	0.0018	0.0620	0.0661	0.005	0.001	0.0001	0.01
19	1	18-19	2039	1	0.0018	0.0620	0.0661	0.005	0.001	0.0001	0.01
20	1	19-20	2040	1	0.0018	0.0620	0.0661	0.005	0.001	0.0001	0.01
21	1	20-21	2041	1	0.0018	0.0620	0.0661	0.005	0.001	0.0001	0.01
22	1	21-22	2042	1	0.0018	0.0620	0.0661	0.005	0.001	0.0001	0.01
23	1	22-23	2043	1	0.0018	0.0620	0.0661	0.005	0.001	0.0001	0.01
24	1	23-24	2044	1	0.0018	0.0620	0.0661	0.005	0.001	0.0001	0.01
25	1	24-25	2045	1	0.0018	0.0620	0.0661	0.005	0.001	0.0001	0.01
26	1	25-26	2046	1	0.0018	0.0620	0.0661	0.005	0.001	0.0001	0.01
27	1	26-27	2047	1	0.0018	0.0620	0.0661	0.005	0.001	0.0001	0.01
28	1	27-28	2048	1	0.0018	0.0620	0.0661	0.005	0.001	0.0001	0.01
29	1	28-29	2049	1	0.0018	0.0620	0.0661	0.005	0.001	0.0001	0.01
30	1	29-30	2050	1	0.0018	0.0620	0.0661	0.005	0.001	0.0001	0.01
Total Increased Cancer Risk								1.04	0.209	0.013	**1.3**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00035	0.05	0.05

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at Saratoga On-Site 1st Level (2nd Floor) Residential Receptors - 8.2 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2021	10	0.0019	0.0712	0.0759	0.022	0.005	0.0003	0.03
1	1	0 - 1	2021	10	0.0019	0.0712	0.0759	0.271	0.057	0.0036	0.33
2	1	1 - 2	2022	10	0.0019	0.0712	0.0759	0.271	0.057	0.0036	0.33
3	1	2 - 3	2023	3	0.0019	0.0712	0.0759	0.036	0.008	0.0005	0.04
4	1	3 - 4	2024	3	0.0019	0.0712	0.0759	0.036	0.008	0.0005	0.04
5	1	4 - 5	2025	3	0.0019	0.0712	0.0759	0.036	0.008	0.0005	0.04
6	1	5 - 6	2026	3	0.0019	0.0712	0.0759	0.036	0.008	0.0005	0.04
7	1	6 - 7	2027	3	0.0019	0.0712	0.0759	0.036	0.008	0.0005	0.04
8	1	7 - 8	2028	3	0.0019	0.0712	0.0759	0.036	0.008	0.0005	0.04
9	1	8 - 9	2029	3	0.0019	0.0712	0.0759	0.036	0.008	0.0005	0.04
10	1	9 - 10	2030	3	0.0019	0.0712	0.0759	0.036	0.008	0.0005	0.04
11	1	10 - 11	2031	3	0.0019	0.0712	0.0759	0.036	0.008	0.0005	0.04
12	1	11 - 12	2032	3	0.0019	0.0712	0.0759	0.036	0.008	0.0005	0.04
13	1	12 - 13	2033	3	0.0019	0.0712	0.0759	0.036	0.008	0.0005	0.04
14	1	13 - 14	2034	3	0.0019	0.0712	0.0759	0.036	0.008	0.0005	0.04
15	1	14 - 15	2035	3	0.0019	0.0712	0.0759	0.036	0.008	0.0005	0.04
16	1	15 - 16	2036	3	0.0019	0.0712	0.0759	0.036	0.008	0.0005	0.04
17	1	16-17	2037	1	0.0019	0.0712	0.0759	0.006	0.001	0.0001	0.01
18	1	17-18	2038	1	0.0019	0.0712	0.0759	0.006	0.001	0.0001	0.01
19	1	18-19	2039	1	0.0019	0.0712	0.0759	0.006	0.001	0.0001	0.01
20	1	19-20	2040	1	0.0019	0.0712	0.0759	0.006	0.001	0.0001	0.01
21	1	20-21	2041	1	0.0019	0.0712	0.0759	0.006	0.001	0.0001	0.01
22	1	21-22	2042	1	0.0019	0.0712	0.0759	0.006	0.001	0.0001	0.01
23	1	22-23	2043	1	0.0019	0.0712	0.0759	0.006	0.001	0.0001	0.01
24	1	23-24	2044	1	0.0019	0.0712	0.0759	0.006	0.001	0.0001	0.01
25	1	24-25	2045	1	0.0019	0.0712	0.0759	0.006	0.001	0.0001	0.01
26	1	25-26	2046	1	0.0019	0.0712	0.0759	0.006	0.001	0.0001	0.01
27	1	26-27	2047	1	0.0019	0.0712	0.0759	0.006	0.001	0.0001	0.01
28	1	27-28	2048	1	0.0019	0.0712	0.0759	0.006	0.001	0.0001	0.01
29	1	28-29	2049	1	0.0019	0.0712	0.0759	0.006	0.001	0.0001	0.01
30	1	29-30	2050	1	0.0019	0.0712	0.0759	0.006	0.001	0.0001	0.01
Total Increased Cancer Risk								1.15	0.240	0.015	**1.40**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00039	0.05	0.06

* Third trimester of pregnancy

El Paseo Option 2 No Education & Saratoga, San Jose, CA - Prospect Road Cancer Risk
Impacts at Saratoga On-Site 2nd Level (3rd Floor) Residential Receptors - 11.3 meter receptor height
30 Year Residential Exposure - Cumulative Traffic - Without MERV13 Filtration

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	0.85	0.85	0.72	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2021	10	0.0016	0.0570	0.0608	0.018	0.004	0.0002	0.02
1	1	0 - 1	2021	10	0.0016	0.0570	0.0608	0.223	0.045	0.0029	0.27
2	1	1 - 2	2022	10	0.0016	0.0570	0.0608	0.223	0.045	0.0029	0.27
3	1	2 - 3	2023	3	0.0016	0.0570	0.0608	0.030	0.006	0.0004	0.04
4	1	3 - 4	2024	3	0.0016	0.0570	0.0608	0.030	0.006	0.0004	0.04
5	1	4 - 5	2025	3	0.0016	0.0570	0.0608	0.030	0.006	0.0004	0.04
6	1	5 - 6	2026	3	0.0016	0.0570	0.0608	0.030	0.006	0.0004	0.04
7	1	6 - 7	2027	3	0.0016	0.0570	0.0608	0.030	0.006	0.0004	0.04
8	1	7 - 8	2028	3	0.0016	0.0570	0.0608	0.030	0.006	0.0004	0.04
9	1	8 - 9	2029	3	0.0016	0.0570	0.0608	0.030	0.006	0.0004	0.04
10	1	9 - 10	2030	3	0.0016	0.0570	0.0608	0.030	0.006	0.0004	0.04
11	1	10 - 11	2031	3	0.0016	0.0570	0.0608	0.030	0.006	0.0004	0.04
12	1	11 - 12	2032	3	0.0016	0.0570	0.0608	0.030	0.006	0.0004	0.04
13	1	12 - 13	2033	3	0.0016	0.0570	0.0608	0.030	0.006	0.0004	0.04
14	1	13 - 14	2034	3	0.0016	0.0570	0.0608	0.030	0.006	0.0004	0.04
15	1	14 - 15	2035	3	0.0016	0.0570	0.0608	0.030	0.006	0.0004	0.04
16	1	15 - 16	2036	3	0.0016	0.0570	0.0608	0.030	0.006	0.0004	0.04
17	1	16-17	2037	1	0.0016	0.0570	0.0608	0.005	0.001	0.0001	0.01
18	1	17-18	2038	1	0.0016	0.0570	0.0608	0.005	0.001	0.0001	0.01
19	1	18-19	2039	1	0.0016	0.0570	0.0608	0.005	0.001	0.0001	0.01
20	1	19-20	2040	1	0.0016	0.0570	0.0608	0.005	0.001	0.0001	0.01
21	1	20-21	2041	1	0.0016	0.0570	0.0608	0.005	0.001	0.0001	0.01
22	1	21-22	2042	1	0.0016	0.0570	0.0608	0.005	0.001	0.0001	0.01
23	1	22-23	2043	1	0.0016	0.0570	0.0608	0.005	0.001	0.0001	0.01
24	1	23-24	2044	1	0.0016	0.0570	0.0608	0.005	0.001	0.0001	0.01
25	1	24-25	2045	1	0.0016	0.0570	0.0608	0.005	0.001	0.0001	0.01
26	1	25-26	2046	1	0.0016	0.0570	0.0608	0.005	0.001	0.0001	0.01
27	1	26-27	2047	1	0.0016	0.0570	0.0608	0.005	0.001	0.0001	0.01
28	1	27-28	2048	1	0.0016	0.0570	0.0608	0.005	0.001	0.0001	0.01
29	1	28-29	2049	1	0.0016	0.0570	0.0608	0.005	0.001	0.0001	0.01
30	1	29-30	2050	1	0.0016	0.0570	0.0608	0.005	0.001	0.0001	0.01
Total Increased Cancer Risk								0.95	0.192	0.012	**1.2**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.00032	0.04	0.05

* Third trimester of pregnancy

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Risk & Hazard Stationary Source Inquiry Form

This form is required when users request stationary source data from BAAQMD

This form is to be used with the BAAQMD's Google Earth stationary source screening tables.

Click here for guidance on coducting risk & hazard screening, including roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart.

Click here for District's Recommended Methods for Screening and Modeling Local Risks and Hazards document.

Table A: Requester Contact Information

Date of Request	**2/17/2021**
Contact Name	Casey Divine
Affiliation	Illingworth & Rodkin, Inc.
Phone	707-794-0400 x103
Email	cdivine@illingworthrodkin.com
Project Name	El Paseo & 1777 Saratoga Ave
Address	El Paseo & 1777 Saratoga Ave
City	San Jose
County	Santa Clara
Type (residential, commercial, mixed use, industrial, etc.)	Mixed-Use
Project Size (# of units or building square feet)	2 Options
Comments:	

For Air District assistance, the following steps must be completed:

1. Complete all the contact and project information requested in **Table A** ncomplete forms will not be processed. Please include a project site map.

2. Download and install the free program Google Earth, **http://www.google.com/earth/download/ge/,** and then download the county specific Google Earth stationary source application files from the District's website, **http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.** The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's Information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration.

3. Find the project site in Google Earth by inputting the site's address in the Google Earth search box.

4. Identify stationary sources within at least a 1000ft radius of project site. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm the source's address location. Please report any mapping errors to the District.

5. List the stationary source information in blue section only.

6. Note that a small percentage of the stationa **Table B** ve Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the Plant Name ght). If HRSA values are presented, these values have already been modeled and cannot be adjusted further.

7. Email this completed form to District staff. District staff will provide the most recent risk, hazard, and PM2.5 data that are available for the source(s). If this information or data are not available, source emissions data will be provided. Staff will respond to inquiries within three weeks.

Note that a public records request received for the same stationary source information will cancel the processing of your SSIF request.

Submit forms, maps, and questions to Areana Flores at 415-749-4616, or aflores@baaqmd.gov

Table B: Google Earth data

Distance from Receptor (feet) or MEI[1]	Plant No.	Facility Name	Address	Cancer Risk[2]	Hazard Risk[2]	$PM_{2.5}$[2]	Source No.[3]	Type of Source[4]	Fuel Code[5]	Status/Comments	Construction MEI: Distance Adjustment Multiplier	Construction MEI: Adjusted Cancer Risk Estimate	Construction MEI: Adjusted Hazard Risk	Construction MEI: Adjusted PM2.5
+1,000	14658	Target Corp - Target San Jose T-1427	1600 Saratoga Avenue	0.01	--	--		Generators		2018 Dataset	0.04	0.0004	#VALUE!	#VALUE!
+1,000	16603	Verizon Wireless-816226	1777 Saratoga Avenue	1.91	--	--		Generators		2018 Dataset	0.04	0.08	#VALUE!	#VALUE!
On-Site, To Be Demolished with Project	18327	Lucky #761	200 El Paseo D Srtga	0.03	--	--		Generators		2018 Dataset	--	#VALUE!	#VALUE!	#VALUE!
+1,000	104160	EL Paseo Chevron #9-1325	1704 Saratoga Ave	27.19	0.12	--		Gas Dispensing Facility		2018 Dataset	0.01	0.41	0.002	#VALUE!
+1,000	105122	Classic Car Wash	18560 Prospect Rd	0.09	--	--		Gas Dispensing Facility		2018 Dataset	0.01	0.001	#VALUE!	#VALUE!

Footnotes:

1. Maximally exposed individual
2. These Cancer Risk, Hazard Index, and PM2.5 columns represent the values in the Google Earth Plant Information Table.
3. Each plant may have multiple permits and sources.
4. Permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc.
5. Fuel codes: 98 = diesel, 189 = Natural Gas.
6. If a Health Risk Screening Assessment (HRSA) was completed for the source, the application number will be listed here.
7. The date that the HRSA was completed.
8. Engineer who completed the HRSA. For District purposes only.
9. All HRSA completed before 1/5/2010 need to be multiplied by an age sensitivity factor of 1.7.
10. The HRSA "Chronic Health" number represents the Hazard Index.
11. Further information about common sources:
    a. Sources that only include diesel internal combustion engines can be adjusted using the BAAQMD's Diesel Multiplier worksheet.
    b. The risk from natural gas boilers used for space heating when <25 MM BTU/hr would have an estimated cancer risk of one in a million or less, and a chronic hazard index of 0.003 or
    c. BAAQMD Reg 11 Rule 16 required that all co-residential (sharing a wall, floor, ceiling or is in the same building as a residential unit) dry cleaners cease use of perc on July 1, 2010. Therefore, there is no cancer risk, hazard or PM2.5 concentrations from co-residential dry cleaning businesses in the BAAQMD.
    d. Non co-residential dry cleaners must phase out use of perc by Jan. 1, 2023. Therefore, the risk from these dry cleaners does not need to be factored in over a 70-year period, but instead should reflect
    e. Gas stations can be adjusted using BAAQMD's Gas Station Distance Mulitplier worksheet.
    f. Unless otherwise noted, exempt sources are considered insignificant. See BAAQMD Reg 2 Rule 1 for a list of exempt sources.
    g. This spray booth is considered to be insignificant.

Date last updated:
03/13/2018

Project Site

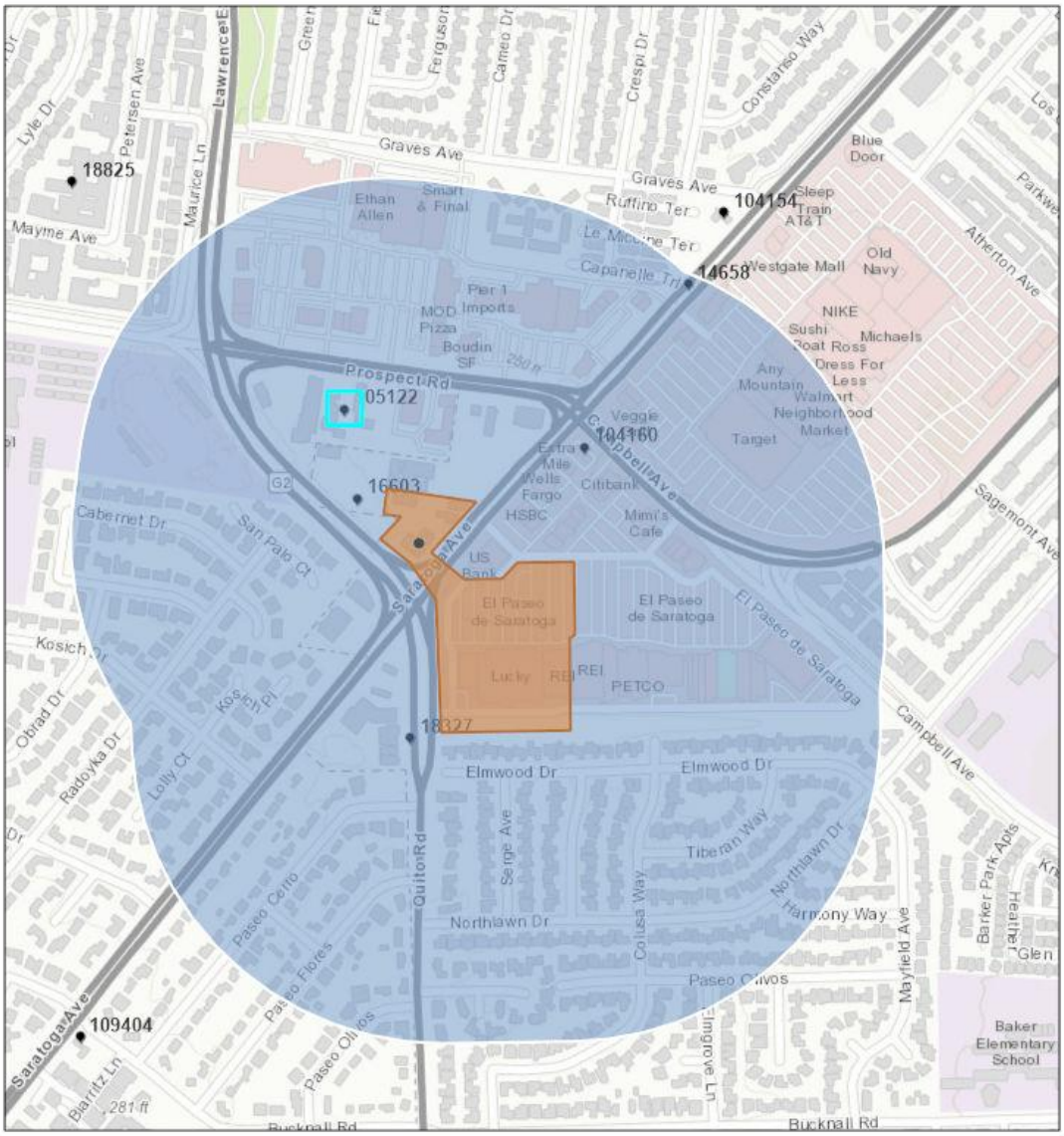
Distance from Receptor (feet) or MEI[1]	FACID (Plant No.)	Distance Adjustment Multiplier	Adjusted Cancer Risk Estimate	Adjusted Hazard Risk	Adjusted PM2.5
1000	14658	0.04	0.0004	#VALUE!	#VALUE!
30	16603	1.00	1.91	#VALUE!	#VALUE!
On-Site, To Be Demolished with Project	18327	--	#VALUE!	#VALUE!	#VALUE!
390	104160	0.07	1.80	0.01	#VALUE!
330	105122	0.09	0.01	#VALUE!	#VALUE!

Stationary Source Risk & Hazards Screening Report

Area of Interest (AOI) Information

Area : 10,336,268.45 ft²

Feb 17 2021 16:12:31 Pacific Standard Time



Summary

Name	Count	Area(ft²)	Length(ft)
Permitted Facilities 2018	5	N/A	N/A

Permitted Facilities 2018

#	FACID	Name	Address	City	St
1	14658	Target Corp - Target San Jose T-1427	1600 Saratoga Avenue	San Jose	CA
2	16603	Verizon Wireless-816226	1777 Saratoga Avenue	San Jose	CA
3	18327	Lucky #761	200 El Paseo D Srtga	San Jose	CA
4	104160	EL Paseo Chevron #9-1325	1704 Saratoga Ave	San Jose	CA
5	105122	Classic Car Wash	18560 Prospect Rd	Saratoga	CA

#	Zip	County	Cancer	Hazard	PM_25	Type	Count
1	95129	Santa Clara	0.010	0.000	0.000	Generators	1
2	95129	Santa Clara	1.910	0.000	0.000	Generators	1
3	95130	Santa Clara	0.030	0.000	0.000	Generators	1
4	95129	Santa Clara	27.190	0.120	0.000	Gas Dispensing Facility	1
5	95070	Santa Clara	0.090	0.000	0.000	Gas Dispensing Facility	1

Note: The estimated risk and hazard impacts from these sources would be expected to be substantially lower when site specific Health Risk Screening Assessments are conducted.

The screening level map is not recommended for evaluating sensitive land uses such as schools, senior centers, day cares, and health facilities.