Appendix C

Air Quality Assessment

Air Quality Assessment
Qume and Commerce Project
City of San José, California

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LIST OF ABBREVIATED TERMS

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

1 INTRODUCTION

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

1.1 PROJECT LOCATION

The proposed project is located at 2222 and 2350 Qume Drive and 2150 Commerce Drive in City of San José. Figure 1: Regional and Figure 2: Site Vicinity, depict the project site in a regional and local context. The project site is located in an urban area with a mix of surrounding uses including commercial, office, and industrial uses. The proposed project's existing land use designation is Industrial Park (IP) and existing zoning designation is Industrial Park (IP).

Currently, the project site is developed with an industrial/business park complex containing three buildings comprising 425,433 square-feet (sf). Multiple driveways are provided along Qume Drive and Commerce Drive, and surface parking is available throughout the site. Truck access and loading docks are located on the northwestern extent of 2350 Qume Drive and the southwestern extent of 2150 Commerce Drive. There is existing landscaping and trees along all project site boundaries and within parking aisles. The project site also has existing surface lighting.

1.2 PROJECT DESCRIPTION

The proposed project includes approval of a Vesting Tentative Map (VTM) to divide APN 244-15-029, -030, and -003 into four individual parcels. Table 1: Proposed Parcel Summary provides an overview of project parcels.

Table 1: Proposed Parcel Summary

Proposed Project Parcel	Existing APN	Proposed APN	Proposed Acreage
1	244-15-029	244-15-026	15.18
2		244-15-028	9.43
3	244-15-030	244-15-020	4.48
4	244-15-003	244-15-003	3.77

The proposed project would demolish all on-site improvements and construct four new industrial warehouse buildings with dock doors and associated site improvements. The proposed buildings would comprise a total of 714,419 sf with a floor area ratio (FAR) of 0.51 and maximum height of 48-feet, see Figure 3: Overall Site Plan. Table 2: Building Summary provides an overview of proposed buildings and key components. The project site would be accessed from six driveways along Qume Drive, two driveways along Commerce Drive, and three driveways along McKay Drive. An internal roadway would provide vehicular access between Building 1 and Building 2. Internal access would not be provided to/from Building 3 or Building 4.

Table 2: Proposed Building Summary

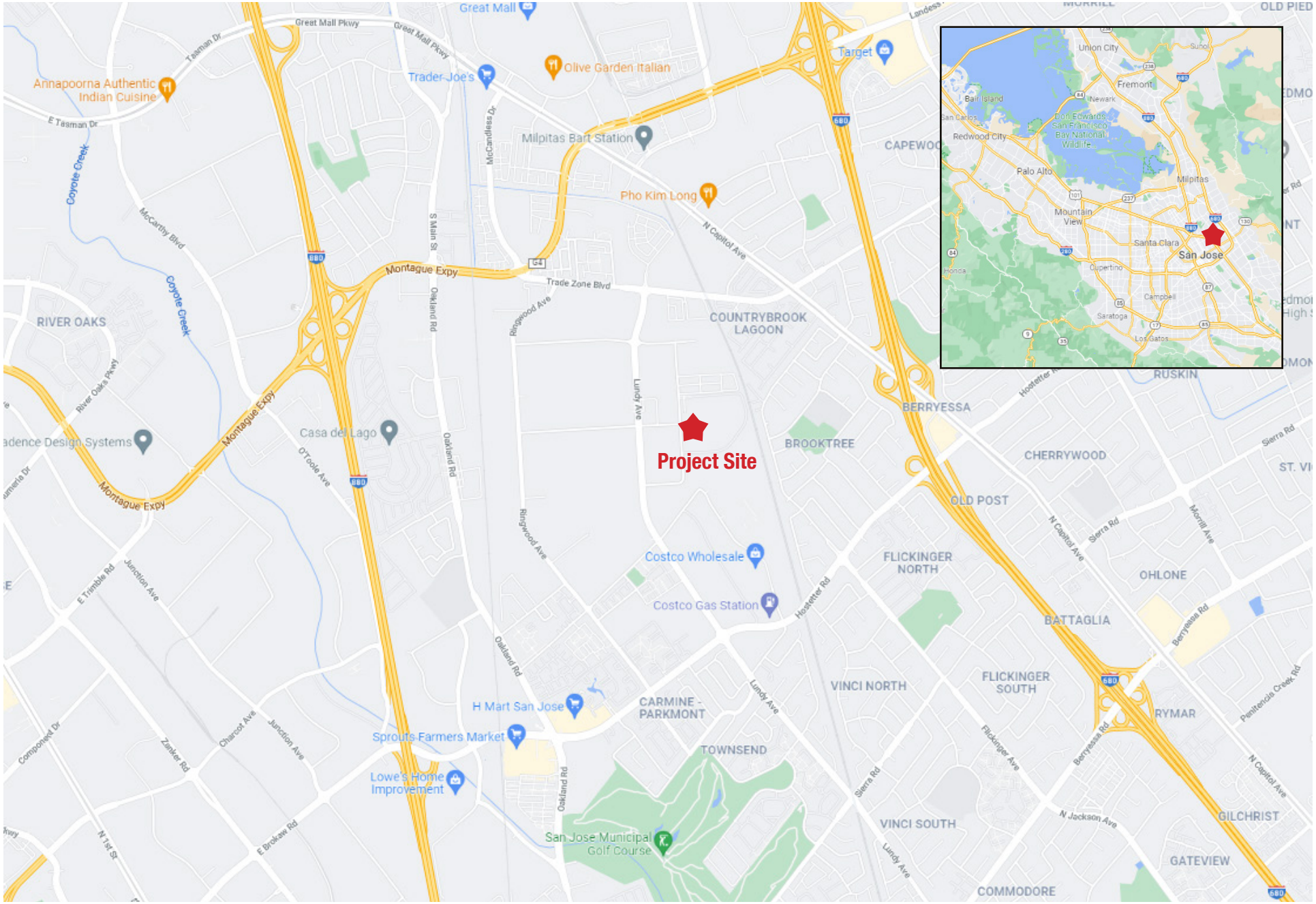
Building	Building Area (sf)	Dock Doors	Trailer Parking	Automobile Parking[1]	Loading Spaces
1	358,180	39	61	156	39
2	202,735	21	27	150	25
3	83,751	10	4	53	10
4	69,825	10	4	53	7
Total	**714,491**	**80**	**96**	**412**	**81**

Notes
[1] Total parking includes ADA accessible, clean air vehicle, EV stalls

The project site has mature landscape vegetation including trees and shrubs along the site boundary. Project implementation would remove existing vegetation on site, including some trees. The removed trees would be replaced according to tree replacement ratios required by the City. Additional landscaping throughout the site would include a mix of grasses, shrubs, and groundcover. Landscape coverage would be provided for the required 15-feet frontage setbacks along Qume Drive and Commerce Drive.

Demolition is anticipated to begin in April 2024, followed by site grading in July 2024 and construction in August 2024. Construction is expected to last for approximately 18 months, concluding in September 2025. Operations are anticipated to commence in October 2025.

The project site is designated as Industrial Park (IP) by the General Plan, which allows for warehousing uses. The project site is zoned as Industrial Park (IP). The LI Zoning District also allows for warehouse and distribution facilities.



Source: Google Maps, 2022

Figure 1: Regional Map

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Not to scale

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Source: Google Maps, 2022

Figure 2: Site Vicinity

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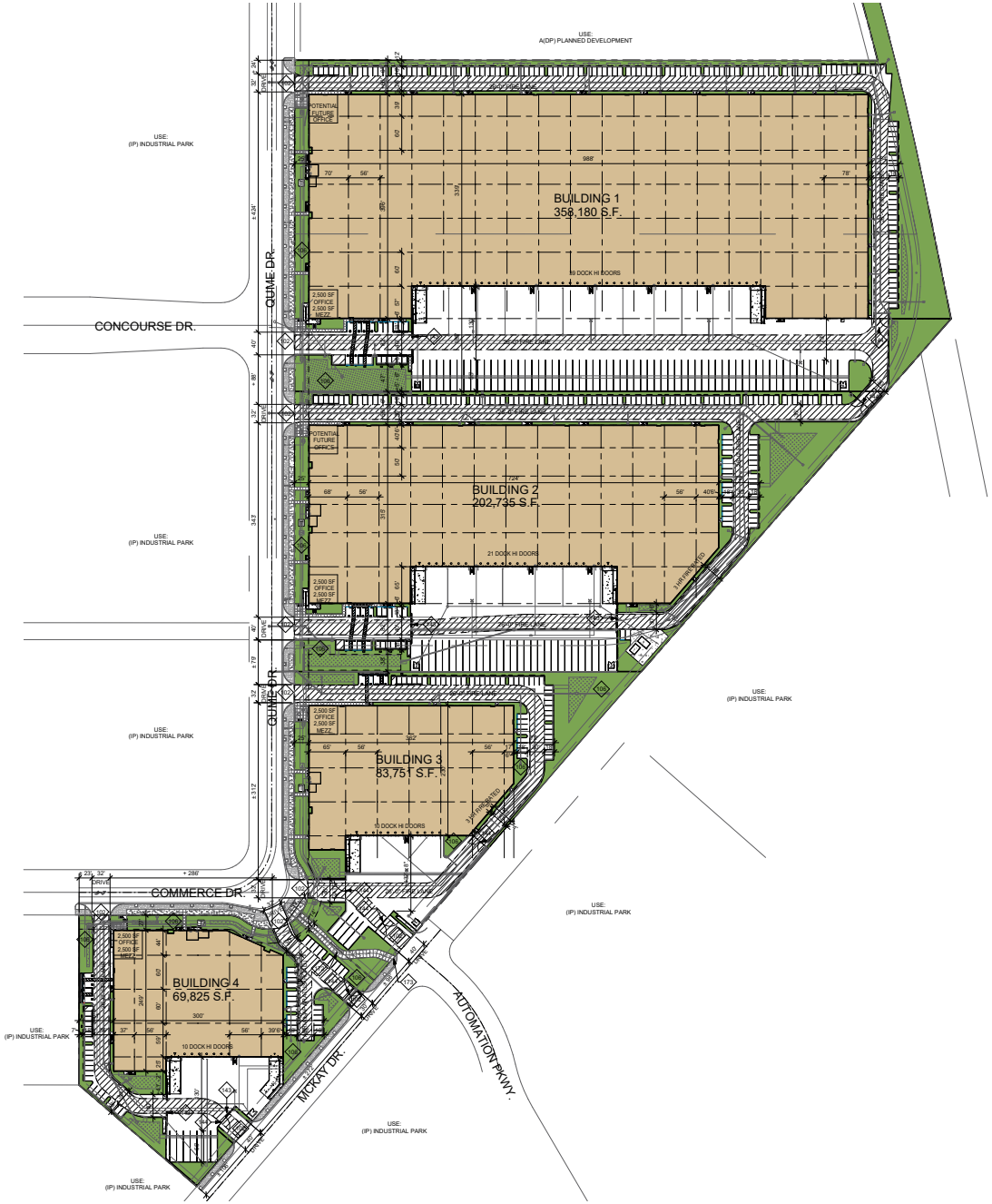

Source: Herdman, 2022

Figure 3: Overall Site Plan

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2 ENVIRONMENTAL SETTING

2.1 CLIMATE AND METEOROLOGY

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

Climate, or the average weather condition, affects air quality in several ways. Wind patterns can remove or add air pollutants emitted by stationary or mobile sources. Inversion, a condition where warm air traps cooler air underneath it, can hold pollutants near the ground by limiting upward mixing (dilution). Topography also affects the local climate, as valleys often trap emissions by limiting lateral dispersal.

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

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

The climate is dominated by the location and strength of a semi-permanent, subtropical high-pressure cell. In the summer, the Pacific cell is centered over the northeastern Pacific Ocean, resulting in stable meteorological conditions and a steady northwesterly wind flow. Upwelling of cold ocean water from below the surface because of the northwesterly flow produces a band of cold water off the coast which results in condensation and the presence of fog and stratus clouds along the coast. In the winter, the high-pressure cell weakens and shifts southward, resulting in increased wind flow offshore, the absence of upwelling, and the occurrence of storms.

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

The project site is located in the City of San José and Santa Clara County; on the southern perimeter of the San Francisco Bay. The City of San José has a generally mild climate, with average temperatures in the low 80's Fahrenheit in the summer and high 50's Fahrenheit in the winter. The annual rainfall is approximately 15 inches in the City, primarily between November and April. The regulatory section below discusses the various buffer zones around sources of air pollution sufficient to avoid adverse health and nuisance impacts on nearby receptors.

2.2 AIR POLLUTANTS OF PRIMARY CONCERN

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state laws. These regulated air pollutants are known as "criteria air pollutants" and are categorized into primary and secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NO_X), sulfur dioxide (SO_2), coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead are primary air pollutants. Of these, CO, NO_X, SO_2, PM_{10}, and $PM_{2.5}$ are criteria pollutants. ROG and NO_X are criteria pollutant precursors and go on to form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. For example, the criteria pollutant ozone (O_3) is formed by a chemical reaction between ROG and NO_X in the presence of sunlight. O_3 and nitrogen dioxide (NO_2) are the principal secondary pollutants. Sources and health effects commonly associated with criteria pollutants are summarized in Table 3: Air Contaminants and Associated Public Health Concerns.

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

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

Table 3: Air Contaminants and Associated Public Health Concerns

Pollutant	Major Man-Made Sources	Human Health Effects
Particulate Matter (PM_{10} and $PM_{2.5}$)	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; asthma; chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility.
Ozone (O_3)	Formed by a chemical reaction between reactive organic gases/volatile organic compounds (ROG or VOC)[1] and nitrogen oxides (NO_X) in the presence of sunlight. Motor vehicle exhaust industrial emissions, gasoline storage and transport, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
Sulfur Dioxide (SO_2)	A colorless gas formed when fuel containing sulfur is burned and when gasoline is extracted from oil. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO_2)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone. Contributes to global warming and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Lead (Pb)	Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Due to the phase out of leaded gasoline, metals processing is the major source of lead emissions to the air today. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.	Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ.

[1] Volatile Organic Compounds (VOCs or Reactive Organic Gases [ROG]) are hydrocarbons/organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including ROGs and VOCs. Both ROGs and VOCs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. The major sources of hydrocarbons are combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources are petroleum fuels, solvents, dry cleaning solutions, and paint (via evaporation).

Source: California Air Pollution Control Officers Association (CAPCOA), *Health Effects*, capcoa.org/health-effects/, accessed March 2, 2022.

Toxic Air Contaminants

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

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

2.3 AMBIENT AIR QUALITY

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

Ozone (O_3) and particulate matter (PM_{10} and $PM_{2.5}$) are pollutants of concern in the BAAQMD. The closest air monitoring station to the project site that monitors ambient concentrations of these pollutants is the San José-Jackson Street Monitoring Station located approximately 2.6 miles northeast of the project site. Table 4: Ambient Air Quality Data lists the monitored maximum concentrations and number of exceedances of federal or state air quality standards for each year between 2018 to 2020. Particulate matter (PM_{10} and $PM_{2.5}$) were both exceeded in 2020 at the closest monitoring station.

Table 4: Ambient Air Quality Data

Pollutant	San José- Jackson Street[1]		
	2018	2019	2020
Ozone (O_3)			
1-hour Maximum Concentration (ppm)	0.078	0.095	.106
8-hour Maximum Concentration (ppm)	0.061	0.081	0.085
Number of Days Standard Exceeded			
CAAQS 1-hour (>0.09 ppm)	0	1	1
NAAQS 8-hour (>0.070 ppm)	0	2	2
Carbon Monoxide (CO)			
1-hour Maximum Concentration (ppm)	2.51	1.71	1.66
Number of Days Standard Exceeded			
NAAQS 1-hour (>35 ppm)	0	0	0
CAAQS 1 hour (>20 ppm)	0	0	0
Nitrogen Dioxide (NO_2)			
1-hour Maximum Concentration (ppm)	0.0861	0.0598	0.0519
Number of Days Standard Exceeded			
NAAQS 1-hour (>0.100 ppm)	0	0	0
CAAQS 1-hour (>0.18 ppm)	0	0	0
Particulate Matter Less Than 2.5 Microns ($PM_{2.5}$)			
National 24-hour Maximum Concentration	133.9	27.6	120.5
State 24-hour Maximum Concentration	133.9	34.4	120.5
Number of Days Standard Exceeded			
NAAQS 24-hour (>150 µg/m^3)	15	0	12
CAAQS 24-hour (>50 µg/m^3)	13	13	13
Particulate Matter Less Than 10 Microns (PM_{10})			
National 24-hour Maximum Concentration	115.4	75.4	134.9
State 24-hour Maximum Concentration	121.8	77.1	137.1
Number of Days Standard Exceeded			
NAAQS 24-hour (>150 µg/m^3)	0	0	0
CAAQS 24-hour (>50 µg/m^3)	4	4	10

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

[1] Measurements taken at the San José-Jackson Street Monitoring Station located at 156B Jackson Street, San José, California 95112 (CARB# 43383).

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

2.4 SENSITIVE RECEPTORS

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

The project site is located in an urban area in City of San José. The surrounding land uses are predominantly commercial and industrial, with residential uses to the east, beyond the Bay Area Rapid Transit (BART) railway corridor. Table 5: Sensitive Receptors lists the distances and locations of nearby sensitive receptors. Figure 4: Sensitive Receptors Map, shows the nearest sensitive receptors.

Table 5: Sensitive Receptors

Receptor Description	Distance and Direction from the Project Site
Multi-family residential	140 feet east
Single-family residential	190 feet east
Brooktree Park	770 feet southeast
Brooktree Elementary School	900 feet southeast

Source: Google Maps, 2022

Figure 4: Sensitive Receptor Locations

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Not to scale

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3 REGULATORY SETTING

3.1 FEDERAL

Federal Clean Air Act

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

The U.S. Environmental Protection Agency (EPA) has designated enforcement of air pollution control regulations to the individual states. Applicable federal standards are summarized in Table 6: State and Federal Ambient Air Quality Standards.

California Air Resources Board

CARB administers California's air quality policy. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards, included with the NAAQS in Table 6, are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates. In general, the Bay Area experiences low concentrations of most pollutants when compared to federal standards, except for O_3 and PM, for which standards are exceeded periodically. With respect to federal standards, the Bay Area's attainment status for 8-hour ozone is classified as "marginal nonattainment" and "nonattainment" for $PM_{2.5}$. The region is also considered to be in nonattainment with the CAAQS for PM_{10} and $PM_{2.5}$. Area sources generate the majority of these airborne particulate emissions. The Basin is considered in attainment or unclassified with respect to the CO, NO_2 and SO_2 NAAQS and CAAQS.

The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for the preparation of the SIP for meeting federal clean air standards for the State of California. Like the EPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events such as wildfires, volcanoes, etc. are not considered violations of a State standard, and are not used as a basis for designating areas as nonattainment. The applicable State standards are summarized in Table 6.

Table 6: State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	State Standards[1]		Federal Standards[2]	
		Concentration	Attainment Status	Concentration[3]	Attainment Status
Ozone (O_3)	8 Hour	0.070 ppm (137 µg/m³)	N[9]	0.070 ppm	N[4]
	1 Hour	0.09 ppm (180 µg/m³)	N	NA	N/A[5]
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m³)	A	9 ppm (10 mg/m³)	A[6]
	1 Hour	20 ppm (23 mg/m³)	A	35 ppm (40 mg/m³)	A
Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm (339 µg/m³)	A	0.100 ppm[11]	U
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)	-	0.053 ppm (100 µg/m³)	A
Sulfur Dioxide[12] (SO_2)	24 Hour	0.04 ppm (105 µg/m³)	A	0.14 ppm (365 µg/m³)	A
	1 Hour	0.25 ppm (655 µg/m³)	A	0.075 ppm (196 µg/m³)	A
	Annual Arithmetic Mean	NA	-	0.03 ppm (80 µg/m³)	A
Particulate Matter (PM_{10})	24-Hour	50 µg/m³	N	150 µg/m³	-U
	Annual Arithmetic Mean	20 µg/m³	N[7]	NA	-
Fine Particulate Matter ($PM_{2.5}$) [15]	24-Hour	NA	-	35 µg/m³	U/A
	Annual Arithmetic Mean	12 µg/m³	N[7]	12 µg/m³	N
Sulfates (SO_{4-2})	24 Hour	25 µg/m³	A	NA	-
Lead (Pb)[13, 14]	30-Day Average	1.5 µg/m³	-	NA	A
	Calendar Quarter	NA	-	1.5 µg/m³	A
	Rolling 3-Month Average	NA	-	0.15 µg/m³	-
Hydrogen Sulfide (H_2S)	1 Hour	0.03 ppm (42 µg/m³)	U	NA	-
Vinyl Chloride (C_2H_3Cl)	24 Hour	0.01 ppm (26 µg/m³)	-	NA	-
Visibility Reducing Particles[8]	8 Hour (10:00 to 18:00 PST)	-	U	-	-

A = attainment; N = nonattainment; U = unclassified; N/A = not applicable or no applicable standard; ppm = parts per million; µg/m³ = micrograms per cubic meter; mg/m³ = milligrams per cubic meter; – = not indicated or no information available.

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM_{10}, and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM_{10} annual standard), then some measurements may be excluded. In particular, measurements are excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe CO standard is 6.0 ppm, a level one-half the national standard and two-thirds the state standard.
2. National standards shown are the "primary standards" designed to protect public health. National standards other than for ozone, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the 4th highest daily concentrations is 0.070 ppm (70 ppb) or less. The 24-hour PM_{10} standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 µg/m_3. The 24-hour $PM_{2.5}$ standard is attained when the 3-year average of 98th percentiles is less than 35 µg/m³.
   Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM_{10} is met if the 3-year average falls below the standard at every site. The annual $PM_{2.5}$ standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard.
3. National air quality standards are set by the EPA at levels determined to be protective of public health with an adequate margin of safety.

4. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the fourth-highest maximum daily 8-hour ozone concentration per year, averaged over three years, is equal to or less than 0.070 ppm. EPA will make recommendations on attainment designations by October 1, 2016, and issue final designations October 1, 2017. Nonattainment areas will have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the ozone level in the area.
5. The national 1-hour ozone standard was revoked by U.S. EPA on June 15, 2005.
6. In April 1998, the Bay Area was redesignated to attainment for the national 8-hour carbon monoxide standard.
7 In June 2002, CARB established new annual standards for $PM_{2.5}$ and PM_{10}.
8 Statewide VRP Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.
9. The 8-hour CA ozone standard was approved by the Air Resources Board on April 28, 2005 and became effective on May 17, 2006.
10. On January 9, 2013, EPA issued a final rule to determine that the Bay Area attains the 24-hour $PM_{2.5}$ national standard. This EPA rule suspends key SIP requirements as long as monitoring data continues to show that the Bay Area attains the standard. Despite this EPA action, the Bay Area will continue to be designated as "nonattainment" for the national 24-hour $PM_{2.5}$ standard until such time as the Air District submits a "redesignation request" and a "maintenance plan" to EPA, and EPA approves the proposed redesignation.
11. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100ppm (effective January 22, 2010). The US Environmental Protection Agency (EPA) expects to make a designation for the Bay Area by the end of 2017.
12. On June 2, 2010, the U.S. EPA established a new 1-hour SO_2 standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The existing 0.030 ppm annual and 0.14 ppm 24-hour SO_2 NAAQS however must continue to be used until one year following U.S. EPA initial designations of the new 1-hour SO_2 NAAQS.
13. CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure below which there are no adverse health effects determined.
14. National lead standard, rolling 3-month average: final rule signed October 15, 2008. Final designations effective December 31, 2011.
15. In December 2012, EPA strengthened the annual $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS) from 15.0 to 12.0 micrograms per cubic meter ($\mu g/m^3$). In December 2014, EPA issued final area designations for the 2012 primary annual $PM_{2.5}$ NAAQS. Areas designated "unclassifiable/attainment" must continue to take steps to prevent their air quality from deteriorating to unhealthy levels. The effective date of this standard is April 15, 2015.

Source: Bay Area Air Quality Management District, *Air Quality Standards and Attainment Status*, 2017 http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status.

3.2 REGIONAL

Bay Area Air Quality Management District

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

Clean Air Plan

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

BAAQMD periodically develops air quality plans that outline the regional strategy to improve air quality and protect the climate. The most recent plan, 2017 Bay Area Clean Air Plan, includes a wide range of control measures designed to reduce emissions of air pollutants and GHGs, including the following

examples that may be relevant to this project: reduce emissions of toxic air contaminants by adopting more stringent limits and methods for evaluating toxic risks; implement pricing measures to reduce travel demand; accelerate the widespread adoption of electric vehicles; promote the use of clean fuels; promote energy efficiency in both new and existing buildings; and promote the switch from natural gas to electricity for space and water heating in Bay Area buildings.

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

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

The following BAAQMD rules would limit emissions of air pollutants from construction and operation of the project:

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

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

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

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

3.3 LOCAL

City of San José General Plan

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

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

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

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

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

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

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

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

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

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

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

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

Policy MS-13.3: Construction and/or demolition projects that have the potential to disturb asbestos (from soil or building material) shall comply with all the requirements of the California Air Resources Board's air toxic control measures (ATCMs) for Construction, Grading, Quarrying, and Surface Mining Operations.

4 SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 AIR QUALITY THRESHOLDS

State CEQA Guidelines Appendix G

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

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

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

AQ-3 Expose sensitive receptors to substantial pollutant concentrations?

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

Air Quality Thresholds

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

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

The BAAQMD's CEQA Air Quality Guidelines provides significance thresholds for both construction and operation of projects. Ultimately the lead agency determines the thresholds of significance for impacts. However, if a project proposes development in excess of the established thresholds, as outlined in Table 7: Bay Area Air Quality Management District Emissions Thresholds, a significant air quality impact may occur and additional analysis is warranted to fully assess the significance of impacts.

Table 7: Bay Area Air Quality Management District Emissions Thresholds

Criteria Air Pollutants and Precursors (Regional)	Construction-Related	Operational-Related	
	Average Daily Emissions (pounds/day)	Average Daily Emission (pounds/day)	Annual Average Emission (tons/year)
Reactive Organic Gases (ROG)	54	54	10
Nitrogen Oxides (NO_X)	54	54	10
Coarse Particulates (PM_{10})	82 (exhaust)	82	15
Fine Particulates ($PM_{2.5}$)	54 (exhaust)	54	10
PM_{10} / $PM_{2.5}$ (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average) 20.0 ppm (1-hour average)	
Source: Bay Area Air Quality Management District, 2017 CEQA Air Quality Guidelines, 2017.			

4.2 METHODOLOGY

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

Construction equipment, trucks, worker vehicles, and ground-disturbing activities associated with project construction would generate emissions of criteria air pollutants and precursors. Air quality impacts were assessed according to CARB and BAAQMD recommended methodologies. Daily regional construction emissions are estimated by assuming construction occurs at the earliest feasible date (i.e., a conservative estimate of construction activities) and applying off-road, fugitive dust, and on-road emissions factors in CalEEMod.

Project operations would result in emissions of area sources (consumer products), energy sources (natural gas usage), and mobile sources (motor vehicles from project generated vehicle trips). Project-generated increases in operational emissions would be predominantly associated with motor vehicle use. The increase of traffic over existing conditions as a result of the project was obtained from the project's Transportation Analysis prepared by Kimley-Horn (August 2020). Other operational emissions from area, energy, and stationary sources were quantified in CalEEMod based on land use activity data.

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

5 POTENTIAL IMPACTS AND MITIGATION

5.1 AIR QUALITY ANALYSIS

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

BAAQMD's most recently adopted plan, the Clean Air Plan, in the Basin outlines how the San Francisco area will attain air quality standards, reduce population exposure and protect public health, and reduce GHG emissions.

The Clean Air Plan assumptions for projected air emissions and pollutants in the City of San José are based on the Envision San José 2040 General Plan Land Use Designation Map which designates the project site use as "Industrial Park (IP)". The project site is zoned "Industrial Park (IP)". The IP Zoning District allows for a wide variety of industrial users such as research and development, manufacturing, warehouses, and offices. The project would be consistent with the development assumptions for the land use. Therefore, the project is consistent with the General Plan assumptions. The proposed project consists of 714,491 sf of industrial/commercial/office space consistent with the Envision San José 2040 General Plan land use designation and would not increase the regional population growth or cause changes in vehicle traffic that would obstruct implementation of the Clean Air Plan in the San Francisco Bay Area Basin.

As described below, construction and operational air quality emissions generated by the proposed project would not exceed the BAAQMD's emissions thresholds. Since the proposed project would not exceed these thresholds, the proposed project would not be considered by the BAAQMD to be a substantial emitter of criteria air pollutants, and would not contribute to any non-attainment areas in the Basin.

The project is anticipated to generate approximately 715[1] jobs within the City. ABAG predicts that job opportunities in the City of San José will grow from 387,510 in 2010 to 554,875 by 2040. The project is consistent with the City's General Plan, therefore the 715 jobs generated by the project would be within the ABAG growth projections for the City. As identified in the General Plan FEIR, the City currently has an existing ratio of 0.8 jobs per resident. The General Plan FEIR identified that at full buildout of the General Plan, the existing ratio of jobs per employed resident would be increased to a job per employed resident ratio of 1.3. Because the Project is consistent with planned land uses for the Project site, the project would not exceed the level of population or housing in regional planning efforts. Population growth from the Project would be consistent with ABAG's projections for the City and with the City's General Plan.

A project would be consistent with the 2017 Clean Air Plan Progress Report if it would not exceed the growth assumptions in the plan. The primary method of determining consistency with the 2017 Clean Air Plan growth assumptions is consistency with the General Plan land use designations and zoning designations for the site. It should be noted that the Clean Air Plan does not make a specific assumption for development on the site, but bases assumptions on ABAG and MTC growth in population, travel, and business, based on socioeconomic forecasts. As noted above, the project would not exceed the growth

[1] THE City of San José. Envision 2040 General Plan Draft EIR assumes one job per 1,000 sf of industrial space. ((714,491 SF industrial) / 1,000 SF = 714.49 jobs); Available at https://www.sanjoseca.gov/home/showpublisheddocument/22041/636688304350830000. Accessed March 7, 2022.

assumptions in the General Plan. Therefore, the growth assumptions in the Clean Air Plan would not be exceeded.

Projects are considered consistent with the 2017 Clean Air Plan if they incorporate all applicable and feasible control measures from the 2017 Clean Air Plan and would not disrupt or hinder implementation of any 2017 Clean Air Plan control measures.

The project is consistent with the 2017 Clean Air Plan policies that are applicable to the project site. As discussed in Table 8: Project Consistency with Applicable Clean Air Plan Control Measures, the project would comply with City, State, and regional requirements.

Table 8: Project Consistency with Applicable Clean Air Plan Control Measures

Control Measure	Project Consistency
Stationary Source Control Measures	
SS25: Coatings, Solvents, Lubricants, Sealants and Adhesives	**Consistent**. The project would comply with Regulation 8, Rule 3: Architectural Coatings, which would dictate the ROG content of paint available for use during construction.
SS26: Surface Prep and Cleaning Solvent	
SS29: Asphaltic Concrete	**Consistent**. Paving activities associated with the project would be required to utilize asphalt that does not exceed BAAQMD emission standards in Regulation 8, Rule 15.
SS31: General Particulate Matter Emissions Limitation	**Consistent**. This control measure is implemented by the BAAQMD through Regulation 6, Rule 1. This rule limits the quantity of particulate matter in the atmosphere by controlling emission rates, concentration, visible emissions and opacity. The project would be required to comply with applicable BAAQMD rules.
SS32: Emergency Back-up Generators	**Consistent**. The project would include back-up generators. The emergency generators installed would be required to meet the BAAQMD's emissions standards for back-up generators.
SS34: Wood Smoke	**Consistent**. The project would comply with BAAQMD Regulation 6, Rule 3 and prohibit the construction of wood burning appliances/ fireplaces.
SS36: Particulate Matter from Trackout	**Consistent**. Mud and dirt that may be tracked out onto the nearby public roads during construction activities would be removed promptly by the contractor based on BAAQMD's requirements and City Standard Permit Conditions.
SS38: Fugitive Dust	**Consistent**. Material stockpiling and track out during grading activities as well as smoke and fumes from paving and roofing asphalt operations would be required to utilize best management practices, such as watering exposed surfaces twice a day, covering haul trucks, keeping vehicle speeds on unpaved roads under 15 mph, to minimize the creation of fugitive dust (BAAQMD Regulation 6).
SS40: Odors	**Consistent**. The project is an industrial development and is not anticipated to generate odors. The project would comply with BAAQMD Regulation 7 to strengthen odor standards and enhance enforceability.
Transportation Control Measures	
TR2: Trip Reduction Programs	

Control Measure	Project Consistency
TR8: Ridesharing and Last-Mile Connections	**Consistent**. The project would include a number of travel demand measures (TDM) such as bicycle/pedestrian access, reduced roadway widths along Commerce Drive and Qume Drive for bicyclist safety, and bicycle parking and storage for employees and visitors. These TDM measures would help reduce vehicle miles traveled (VMT) and mobile greenhouse gas emissions.
TR9: Bicycle and Pedestrian Access Facilities	**Consistent**. Bicycle facilities in the area include Montague Expressway, Trade Zone Boulevard, Capitol Avenue, Oakland Road, Lundy Avenue, Murphy Road, and Hostetter Road which provide Class II bike lanes with buffered striping to separate the vehicle and bike travel way. The proposed project would include 32 bicycle parking spaces.
TR10: Land Use Strategies	**Consistent**. This measure is a BAAQMD funding tool to maintain and disseminate information on current climate action plans and other local best practices and collaborate with regional partners to identify innovative funding mechanisms to help local governments address air quality and climate change in their general plans. In addition, the proposed project site is located within 2,000 feet of a transit stops located at the intersections of Lundy Avenue and Concourse Drive and Lundy Avenue and Commerce Drive. Therefore, these employment opportunities would be easily accessible via transit, furthering the City's General Plan goals to support a healthy community, reduce traffic congestion and decrease greenhouse gas emissions and energy consumption. The project would not conflict with implementation of this measure.
TR13: Parking Policies	**Consistent.** The proposed project would create approximately 511 new parking spaces (99 trailer spaces and 412 automobile spaces). The proposed parking is sufficient for the proposed uses.
TR19: Medium and Heavy Duty Trucks	**Consistent.** The project includes a warehousing use that would generate truck trips. However, per the Transportation Analysis prepared for the project indicated there would be approximately 2,035 daily trips. Approximately 17 percent of warehouse fleets are truck trips. Therefore, the project would have an estimated 344 daily truck trips. However, with consideration for applicable trip reductions and credits, the project would generate a net total of 0 additional daily trips. The project would not conflict with the implementation of this measure.
TR22: Construction, Freight and Farming Equipment	**Consistent**. The Project would comply through implementation of the BAAQMD standard condition, which requires construction equipment to be properly maintained.
Energy and Climate Control Measures	
EN1: Decarbonize Electricity Generation	**Consistent**. The project would be constructed in accordance with the latest California Building Code and green building regulations/CalGreen. The proposed development would be constructed in compliance with the City's Council Policy 6-32 and the City's Green Building Ordinance. Additionally, the project would include San José Clean Energy (SJCE) TotalGreen.
EN2: Decrease Electricity Demand	

Control Measure	Project Consistency
Buildings Control Measures	
BL1: Green Buildings	**Consistent**. The project would be constructed in accordance with the latest California Building Code and green building regulations/CalGreen. The proposed development would be constructed in compliance with the City's Council Policy 6-32 and the City's Green Building Ordinance.
L2: Decarbonize Buildings	
BL4: Urban Heat Island Mitigation	**Consistent**. The Project would demolish three existing buildings and associated asphalt surfaces. The Project site would be replaced with a similar land use. The Project landscaping would include 339 new 24-inch box trees which would cover approximately 21 percent of the site with landscaping. The trees would provide shading to help mitigate the urban heat island effect.
Natural and Working Lands Control Measures	
NW2: Urban Tree Planting	**Consistent**. The project site is in an existing industrial park with urban trees in the parking field. The project would plant 339 new native trees which would allow for better overall tree health.
Waste Management Control Measures	
WA1: Landfills	**Consistent**. The waste service provider for the project would be required to meet the AB 341 and SB 939, 1374, and 1383 requirements that require waste service providers to divert and recycle waste. Per Cal Green requirements the project would recycle construction waste.
WA3: Green Waste Diversion	
WA4: Recycling and Waste Reduction	
Water Control Measures	
WR2: Support Water Conservation	**Consistent**. The project would implement water conservation measures and low flow fixtures as required by Title 24, CalGreen, and the City of San Jose's Municipal Code Section 15-11 Water Efficient Landscaping Ordinance, which includes various specifications for plant types, water features, and irrigation design etc.
Source: BAAQMD, Clean Air Plan, 2017 and Kimley-Horn & Associates, 2022.	

The Project would generate approximately 715 jobs. The project is consistent with the anticipated General Plan and therefore the City's projected population growth for the site. As a result, the project would be within the ABAG growth projections for the City of approximately 554,875 jobs by 2040. Thus, the project would not exceed the assumptions in the General Plan or the Clean Air Plan.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

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

Construction Emissions

Project construction activities would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the project area include ozone-precursor pollutants (i.e., ROG and NO_x) and PM_{10} and $PM_{2.5}$. Construction-generated emissions are short term and temporary, lasting only

while construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the BAAQMD's thresholds of significance.

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

The duration of construction activities associated with the project are estimated to last approximately 18 months, beginning in April 2024 and concluding at the end of September 2025. The project's construction-related emissions were calculated using the BAAQMD-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Project demolition and site preparation are anticipated to begin in April 2024 and last approximately three months. Project grading and construction is anticipated to begin in July 2024 and last approximately 15 months. The project would include approximately 5,000 cubic yards (cy) of export, however most of the materials would be balanced on site. Paving and Architectural Coating were modeled to be completed end of September 2025. The exact construction timeline is unknown; however, to be conservative, earlier dates were utilized in the modeling. This approach is conservative given that emissions factors decrease in future years due to regulatory and technological improvements and fleet turnover. See Appendix A: Air Quality Modeling Data for additional information regarding the construction assumptions used in this analysis. The project's predicted maximum daily construction-related emissions are summarized in Table 9: Construction-Related Emissions.

Table 9: Construction-Related Emissions

Construction Year	Pollutant (maximum pounds per day)[1]					
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO_x)	Exhaust		Fugitive Dust	
			Coarse Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)	Coarse Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)
2024	3.30	34.45	1.35	1.25	11.34	4.36
2025	47.97	24.54	0.67	0.63	7.12	1.93
Maximum	**47.97**	**34.45**	**1.35**	**1.25**	**11.34**	**4.36**
BAAQMD Significance Threshold [2, 3]	*54*	*54*	*82*	*54*	*BMPs*	*BMPs*
Exceed BAAQMD Threshold?	No	No	No	No	N/A	N/A

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

Source: Refer to the CalEEMod outputs provided in Appendix A.

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

Standard Permit Condition

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

i. Water active construction areas at least twice daily or as often as needed to control dust emissions.
ii. Cover trucks hauling soil, sand, and other loose materials and/or ensure that all trucks hauling such materials maintain at least two feet of freeboard.
iii. Remove visible mud or dirt track-out onto adjacent public roads using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
iv. Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
v. Pave new or improved roadways, driveways, and sidewalks as soon as possible.
vi. Lay building pads as soon as possible after grading unless seeding or soil binders are used.
vii. Replant vegetation in disturbed areas as quickly as possible.
viii. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
ix. Minimizing idling times either by shutting off equipment 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). Provide clear signage for construction workers at all access points.
x. Maintain and properly tune construction equipment in accordance with manufacturer's specifications. Check all equipment by a certified mechanic and record a determination of running in proper condition prior to operation.
xi. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints.

Construction Equipment and Worker Vehicle Exhaust. The project assumed exhaust emission factors for typical diesel-powered heavy equipment based on the CalEEMod program defaults. Variables factored into estimating the total construction emissions included: level of activity, length of construction period, number of pieces/types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported onsite or offsite. Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, emissions produced on site as the equipment is used, and emissions

from trucks transporting materials and workers to and from the site. Emitted pollutants would include ROG, NO_X, PM_{10}, and $PM_{2.5}$. The BAAQMD recommends the implementation of all Basic Construction Control Measures, whether or not construction-related emissions exceed applicable significance thresholds. The See the above listed Standard Permit Conditions.

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

The highest concentration of ROG emissions would be generated from architectural coating beginning in May 2025 and lasting approximately four months. This phase includes the interior and exterior painting as well as striping of all paved parking areas and driveways. Paints would be required to comply with BAAQMD Regulation 8, Rule 3: Architectural Coating. Regulation 8, Rule 3 provides specifications on painting practices and regulates the ROG content of paint.

Summary. As shown in Table 9, all criteria pollutant construction emissions would remain below their respective thresholds. BAAQMD considers fugitive dust emissions to be potentially significant without implementation of the Construction Control Measures which help control fugitive dust. NO_X emissions are primarily generated by engine combustion in construction equipment, haul trucks, and employee commuting, requiring the use of newer construction equipment with better emissions controls would reduce construction-related NO_X emissions. With implementation of the Standard Permit Condition, above, the proposed project's construction would not worsen ambient air quality, create additional violations of federal and state standards, or delay the Basin's goal for meeting attainment standards. Impacts would be less than significant.

Operational Emissions

Operational emissions for industrial developments are typically generated from mobile sources (burning of fossil fuels in cars); energy sources (cooling and heating); and area sources (landscape equipment and household products). Table 10: Maximum Daily Project Operational Emissions shows that the project's maximum emissions would not exceed BAAQMD operational thresholds.

Table 10: Maximum Daily Project Operational Emissions

Emissions Source	Pollutant (maximum pounds per day)[1]					
	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO_X)	Exhaust		Fugitive Dust	
			Coarse Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)	Coarse Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)
Existing Project Site						
Area	10.73	0.00	0.00	0.00	0.00	0.00
Energy	0.04	0.40	0.03	0.03	0.00	0.00
Mobile	10.95	14.41	0.20	0.19	21.89	6.02
Total Emissions	**21.72**	**14.80**	**0.23**	**0.22**	**21.89**	**6.02**
Proposed Project						
Area	17.58	0.00	0.00	0.00	0.00	0.00
Energy	0.07	0.66	0.05	0.05	0.00	0.00

Emissions Source	Pollutant (maximum pounds per day)[1]					
			Exhaust		Fugitive Dust	
	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO_X)	Coarse Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)	Coarse Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)
Mobile	5.09	26.40	0.21	0.20	14.50	3.88
Stationary[2]	1.23	5.50	0.18	0.18	0.00	0.00
Total Project Emissions	**23.97**	**32.57**	**0.44**	**0.43**	**14.50**	**3.88**
Net Emissions						
Existing Project Site	21.72	14.80	0.23	0.22	21.89	6.02
Proposed Project	23.97	32.57	0.44	0.43	14.50	3.88
Net Change	**+2.25**	**+17.77**	**+0.21**	**+0.21**	**-7.39**	**-2.14**
BAAQMD Significance Threshold[3]	*54*	*54*	*82*	*54*	*N/A*	*N/A*
BAAQMD Threshold Exceeded?	**No**	**No**	**No**	**No**	**N/A**	**N/A**

1. Emissions were calculated using CalEEMod.
2. Stationary emissions source includes the four backup generators associated with the project.
3. Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, 2017.

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

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

Energy Source Emissions. Energy source emissions would be generated as a result of electricity usage associated with the project. The primary use of electricity by the project would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics.

Mobile Source Emissions. Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_X, PM_{10}, and $PM_{2.5}$ are all pollutants of regional concern (NO_X and ROG react with sunlight to form O_3 [photochemical smog], and wind currents readily transport PM_{10} and $PM_{2.5}$). However, CO tends to be a localized pollutant, dispersing rapidly at the source. Project-generated vehicle emissions have been estimated using CalEEMod. Trip generation rates associated with the project were based on the Project Transportation Analysis prepared by Kimley-Horn (2022). Based on the Transportation Analysis, the project would result in a gross total of 2,408 daily vehicle trips. However, with applicable trip reductions including location-based mode-share the project would result in 2,035 trips. The existing site generates 3,565 vehicle trips, therefore the project would not generate any additional daily trips.

Total Operational Emissions. As seen in Table 10, net project operational emissions would not exceed BAAQMD thresholds. The federal ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Therefore, the project would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and no criteria pollutant health impacts would occur. Project operational emissions would be less than significant.

Cumulative Short-Term Emissions

The Basin is designated nonattainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards and nonattainment for O_3 and $PM_{2.5}$ for Federal standards. discussed above, the project's construction-related emissions would not exceed the BAAQMD significance thresholds for criteria pollutants.

Since these thresholds indicate whether an individual project's emissions have the potential to affect cumulative regional air quality, it can be expected that the project-related construction emissions would not be cumulatively considerable. The BAAQMD recommends Basic Construction Control Measures for all projects whether or not construction-related emissions exceed the thresholds of significance. Compliance with BAAQMD construction-related measures are considered to reduce cumulative impacts at a Basin-wide level. As a result, construction emissions associated with the project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts.

Cumulative Long-Term Impacts

The BAAQMD has not established separate significance thresholds for cumulative operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. The BAAQMD developed the operational thresholds of significance based on the level above which a project's individual emissions would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. Therefore, a project that exceeds the BAAQMD operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact. [2]

As shown in Table 10, the project's operational emissions would not exceed BAAQMD thresholds. As a result, operational emissions associated with the project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact with compliance with standard conditions and City policies.

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

Sensitive land uses are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The State CEQA Guidelines indicate that a potentially significant impact could occur if a project would expose sensitive receptors to substantial pollutant concentrations.

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

Construction Toxic Air Contaminants

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust which is a known Toxic Air Contaminants (TAC). Diesel exhaust from construction equipment operating at the site poses a health risk to nearby sensitive receptors. However, the use of diesel-powered construction equipment would be episodic and would occur in various phases throughout the project site. Construction is subject to and would comply with California regulations (e.g., California Code of Regulations, Title 13, Division 3, Article 1, Chapter 10, Sections 2485 and 2449), which reduce DPM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five minutes. These regulations would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions.

As noted in the Health Risk Assessment prepared by Kimley-Horn (2022), maximum (worst case) $PM_{2.5}$ exhaust construction emissions over the entire construction period were used in AERMOD to approximate construction DPM emissions. See the HRA for additional methodology on the modeling analysis. Risk levels were calculated with the CARB Hotspots Analysis and Reporting Program (HARP) Risk Assessment Standalone Tool (RAST) based on the California Office of Environmental Health Hazard Assessment (OEHHA) guidance document, Air Toxics Hot Spots Program Risk Assessment Guidelines (February 2015). Results of this assessment are summarized in Table 11: Construction Risk.

Table 11: Construction Risk

Emissions Sources	Pollutant Concentration ($\mu g/m^3$)	Cancer Risk (per Million)	Chronic Hazard	Acute Hazard
Unmitigated				
Construction	0.05	14.95	0.009	0.115
BAAQMD Threshold	*0.3*	*10*	*1.0*	*1.0*
Threshold Exceeded?	**No**	**Yes**	**No**	**No**
Mitigated				
Construction	0.01	1.71	0.001	0.012
BAAQMD Threshold	*0.3*	*10*	*1.0*	*1.0*
Threshold Exceeded?	**No**	**No**	**No**	**No**

1. Heavy-duty off-road construction equipment would also meet CARB Tier 4 Final emissions standards per Mitigation Measure HRA-1. The Tier 3 construction equipment with 85 percent PM reduction filters would result in 0.013 $\mu g/m^3$ with a cancer risk of 4.18 per million. This would be below BAAQMD thresholds.
2. Cancer risk incorporates age sensitivity factors, 95th percentile breathing rates, and a 30 year exposure duration with a 3rd trimester start age.

Refer to Appendix A: Air Quality Modeling Data.

Maximum unmitigated concentration of $PM_{2.5}$ during construction would be 0.05 $\mu g/m^3$, which would not exceed the BAAQMD threshold of 0.3 $\mu g/m^3$. The highest calculated unmitigated carcinogenic risk from project construction would be 14.95 per million (based on $PM_{2.5}$ exhaust), which would exceed the BAAQMD threshold of 10 in one million. The maximally exposed individual (MEI) during construction (i.e., the closest sensitive receptor) to the project site are the residences across the railroad tracks (approximately 140 feet away). As such, the project would be required to include Mitigation Measure HRA-1.

Mitigation Measure HRA-1 requires the use of construction equipment that would meet CARB Tier 4 Final emissions standards in order to reduce diesel exhaust construction emissions. Mitigation Measure HRA-1 would reduce the project $PM_{2.5}$ concentration to 0.01 µg/m^3 and would reduce the project's maximum cancer risk to 1.71 per million, which would be below the BAAQMD thresholds of 0.3 µg/m^3 and 10 in one million, respectively. Non-cancer hazards for DPM would be below BAAQMD threshold, with a chronic hazard index computed at 0.009 and an acute hazard index of 0.115 without mitigation and 0.001 and 0.012 with mitigation. Acute and chronic hazards would be below the BAAQMD significance threshold of 1.0. As described above, construction risk levels would be below the BAAQMD's thresholds with Mitigation Measure HRA-1. Construction risk levels would be less than significant with mitigation.

Operational Toxic Air Contaminants

The Project would demolish the three existing buildings on site and construct four new warehouse industrial buildings, totaling approximately 714,791 sf. According to the Transportation Analysis prepared, the project would include passenger vehicles, vans, and trucks. The project is anticipated to generate approximately 2,035 daily vehicle trips (0 net daily trips). The project also includes one backup generator per building. As shown in Table 12: Operational Risk Assessment Results, the highest calculated carcinogenic risk resulting from the Project is 0.48 per million residents[3], which is below the BAAQMD threshold of 10 per million. Acute and chronic hazards also would be below the BAAQMD significance threshold of 1.0. Operational impacts would be less than significant.

Table 12: Operational Risk Assessment Results

Exposure Scenario	Pollutant Concentration (µg/m^3)	Maximum Cancer Risk (Risk per Million)	Chronic Noncancer Hazard	Acute Noncancer Hazard
Particulate Matter ($PM_{2.5}$)	0.001	0.48	0.00001	0.003
Threshold	*NA*	*10*	*1.0*	*1.0*
Exceed Threshold?	**No**	**No**	**No**	**No**

Refer to Appendix A: Modeling Data.
1. The maximum cancer would be experienced at a residences across the railroad track east of the project site based on worst-case exposure durations for the Project, 95th percentile breathing rates, and 30-year exposure duration.
2. Cancer risk incorporates age sensitivity factors, 95th percentile breathing rates, and a 30 year exposure duration with a 3rd trimester start age.

The pollutant concentrations modeled in AERMOD evaluate the cancer risk exposure levels outdoors for the nearest sensitive receptors. The BAAQMD conservatively does not include indoor exposure adjustments for residents. However, the typical person spends the majority of time indoors rather than remaining outdoors in the same location for 24 hours a day.[4] Therefore, the AERMOD outdoor pollutant concentrations are not necessarily representative of actual exposure at the project site and tend to overestimate exposure. As such, the modeled results are a conservative estimation.

[3] Cancer risk incorporates age sensitivity factors, 95th percentile breathing rates, and a 30 year exposure duration with a 3rd trimester start age.

[4] California Air Resources Board Research Division and University of California, Berkeley, *Activity Patterns of California Residents,* May 1991. The study indicates that on average, adults and adolescents in California spent almost 15 hours per day inside their homes, and 6 hours in other indoor locations, for a total of 21 hours (87% of the day). Approximately two hours per day were spent in transit, and just over one hour per day was spent in outdoor locations.

Cumulative Health Risk Analysis

Cumulative impacts are defined as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Worst-case $PM_{2.5}$ concentrations and chronic hazard levels for the project would be well below the BAAQMD's thresholds. CEQA Guidelines 15065(a)(3) states "… 'Cumulatively considerable' means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

Mobile and stationary sources within a 1,000-foot radius of the project site were reviewed using BAAQMD's Stationary Source Screening Analysis Tools. There are two stationary sources located within a 1,000-foot radius of the project site.

As shown in Table 13: Cumulative Operational Health Risk, cumulative impacts related to cancer risk and hazard would be less than cumulatively considerable and within acceptable limits. Additionally, cumulative residential $PM_{2.5}$ would not exceed the BAAQMD's cumulative threshold of 0.3 µg/m^3, the primary contributor to those concentrations is the existing highway sources near the project area. The existing highway sources have a high $PM_{2.5}$ (0.26 µg/m^3). The highway sources represent approximately 87 percent of the total concentrations and are completely unrelated to the project. The project represents less than 1.3 percent of total cumulative $PM_{2.5}$ in the project area. Therefore, the project's cumulative impacts would be less than significant.

Table 13: Cumulative Operational Health Risk

Emissions Sources	$PM_{2.5}$ (µg/m^3)	Cancer Risk (per million)	Hazard
Project Mobile Emissions	0.001	0.48	0.0001
Stationary Sources			
BD Biosciences	0.001	0.53	0.001
HGST, Inc	0.002	0.83	0.002
Major Street Sources[1]	0.04	1.60	0.16
Highway Sources[1]	0.26	13.34	1.04
Railway Sources[1]	0.00	0.10	0.00
Cumulative Health Risk Values	**0.30**	**16.88**	**1.20**
BAAQMD Cumulative Threshold	*0.8*	*100*	*10*
Threshold Exceeded?	**No**	**No**	**No**

1. BAAQMD GIS data.
Source: BAAQMD's Stationary Source Data and GIS Mapping Tools, 2021.

As described above in Table 13, cumulative impacts related to cancer risk and hazard would not be cumulatively considerable and would be within acceptable limits. Additionally, cumulative $PM_{2.5}$ concentrations at the residential MEI would not exceed the BAAQMD's cumulative threshold of 0.3 µg/m^3. The primary contributor to those concentrations is the existing highway sources near the project area which includes I-680 and I-880. Using BAAQMD's GIS mapping tools $PM_{2.5}$ concentrations and cancer risk can be evaluated as individual data points near the project site. The existing highway sources have a high $PM_{2.5}$ (0.26 µg/m^3). The highway sources represent approximately 87 percent of the total cumulative concentrations and are unrelated to the project. The project represents less than 0.3 percent of total

cumulative $PM_{2.5}$ in the project area. Therefore, the project's cumulative impacts would be less than significant.

Mobile Sources

The project would not place sensitive receptors within 1,000-feet of a major roadway (mobile TAC source). Additionally, the project's effects to existing vehicle distribution and travel speeds would be nominal. According to the Transportation Analysis, the project would generate 0 net new daily trips. Any changes to vehicle distribution and travel speeds can affect vehicle emissions rates, although these changes would be minimal and would not substantially change criteria pollutant emissions, which are primarily driven by vehicle miles travelled (VMT). According to Transportation Analysis (Appendix L), the proposed Project would have lower VMT than the existing conditions. Traffic is also predominantly light-duty and gasoline powered and therefore any shifts in traffic would not constitute a change in substantial cancer risk. The project does not involve the increase of transit trips or routes and would not generate increased emissions from expanded service (e.g., increased bus idling service).

Carbon Monoxide Hotspots

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

The Basin is designated as in attainment for carbon monoxide (CO). Emissions and ambient concentrations of CO have decreased dramatically in the Basin with the introduction of the catalytic converter in 1975. No exceedances of the CAAQS or NAAQS for CO have been recorded at nearby monitoring stations since 1991. As a result, the BAAQMD screening criteria notes that CO impacts may be determined to be less than significant if a project would not increase traffic volumes at local intersections to more than 44,000 vehicles per hour, or 24,000 vehicles per hour for locations in heavily urban areas, where "urban canyons" formed by buildings tend to reduce air circulation.

According to the Transportation Analysis prepared for the project (2022), the project would not generate any net new daily trips. The project's effects to existing vehicle distribution and travel speeds would be nominal as the project is not resulting in an LOS delay at any intersections evaluated. The project would not increase traffic volumes in intersections with more than 24,000 or 44,000 vehicles per hour. As a result, the project would not have the potential to create a CO hotspot and impacts would be less than significant.

Mitigation Measures: Refer to Mitigation Measure HRA-1 in the project Health Risk Assessment.

Level of Significance: Less than significant impact.

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

Construction

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

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

Operational

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

The project includes four industrial warehouse buildings comprising 714,491 sf office/warehouse industrial building which are not anticipated to generate objectionable odors. None of the above listed odor generating uses are located near the project site. Impacts would be less than significant.

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

Level of Significance: Less than significant impact.

5.2 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

Cumulative Setting

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

Cumulative Impacts and Mitigation Measures

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

As described in threshold AQ-1 above, the project would also be consistent with the appropriate 2017 Clean Air Plan control measures, which are provided to reduce air quality emissions for the entire Bay Area region. Additionally, the discussion in threshold AQ-2 addresses cumulative impacts and demonstrates that the project would not exceed the applicable BAAQMD thresholds for construction or operations. The BAAQMD CEQA Air Quality Guidelines note that the nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size by itself to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. Consistency with the 2017 Clean Air Plan control measures would ensure that the project would not cumulatively contribute to air quality impacts in the Basin. Therefore, impacts would be less than significant.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

6 REFERENCES

1. Bay Area Air Quality Management District, *Planning Healthy Places*, 2016.
2. Bay Area Air Quality Management District, *CEQA Air Quality Guidelines,* 2017.
3. Bay Area Air Quality Management District, *Clean Air Plan*, 2017.
4. Bay Area Air Quality Management District, *Air Quality Standards and Attainment Status,* 2017.
5. Bay Area Air Quality Management District, *Current Rules*, 2017.
6. Bay Area Air Quality Management District, *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans,* 2022.
7. California Air Pollution Control Officers Association (CAPCOA), *Health Effects*, 2018.
8. California Air Pollution Control Officers Association (CAPCOA), *Health Risk Assessments for Proposed Land Use Projects*, 2009.
9. California Air Resources Board, *Aerometric Data Analysis and Measurement System (ADAM) Top Four Summaries from 2015 to 2017*, 2018.
10. California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, 2005.
11. California Air Resources Board, *Current Air Quality Standards*, 2016.
12. California Air Resources Board, *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, 2000.
13. City of San José, *General Plan,* 2018.
14. City of San José, *Municipal Code*, 2019.
15. Federal Highway Administration*, Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents,* 2016.
16. Kimley-Horn & Associates, *Qume and Commerce Development Transportation Analysis*, February 2022.
17. Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Risk Assessment Guidelines*, 2015.
18. United States Environmental Protection Agency, *National Ambient Air Quality Standards Table*, 2016.
19. United States Environmental Protection Agency, *Nonattainment Areas for Criteria Pollutants*, 2018.
20. United States Environmental Protection Agency, *Policy Assessment for the Review of the Lead National Ambient Air Quality Standards*, 2013.

Appendix A

Air Quality Modeling Data

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Bridge Qume Exisiting

Santa Clara County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	428.43	1000sqft	9.84	428,433.00	0
Parking Lot	661.74	1000sqft	15.19	661,740.00	0
City Park	7.77	Acre	7.77	338,461.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - City Park Proxy for Landscape - Landscape numbers taken from Stormwater Evaluation Form

Construction Phase - Existing - No construction

Grading -

Vehicle Trips - Per TA - City park has no trips

Construction Off-road Equipment Mitigation - Per BAAQMD rule compliance

Water Mitigation -

Waste Mitigation - Per AB 939

Table Name	Column Name	Default Value	New Value

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	AcresOfGrading	135.00	0.00
tblGrading	AcresOfGrading	30.00	0.00
tblLandUse	LandUseSquareFeet	428,430.00	428,433.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	8.32
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	8.32
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	8.32

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2021	3.9432	40.5330	21.9934	0.0399	18.2141	2.0453	20.2594	9.9699	1.8816	11.8515	0.0000	3,861.5704	3,861.5704	1.1960	3.6200e-003	3,888.9247
2022	3.9276	38.8786	35.8946	0.1203	18.2141	1.6357	19.8274	9.9699	1.5049	11.4542	0.0000	12,330.1839	12,330.1839	1.9482	0.9000	12,619.7130
2023	3.4180	25.3779	34.0312	0.1169	6.5138	0.7845	7.2983	1.7637	0.7386	2.5023	0.0000	11,995.3676	11,995.3676	0.8245	0.8557	12,270.9778
2024	136.0220	24.3402	32.9143	0.1148	6.5139	0.6975	7.2115	1.7637	0.6566	2.4203	0.0000	11,815.0519	11,815.0519	0.8094	0.8364	12,084.5382

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Maximum	**136.0220**	**40.5330**	**35.8946**	**0.1203**	**18.2141**	**2.0453**	**20.2594**	**9.9699**	**1.8816**	**11.8515**	**0.0000**	**12,330.1839**	**12,330.1839**	**1.9482**	**0.9000**	**12,619.7130**

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	lb/day										lb/day					
2021	3.9432	40.5329	21.9934	0.0399	7.8635	2.0453	9.9087	4.2827	1.8816	6.1643	0.0000	3,861.5704	3,861.5704	1.1960	3.6200e-003	3,888.9247
2022	3.9276	38.8786	35.8946	0.1203	7.8635	1.6357	9.4768	4.2827	1.5049	5.7670	0.0000	12,330.1839	12,330.1839	1.9482	0.9000	12,619.7130
2023	3.4180	25.3779	34.0312	0.1169	6.1891	0.7845	6.9735	1.6840	0.7386	2.4226	0.0000	11,995.3676	11,995.3676	0.8245	0.8557	12,270.9778
2024	136.0220	24.3402	32.9143	0.1148	6.1892	0.6975	6.8867	1.6840	0.6566	2.3406	0.0000	11,815.0519	11,815.0519	0.8094	0.8364	12,084.5382
Maximum	**136.0220**	**40.5329**	**35.8946**	**0.1203**	**7.8635**	**2.0453**	**9.9087**	**4.2827**	**1.8816**	**6.1643**	**0.0000**	**12,330.1839**	**12,330.1839**	**1.9482**	**0.9000**	**12,619.7130**

	ROG	NOx	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**	**43.17**	**0.00**	**39.11**	**49.15**	**0.00**	**40.86**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.7306	1.0300e-003	0.1125	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		0.2403	0.2403	6.4000e-004		0.2562
Energy	0.0436	0.3959	0.3325	2.3800e-003		0.0301	0.0301		0.0301	0.0301		475.0393	475.0393	9.1000e-003	8.7100e-003	477.8623
Mobile	10.9459	12.5923	104.0393	0.2201	21.8867	0.2027	22.0893	5.8270	0.1900	6.0170		22,396.8584	22,396.8584	1.2594	0.9517	22,711.9367
Total	**21.7200**	**12.9892**	**104.4844**	**0.2225**	**21.8867**	**0.2331**	**22.1198**	**5.8270**	**0.2205**	**6.0475**		**22,872.1380**	**22,872.1380**	**1.2691**	**0.9604**	**23,190.0552**

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	lb/day										lb/day					
Area	10.7306	1.0300e-003	0.1125	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		0.2403	0.2403	6.4000e-004		0.2562
Energy	0.0436	0.3959	0.3325	2.3800e-003		0.0301	0.0301		0.0301	0.0301		475.0393	475.0393	9.1000e-003	8.7100e-003	477.8623
Mobile	10.9459	12.5923	104.0393	0.2201	21.8867	0.2027	22.0893	5.8270	0.1900	6.0170		22,396.8584	22,396.8584	1.2594	0.9517	22,711.9367
Total	**21.7200**	**12.9892**	**104.4844**	**0.2225**	**21.8867**	**0.2331**	**22.1198**	**5.8270**	**0.2205**	**6.0475**		**22,872.1380**	**22,872.1380**	**1.2691**	**0.9604**	**23,190.0552**

	ROG	NOx	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**

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	11/17/2021	12/28/2021	5	30	
2	Site Preparation	Site Preparation	12/29/2021	1/25/2022	5	20	
3	Grading	Grading	1/26/2022	3/29/2022	5	45	
4	Building Construction	Building Construction	3/30/2022	2/27/2024	5	500	
5	Paving	Paving	2/28/2024	4/16/2024	5	35	
6	Architectural Coating	Architectural Coating	4/17/2024	6/4/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 15.19

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 642,650; Non-Residential Outdoor: 214,217; Striped Parking Area: 39,704

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	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
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	600.00	234.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	120.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**		**1.5513**	**1.5513**		**1.4411**	**1.4411**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

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	lb/day										lb/day					
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
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
Worker	0.0458	0.0299	0.4284	1.1200e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		113.6255	113.6255	3.3400e-003	3.0100e-003	114.6074
Total	**0.0458**	**0.0299**	**0.4284**	**1.1200e-003**	**0.1232**	**6.6000e-004**	**0.1239**	**0.0327**	**6.1000e-004**	**0.0333**		**113.6255**	**113.6255**	**3.3400e-003**	**3.0100e-003**	**114.6074**

Mitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**		**1.5513**	**1.5513**		**1.4411**	**1.4411**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

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	lb/day										lb/day					
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
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
Worker	0.0458	0.0299	0.4284	1.1200e-003	0.1168	6.6000e-004	0.1175	0.0311	6.1000e-004	0.0317		113.6255	113.6255	3.3400e-003	3.0100e-003	114.6074
Total	**0.0458**	**0.0299**	**0.4284**	**1.1200e-003**	**0.1168**	**6.6000e-004**	**0.1175**	**0.0311**	**6.1000e-004**	**0.0317**		**113.6255**	**113.6255**	**3.3400e-003**	**3.0100e-003**	**114.6074**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	lb/day										lb/day					
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
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
Worker	0.0550	0.0359	0.5141	1.3500e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		136.3506	136.3506	4.0100e-003	3.6200e-003	137.5288
Total	**0.0550**	**0.0359**	**0.5141**	**1.3500e-003**	**0.1479**	**7.9000e-004**	**0.1487**	**0.0392**	**7.3000e-004**	**0.0400**		**136.3506**	**136.3506**	**4.0100e-003**	**3.6200e-003**	**137.5288**

Mitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.7233	0.0000	7.7233	4.2454	0.0000	4.2454			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**7.7233**	**2.0445**	**9.7678**	**4.2454**	**1.8809**	**6.1263**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	lb/day										lb/day					
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
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
Worker	0.0550	0.0359	0.5141	1.3500e-003	0.1402	7.9000e-004	0.1409	0.0373	7.3000e-004	0.0381		136.3506	136.3506	4.0100e-003	3.6200e-003	137.5288
Total	**0.0550**	**0.0359**	**0.5141**	**1.3500e-003**	**0.1402**	**7.9000e-004**	**0.1409**	**0.0373**	**7.3000e-004**	**0.0381**		**136.3506**	**136.3506**	**4.0100e-003**	**3.6200e-003**	**137.5288**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**18.0663**	**1.6126**	**19.6788**	**9.9307**	**1.4836**	**11.4143**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

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	lb/day										lb/day					
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
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
Worker	0.0510	0.0316	0.4720	1.3100e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		132.8018	132.8018	3.6000e-003	3.3400e-003	133.8866
Total	**0.0510**	**0.0316**	**0.4720**	**1.3100e-003**	**0.1479**	**7.5000e-004**	**0.1486**	**0.0392**	**6.9000e-004**	**0.0399**		**132.8018**	**132.8018**	**3.6000e-003**	**3.3400e-003**	**133.8866**

Mitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.7233	0.0000	7.7233	4.2454	0.0000	4.2454			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**7.7233**	**1.6126**	**9.3359**	**4.2454**	**1.4836**	**5.7289**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

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	lb/day										lb/day					
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
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
Worker	0.0510	0.0316	0.4720	1.3100e-003	0.1402	7.5000e-004	0.1409	0.0373	6.9000e-004	0.0380		132.8018	132.8018	3.6000e-003	3.3400e-003	133.8866
Total	**0.0510**	**0.0316**	**0.4720**	**1.3100e-003**	**0.1402**	**7.5000e-004**	**0.1409**	**0.0373**	**6.9000e-004**	**0.0380**		**132.8018**	**132.8018**	**3.6000e-003**	**3.3400e-003**	**133.8866**

3.4 Grading - 2022

Unmitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**6.0221**	**1.6349**	**7.6570**	**3.3102**	**1.5041**	**4.8143**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	lb/day										lb/day					
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
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
Worker	0.0567	0.0351	0.5245	1.4500e-003	0.1643	8.3000e-004	0.1651	0.0436	7.6000e-004	0.0443		147.5576	147.5576	4.0100e-003	3.7100e-003	148.7629
Total	**0.0567**	**0.0351**	**0.5245**	**1.4500e-003**	**0.1643**	**8.3000e-004**	**0.1651**	**0.0436**	**7.6000e-004**	**0.0443**		**147.5576**	**147.5576**	**4.0100e-003**	**3.7100e-003**	**148.7629**

Mitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5744	0.0000	2.5744	1.4151	0.0000	1.4151			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**2.5744**	**1.6349**	**4.2093**	**1.4151**	**1.5041**	**2.9192**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	lb/day										lb/day					
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
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
Worker	0.0567	0.0351	0.5245	1.4500e-003	0.1557	8.3000e-004	0.1566	0.0415	7.6000e-004	0.0422		147.5576	147.5576	4.0100e-003	3.7100e-003	148.7629
Total	**0.0567**	**0.0351**	**0.5245**	**1.4500e-003**	**0.1557**	**8.3000e-004**	**0.1566**	**0.0415**	**7.6000e-004**	**0.0422**		**147.5576**	**147.5576**	**4.0100e-003**	**3.7100e-003**	**148.7629**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	lb/day										lb/day					
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
Vendor	0.5217	12.7381	3.7968	0.0499	1.5849	0.1382	1.7231	0.4563	0.1322	0.5885		5,349.1225	5,349.1225	0.1211	0.7887	5,587.1928
Worker	1.6997	1.0532	15.7344	0.0435	4.9289	0.0249	4.9537	1.3074	0.0229	1.3303		4,426.7279	4,426.7279	0.1202	0.1113	4,462.8879
Total	**2.2214**	**13.7913**	**19.5312**	**0.0934**	**6.5137**	**0.1631**	**6.6768**	**1.7636**	**0.1551**	**1.9187**		**9,775.8503**	**9,775.8503**	**0.2413**	**0.9000**	**10,050.0808**

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

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	lb/day										lb/day					
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
Vendor	0.5217	12.7381	3.7968	0.0499	1.5171	0.1382	1.6553	0.4396	0.1322	0.5718		5,349.1225	5,349.1225	0.1211	0.7887	5,587.1928
Worker	1.6997	1.0532	15.7344	0.0435	4.6718	0.0249	4.6967	1.2443	0.0229	1.2672		4,426.7279	4,426.7279	0.1202	0.1113	4,462.8879
Total	**2.2214**	**13.7913**	**19.5312**	**0.0934**	**6.1890**	**0.1631**	**6.3520**	**1.6839**	**0.1551**	**1.8390**		**9,775.8503**	**9,775.8503**	**0.2413**	**0.9000**	**10,050.0808**

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	lb/day										lb/day					

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	lb/day										lb/day					
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
Vendor	0.2621	10.0588	3.2323	0.0478	1.5850	0.0611	1.6461	0.4563	0.0584	0.5147		5,125.5836	5,125.5836	0.1083	0.7525	5,352.5276
Worker	1.5832	0.9343	14.5549	0.0422	4.9289	0.0236	4.9525	1.3074	0.0218	1.3291		4,314.5741	4,314.5741	0.1084	0.1032	4,348.0442
Total	**1.8453**	**10.9931**	**17.7872**	**0.0899**	**6.5138**	**0.0847**	**6.5986**	**1.7637**	**0.0802**	**1.8439**		**9,440.1577**	**9,440.1577**	**0.2167**	**0.8557**	**9,700.5718**

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	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	lb/day										lb/day					
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
Vendor	0.2621	10.0588	3.2323	0.0478	1.5172	0.0611	1.5783	0.4397	0.0584	0.4981		5,125.5836	5,125.5836	0.1083	0.7525	5,352.5276
Worker	1.5832	0.9343	14.5549	0.0422	4.6718	0.0236	4.6955	1.2443	0.0218	1.2660		4,314.5741	4,314.5741	0.1084	0.1032	4,348.0442
Total	**1.8453**	**10.9931**	**17.7872**	**0.0899**	**6.1891**	**0.0847**	**6.2738**	**1.6840**	**0.0802**	**1.7641**		**9,440.1577**	**9,440.1577**	**0.2167**	**0.8557**	**9,700.5718**

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	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

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Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
Vendor	0.2552	10.0606	3.1692	0.0471	1.5851	0.0617	1.6468	0.4563	0.0590	0.5154		5,050.1309	5,050.1309	0.1069	0.7401	5,273.3518
Worker	1.4822	0.8358	13.5783	0.0408	4.9289	0.0225	4.9514	1.3074	0.0207	1.3281		4,209.2222	4,209.2222	0.0982	0.0963	4,240.3788
Total	**1.7374**	**10.8965**	**16.7475**	**0.0879**	**6.5139**	**0.0842**	**6.5981**	**1.7637**	**0.0797**	**1.8434**		**9,259.3530**	**9,259.3530**	**0.2051**	**0.8364**	**9,513.7306**

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	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
Vendor	0.2552	10.0606	3.1692	0.0471	1.5173	0.0617	1.5790	0.4397	0.0590	0.4987		5,050.1309	5,050.1309	0.1069	0.7401	5,273.3518
Worker	1.4822	0.8358	13.5783	0.0408	4.6718	0.0225	4.6944	1.2443	0.0207	1.2650		4,209.2222	4,209.2222	0.0982	0.0963	4,240.3788
Total	**1.7374**	**10.8965**	**16.7475**	**0.0879**	**6.1892**	**0.0842**	**6.2734**	**1.6840**	**0.0797**	**1.7637**		**9,259.3530**	**9,259.3530**	**0.2051**	**0.8364**	**9,513.7306**

3.6 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	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	1.1371					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1252**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
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
Worker	0.0371	0.0209	0.3395	1.0200e-003	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		105.2306	105.2306	2.4500e-003	2.4100e-003	106.0095
Total	**0.0371**	**0.0209**	**0.3395**	**1.0200e-003**	**0.1232**	**5.6000e-004**	**0.1238**	**0.0327**	**5.2000e-004**	**0.0332**		**105.2306**	**105.2306**	**2.4500e-003**	**2.4100e-003**	**106.0095**

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	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	1.1371					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1252**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
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
Worker	0.0371	0.0209	0.3395	1.0200e-003	0.1168	5.6000e-004	0.1174	0.0311	5.2000e-004	0.0316		105.2306	105.2306	2.4500e-003	2.4100e-003	106.0095
Total	**0.0371**	**0.0209**	**0.3395**	**1.0200e-003**	**0.1168**	**5.6000e-004**	**0.1174**	**0.0311**	**5.2000e-004**	**0.0316**		**105.2306**	**105.2306**	**2.4500e-003**	**2.4100e-003**	**106.0095**

3.7 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	lb/day										lb/day					
Archit. Coating	135.5448					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**135.7256**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
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
Worker	0.2964	0.1672	2.7157	8.1600e-003	0.9858	4.5000e-003	0.9903	0.2615	4.1400e-003	0.2656		841.8444	841.8444	0.0196	0.0193	848.0758
Total	**0.2964**	**0.1672**	**2.7157**	**8.1600e-003**	**0.9858**	**4.5000e-003**	**0.9903**	**0.2615**	**4.1400e-003**	**0.2656**		**841.8444**	**841.8444**	**0.0196**	**0.0193**	**848.0758**

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	lb/day										lb/day					
Archit. Coating	135.5448					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**135.7256**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
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
Worker	0.2964	0.1672	2.7157	8.1600e-003	0.9344	4.5000e-003	0.9389	0.2489	4.1400e-003	0.2530		841.8444	841.8444	0.0196	0.0193	848.0758
Total	**0.2964**	**0.1672**	**2.7157**	**8.1600e-003**	**0.9344**	**4.5000e-003**	**0.9389**	**0.2489**	**4.1400e-003**	**0.2530**		**841.8444**	**841.8444**	**0.0196**	**0.0193**	**848.0758**

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	lb/day										lb/day					
Mitigated	10.9459	12.5923	104.0393	0.2201	21.8867	0.2027	22.0893	5.8270	0.1900	6.0170		22,396.8584	22,396.8584	1.2594	0.9517	22,711.9367
Unmitigated	10.9459	12.5923	104.0393	0.2201	21.8867	0.2027	22.0893	5.8270	0.1900	6.0170		22,396.8584	22,396.8584	1.2594	0.9517	22,711.9367

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	3,564.54	3,564.54	3564.54	10,406,707	10,406,707
Total	3,564.54	3,564.54	3,564.54	10,406,707	10,406,707

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.567742	0.054883	0.190502	0.116880	0.020652	0.004894	0.008289	0.006425	0.000966	0.000407	0.024432	0.000950	0.00
Parking Lot	0.567742	0.054883	0.190502	0.116880	0.020652	0.004894	0.008289	0.006425	0.000966	0.000407	0.024432	0.000950	0.00
Unrefrigerated Warehouse-No Rail	0.567742	0.054883	0.190502	0.116880	0.020652	0.004894	0.008289	0.006425	0.000966	0.000407	0.024432	0.000950	0.00

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0436	0.3959	0.3325	2.3800e-003		0.0301	0.0301		0.0301	0.0301		475.0393	475.0393	9.1000e-003	8.7100e-003	477.8623
NaturalGas Unmitigated	0.0436	0.3959	0.3325	2.3800e-003		0.0301	0.0301		0.0301	0.0301		475.0393	475.0393	9.1000e-003	8.7100e-003	477.8623

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	lb/day										lb/day					
City Park	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
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
Unrefrigerated Warehouse-No Rail	4037.83	0.0436	0.3959	0.3325	2.3800e-003		0.0301	0.0301		0.0301	0.0301		475.0393	475.0393	9.1000e-003	8.7100e-003	477.8623
Total		**0.0436**	**0.3959**	**0.3325**	**2.3800e-003**		**0.0301**	**0.0301**		**0.0301**	**0.0301**		**475.0393**	**475.0393**	**9.1000e-003**	**8.7100e-003**	**477.8623**

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

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	kBTU/yr	lb/day										lb/day					
City Park	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
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
Unrefrigerated Warehouse-No Rail	4.03783	0.0436	0.3959	0.3325	2.3800e-003		0.0301	0.0301		0.0301	0.0301		475.0393	475.0393	9.1000e-003	8.7100e-003	477.8623
Total		**0.0436**	**0.3959**	**0.3325**	**2.3800e-003**		**0.0301**	**0.0301**		**0.0301**	**0.0301**		**475.0393**	**475.0393**	**9.1000e-003**	**8.7100e-003**	**477.8623**

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	lb/day										lb/day					
Mitigated	10.7306	1.0300e-003	0.1125	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		0.2403	0.2403	6.4000e-004		0.2562
Unmitigated	10.7306	1.0300e-003	0.1125	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		0.2403	0.2403	6.4000e-004		0.2562

6.2 Area by SubCategory

Unmitigated

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	lb/day										lb/day					
Architectural Coating	1.2997					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.4203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0105	1.0300e-003	0.1125	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		0.2403	0.2403	6.4000e-004		0.2562
Total	**10.7305**	**1.0300e-003**	**0.1125**	**1.0000e-005**		**4.0000e-004**	**4.0000e-004**		**4.0000e-004**	**4.0000e-004**		**0.2403**	**0.2403**	**6.4000e-004**		**0.2562**

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	lb/day										lb/day					
Architectural Coating	1.2997					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.4203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0105	1.0300e-003	0.1125	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		0.2403	0.2403	6.4000e-004		0.2562
Total	**10.7305**	**1.0300e-003**	**0.1125**	**1.0000e-005**		**4.0000e-004**	**4.0000e-004**		**4.0000e-004**	**4.0000e-004**		**0.2403**	**0.2403**	**6.4000e-004**		**0.2562**

7.0 Water Detail

7.1 Mitigation Measures Water

Bridge Qume Exisiting - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Bridge Qume

Santa Clara County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	714.49	1000sqft	16.40	714,491.00	0
Parking Lot	490.73	1000sqft	11.27	490,730.00	0
City Park	5.13	Acre	5.13	223,462.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - City Park Proxy for Landscape

Construction Phase - Per construction timeline

Demolition -

Grading -

Vehicle Trips - City park proxy for truck trips

Construction Off-road Equipment Mitigation - Per BAAQMD rule compliance

Water Mitigation -

Waste Mitigation - Per AB939

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Stationary Sources - Emergency Generators and Fire Pumps -

Fleet Mix - City Park heavy-duty trucks

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	56.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	45.00	40.00
tblConstructionPhase	NumDays	500.00	262.00
tblConstructionPhase	NumDays	35.00	172.00
tblConstructionPhase	NumDays	35.00	29.00
tblFleetMix	HHD	6.3770e-003	1.00
tblFleetMix	LDA	0.57	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.1580e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	2.7200e-003	0.00
tblFleetMix	MHD	8.0300e-003	0.00
tblFleetMix	OBUS	8.9300e-004	0.00
tblFleetMix	SBUS	9.0000e-004	0.00
tblFleetMix	UBUS	3.7200e-004	0.00
tblGrading	MaterialExported	0.00	5,000.00
tblLandUse	LandUseSquareFeet	714,490.00	714,491.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	750.00

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.25
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	4.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TL	7.30	31.00
tblVehicleTrips	CNW_TTP	19.00	100.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	79.34
tblVehicleTrips	ST_TR	1.74	2.28
tblVehicleTrips	SU_TR	2.19	79.34
tblVehicleTrips	SU_TR	1.74	2.28
tblVehicleTrips	WD_TR	0.78	79.34
tblVehicleTrips	WD_TR	1.74	2.28

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	lb/day										lb/day					
2024	3.3010	34.4539	32.9143	0.1148	24.1674	1.3535	25.2422	10.1417	1.2459	11.2733	0.0000	11,815.0519	11,815.0519	1.9818	1.0607	12,084.5382
2025	47.9728	24.5392	36.2940	0.1235	7.4998	0.6667	8.1665	2.0252	0.6306	2.6558	0.0000	12,734.1605	12,734.1605	0.8289	0.8346	13,003.5759
Maximum	**47.9728**	**34.4539**	**36.2940**	**0.1235**	**24.1674**	**1.3535**	**25.2422**	**10.1417**	**1.2459**	**11.2733**	**0.0000**	**12,734.1605**	**12,734.1605**	**1.9818**	**1.0607**	**13,003.5759**

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	lb/day										lb/day					
2024	3.3010	34.4539	32.9143	0.1148	11.3437	1.3535	12.4186	4.3561	1.2459	5.4878	0.0000	11,815.0519	11,815.0519	1.9818	1.0607	12,084.5382
2025	47.9728	24.5392	36.2940	0.1235	7.1236	0.6667	7.7903	1.9329	0.6306	2.5635	0.0000	12,734.1605	12,734.1605	0.8289	0.8346	13,003.5759
Maximum	**47.9728**	**34.4539**	**36.2940**	**0.1235**	**11.3437**	**1.3535**	**12.4186**	**4.3561**	**1.2459**	**5.4878**	**0.0000**	**12,734.1605**	**12,734.1605**	**1.9818**	**1.0607**	**13,003.5759**

	ROG	NOx	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**	**41.68**	**0.00**	**39.51**	**48.31**	**0.00**	**42.20**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Date: 2/21/2022 9:05 AM

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Area	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Energy	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
Mobile	5.5442	82.7187	61.2410	0.4658	22.8702	0.7636	23.6338	6.1743	0.7288	6.9031		50,365.3226	50,365.3226	1.9087	6.6726	52,401.4586
Stationary	1.2308	5.5041	3.1383	5.9100e-003		0.1811	0.1811		0.1811	0.1811		629.6356	629.6356	0.0883		631.8425
Total	**24.4320**	**88.8841**	**65.0571**	**0.4757**	**22.8702**	**0.9953**	**23.8655**	**6.1743**	**0.9605**	**7.1348**		**51,787.4387**	**51,787.4387**	**2.0128**	**6.6871**	**53,830.5065**

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	lb/day										lb/day					
Area	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Energy	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
Mobile	5.5442	82.7187	61.2410	0.4658	22.8702	0.7636	23.6338	6.1743	0.7288	6.9031		50,365.3226	50,365.3226	1.9087	6.6726	52,401.4586
Stationary	1.2308	5.5041	3.1383	5.9100e-003		0.1811	0.1811		0.1811	0.1811		629.6356	629.6356	0.0883		631.8425
Total	**24.4320**	**88.8841**	**65.0571**	**0.4757**	**22.8702**	**0.9953**	**23.8655**	**6.1743**	**0.9605**	**7.1348**		**51,787.4387**	**51,787.4387**	**2.0128**	**6.6871**	**53,830.5065**

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	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**

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	4/1/2024	6/17/2024	5	56	
2	Site Preparation	Site Preparation	6/18/2024	6/24/2024	5	5	
3	Grading	Grading	6/25/2024	8/19/2024	5	40	
4	Building Construction	Building Construction	8/20/2024	8/20/2025	5	262	
5	Architectural Coating	Architectural Coating	2/3/2025	9/30/2025	5	172	
6	Paving	Paving	8/21/2025	9/30/2025	5	29	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 120

Acres of Paving: 11.27

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,071,737; Non-Residential Outdoor: 357,246; Striped Parking Area: 29,444

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

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	6	15.00	0.00	5,756.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	625.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	600.00	234.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	120.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 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	lb/day										lb/day					
Fugitive Dust					22.2458	0.0000	22.2458	3.3682	0.0000	3.3682			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**2.2437**	**20.8781**	**19.7073**	**0.0388**	**22.2458**	**0.9602**	**23.2060**	**3.3682**	**0.8922**	**4.2604**		**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

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	lb/day										lb/day					
Hauling	0.2198	13.4791	3.2462	0.0611	1.7984	0.1141	1.9125	0.4930	0.1092	0.6022		6,674.9138	6,674.9138	0.2296	1.0583	6,996.0329
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

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	0.0371	0.0209	0.3395	1.0200e-003	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		105.2306	105.2306	2.4500e-003	2.4100e-003	106.0095
Total	**0.2569**	**13.5000**	**3.5857**	**0.0622**	**1.9216**	**0.1147**	**2.0363**	**0.5257**	**0.1097**	**0.6354**		**6,780.1444**	**6,780.1444**	**0.2321**	**1.0607**	**7,102.0424**

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	lb/day										lb/day					
Fugitive Dust					9.5101	0.0000	9.5101	1.4399	0.0000	1.4399			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**2.2437**	**20.8781**	**19.7073**	**0.0388**	**9.5101**	**0.9602**	**10.4702**	**1.4399**	**0.8922**	**2.3321**	**0.0000**	**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

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	lb/day										lb/day					
Hauling	0.2198	13.4791	3.2462	0.0611	1.7169	0.1141	1.8310	0.4730	0.1092	0.5821		6,674.9138	6,674.9138	0.2296	1.0583	6,996.0329
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

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	0.0371	0.0209	0.3395	1.0200e-003	0.1168	5.6000e-004	0.1174	0.0311	5.2000e-004	0.0316		105.2306	105.2306	2.4500e-003	2.4100e-003	106.0095
Total	**0.2569**	**13.5000**	**3.5857**	**0.0622**	**1.8337**	**0.1147**	**1.9483**	**0.5041**	**0.1097**	**0.6138**		**6,780.1444**	**6,780.1444**	**0.2321**	**1.0607**	**7,102.0424**

3.3 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**		**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

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	lb/day										lb/day					
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
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

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	0.0445	0.0251	0.4074	1.2200e-003	0.1479	6.8000e-004	0.1485	0.0392	6.2000e-004	0.0398		126.2767	126.2767	2.9500e-003	2.8900e-003	127.2114
Total	**0.0445**	**0.0251**	**0.4074**	**1.2200e-003**	**0.1479**	**6.8000e-004**	**0.1485**	**0.0392**	**6.2000e-004**	**0.0398**		**126.2767**	**126.2767**	**2.9500e-003**	**2.8900e-003**	**127.2114**

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	lb/day										lb/day					
Fugitive Dust					8.4034	0.0000	8.4034	4.3188	0.0000	4.3188			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**8.4034**	**1.2294**	**9.6327**	**4.3188**	**1.1310**	**5.4498**	**0.0000**	**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

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	lb/day										lb/day					
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
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

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	0.0445	0.0251	0.4074	1.2200e-003	0.1402	6.8000e-004	0.1408	0.0373	6.2000e-004	0.0380		126.2767	126.2767	2.9500e-003	2.8900e-003	127.2114
Total	**0.0445**	**0.0251**	**0.4074**	**1.2200e-003**	**0.1402**	**6.8000e-004**	**0.1408**	**0.0373**	**6.2000e-004**	**0.0380**		**126.2767**	**126.2767**	**2.9500e-003**	**2.8900e-003**	**127.2114**

3.4 Grading - 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	lb/day										lb/day					
Fugitive Dust					9.2177	0.0000	9.2177	3.6559	0.0000	3.6559			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**9.2177**	**1.3354**	**10.5531**	**3.6559**	**1.2286**	**4.8845**		**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

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	lb/day										lb/day					
Hauling	0.0334	2.0490	0.4935	9.2900e-003	0.2734	0.0173	0.2907	0.0749	0.0166	0.0915		1,014.6890	1,014.6890	0.0349	0.1609	1,063.5040
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

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	0.0494	0.0279	0.4526	1.3600e-003	0.1643	7.5000e-004	0.1651	0.0436	6.9000e-004	0.0443		140.3074	140.3074	3.2700e-003	3.2100e-003	141.3460
Total	**0.0828**	**2.0769**	**0.9461**	**0.0107**	**0.4377**	**0.0181**	**0.4558**	**0.1185**	**0.0173**	**0.1358**		**1,154.9964**	**1,154.9964**	**0.0382**	**0.1641**	**1,204.8499**

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	lb/day										lb/day					
Fugitive Dust					3.9406	0.0000	3.9406	1.5629	0.0000	1.5629			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**3.9406**	**1.3354**	**5.2760**	**1.5629**	**1.2286**	**2.7915**	**0.0000**	**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

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	lb/day										lb/day					
Hauling	0.0334	2.0490	0.4935	9.2900e-003	0.2610	0.0173	0.2783	0.0719	0.0166	0.0885		1,014.6890	1,014.6890	0.0349	0.1609	1,063.5040
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

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	0.0494	0.0279	0.4526	1.3600e-003	0.1557	7.5000e-004	0.1565	0.0415	6.9000e-004	0.0422		140.3074	140.3074	3.2700e-003	3.2100e-003	141.3460
Total	**0.0828**	**2.0769**	**0.9461**	**0.0107**	**0.4167**	**0.0181**	**0.4348**	**0.1134**	**0.0173**	**0.1307**		**1,154.9964**	**1,154.9964**	**0.0382**	**0.1641**	**1,204.8499**

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	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

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	lb/day										lb/day					
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
Vendor	0.2552	10.0606	3.1692	0.0471	1.5851	0.0617	1.6468	0.4563	0.0590	0.5154		5,050.1309	5,050.1309	0.1069	0.7401	5,273.3518
Worker	1.4822	0.8358	13.5783	0.0408	4.9289	0.0225	4.9514	1.3074	0.0207	1.3281		4,209.2222	4,209.2222	0.0982	0.0963	4,240.3788

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**1.7374**	**10.8965**	**16.7475**	**0.0879**	**6.5139**	**0.0842**	**6.5981**	**1.7637**	**0.0797**	**1.8434**		**9,259.3530**	**9,259.3530**	**0.2051**	**0.8364**	**9,513.7306**

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	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

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	lb/day										lb/day					
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
Vendor	0.2552	10.0606	3.1692	0.0471	1.5173	0.0617	1.5790	0.4397	0.0590	0.4987		5,050.1309	5,050.1309	0.1069	0.7401	5,273.3518
Worker	1.4822	0.8358	13.5783	0.0408	4.6718	0.0225	4.6944	1.2443	0.0207	1.2650		4,209.2222	4,209.2222	0.0982	0.0963	4,240.3788
Total	**1.7374**	**10.8965**	**16.7475**	**0.0879**	**6.1892**	**0.0842**	**6.2734**	**1.6840**	**0.0797**	**1.7637**		**9,259.3530**	**9,259.3530**	**0.2051**	**0.8364**	**9,513.7306**

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 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	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	lb/day										lb/day					
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
Vendor	0.2495	10.0188	3.1190	0.0463	1.5852	0.0617	1.6469	0.4564	0.0591	0.5154		4,964.4750	4,964.4750	0.1056	0.7261	5,183.4868
Worker	1.3947	0.7543	12.7343	0.0395	4.9289	0.0216	4.9504	1.3074	0.0198	1.3272		4,109.8025	4,109.8025	0.0891	0.0904	4,138.9660
Total	**1.6442**	**10.7731**	**15.8533**	**0.0857**	**6.5140**	**0.0833**	**6.5973**	**1.7637**	**0.0789**	**1.8426**		**9,074.2775**	**9,074.2775**	**0.1947**	**0.8165**	**9,322.4528**

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	lb/day										lb/day					
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
Vendor	0.2495	10.0188	3.1190	0.0463	1.5174	0.0617	1.5792	0.4397	0.0591	0.4988		4,964.4750	4,964.4750	0.1056	0.7261	5,183.4868
Worker	1.3947	0.7543	12.7343	0.0395	4.6718	0.0216	4.6934	1.2443	0.0198	1.2641		4,109.8025	4,109.8025	0.0891	0.0904	4,138.9660
Total	**1.6442**	**10.7731**	**15.8533**	**0.0857**	**6.1893**	**0.0833**	**6.2726**	**1.6840**	**0.0789**	**1.7629**		**9,074.2775**	**9,074.2775**	**0.1947**	**0.8165**	**9,322.4528**

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	44.5114					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**44.6823**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

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	lb/day										lb/day					
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
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
Worker	0.2790	0.1509	2.5469	7.8900e-003	0.9858	4.3100e-003	0.9901	0.2615	3.9700e-003	0.2654		821.9605	821.9605	0.0178	0.0181	827.7932
Total	**0.2790**	**0.1509**	**2.5469**	**7.8900e-003**	**0.9858**	**4.3100e-003**	**0.9901**	**0.2615**	**3.9700e-003**	**0.2654**		**821.9605**	**821.9605**	**0.0178**	**0.0181**	**827.7932**

Mitigated Construction On-Site

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	44.5114					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**44.6823**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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	lb/day										lb/day					
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
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
Worker	0.2790	0.1509	2.5469	7.8900e-003	0.9344	4.3100e-003	0.9387	0.2489	3.9700e-003	0.2528		821.9605	821.9605	0.0178	0.0181	827.7932
Total	**0.2790**	**0.1509**	**2.5469**	**7.8900e-003**	**0.9344**	**4.3100e-003**	**0.9387**	**0.2489**	**3.9700e-003**	**0.2528**		**821.9605**	**821.9605**	**0.0178**	**0.0181**	**827.7932**

3.7 Paving - 2025

Unmitigated Construction On-Site

Date: 2/21/2022 9:05 AM

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.0182					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9333**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

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	lb/day										lb/day					
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
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
Worker	0.0349	0.0189	0.3184	9.9000e-004	0.1232	5.4000e-004	0.1238	0.0327	5.0000e-004	0.0332		102.7451	102.7451	2.2300e-003	2.2600e-003	103.4742
Total	**0.0349**	**0.0189**	**0.3184**	**9.9000e-004**	**0.1232**	**5.4000e-004**	**0.1238**	**0.0327**	**5.0000e-004**	**0.0332**		**102.7451**	**102.7451**	**2.2300e-003**	**2.2600e-003**	**103.4742**

Mitigated Construction On-Site

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.0182					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9333**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

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	lb/day										lb/day					
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
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
Worker	0.0349	0.0189	0.3184	9.9000e-004	0.1168	5.4000e-004	0.1173	0.0311	5.0000e-004	0.0316		102.7451	102.7451	2.2300e-003	2.2600e-003	103.4742
Total	**0.0349**	**0.0189**	**0.3184**	**9.9000e-004**	**0.1168**	**5.4000e-004**	**0.1173**	**0.0311**	**5.0000e-004**	**0.0316**		**102.7451**	**102.7451**	**2.2300e-003**	**2.2600e-003**	**103.4742**

4.0 Operational Detail - Mobile

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Mitigated	5.5442	82.7187	61.2410	0.4658	22.8702	0.7636	23.6338	6.1743	0.7288	6.9031		50,365.3226	50,365.3226	1.9087	6.6726	52,401.4586
Unmitigated	5.5442	82.7187	61.2410	0.4658	22.8702	0.7636	23.6338	6.1743	0.7288	6.9031		50,365.3226	50,365.3226	1.9087	6.6726	52,401.4586

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	407.01	407.01	407.01	4,592,748	4,592,748
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,629.04	1,629.04	1629.04	5,633,211	5,633,211
Total	2,036.05	2,036.05	2,036.05	10,225,959	10,225,959

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
City Park	9.50	7.30	31.00	0.00	0.00	100.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Parking Lot	0.573651	0.055882	0.186012	0.115369	0.020252	0.005158	0.008030	0.006377	0.000893	0.000372	0.024386	0.000900	0.002
Unrefrigerated Warehouse-No Rail	0.573651	0.055882	0.186012	0.115369	0.020252	0.005158	0.008030	0.006377	0.000893	0.000372	0.024386	0.000900	0.002

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	lb/day										lb/day					
NaturalGas Mitigated	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
NaturalGas Unmitigated	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234

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	lb/day										lb/day					
City Park	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

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Unrefrigerated Warehouse-No Rail	6733.83	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
Total		**0.0726**	**0.6602**	**0.5546**	**3.9600e-003**		**0.0502**	**0.0502**		**0.0502**	**0.0502**		**792.2157**	**792.2157**	**0.0152**	**0.0145**	**796.9234**

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	lb/day										lb/day					
City Park	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
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
Unrefrigerated Warehouse-No Rail	6.73383	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
Total		**0.0726**	**0.6602**	**0.5546**	**3.9600e-003**		**0.0502**	**0.0502**		**0.0502**	**0.0502**		**792.2157**	**792.2157**	**0.0152**	**0.0145**	**796.9234**

6.0 Area Detail

6.1 Mitigation Measures Area

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Unmitigated	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821

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	lb/day										lb/day					
Architectural Coating	2.0975					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.4754					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0114	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Total	**17.5843**	**1.1200e-003**	**0.1233**	**1.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**		**0.2649**	**0.2649**	**6.9000e-004**		**0.2821**

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

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

SubCategory	lb/day										lb/day					
Architectural Coating	2.0975					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.4754					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0114	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Total	**17.5843**	**1.1200e-003**	**0.1233**	**1.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**		**0.2649**	**0.2649**	**6.9000e-004**		**0.2821**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	4	0.25	50	750	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	lb/day										lb/day					
Emergency Generator - Diesel	1.2308	5.5041	3.1383	5.9100e-003		0.1811	0.1811		0.1811	0.1811		629.6356	629.6356	0.0883		631.8425
Total	**1.2308**	**5.5041**	**3.1383**	**5.9100e-003**		**0.1811**	**0.1811**		**0.1811**	**0.1811**		**629.6356**	**629.6356**	**0.0883**		**631.8425**

11.0 Vegetation

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Bridge Qume

Santa Clara County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	714.49	1000sqft	16.40	714,491.00	0
Parking Lot	490.73	1000sqft	11.27	490,730.00	0
City Park	5.13	Acre	5.13	223,462.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - City Park Proxy for Landscape

Construction Phase - Per construction timeline

Demolition -

Grading -

Vehicle Trips - City park proxy for truck trips

Construction Off-road Equipment Mitigation - Per BAAQMD rule compliance

Water Mitigation -

Waste Mitigation - Per AB939

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Fleet Mix - City Park heavy-duty trucks

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
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	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstructionPhase	NumDays	30.00	56.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	45.00	40.00
tblConstructionPhase	NumDays	500.00	262.00
tblConstructionPhase	NumDays	35.00	172.00
tblConstructionPhase	NumDays	35.00	29.00
tblFleetMix	HHD	6.3770e-003	1.00
tblFleetMix	LDA	0.57	0.00
tblFleetMix	LDT1	0.06	0.00

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.1580e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	2.7200e-003	0.00
tblFleetMix	MHD	8.0300e-003	0.00
tblFleetMix	OBUS	8.9300e-004	0.00
tblFleetMix	SBUS	9.0000e-004	0.00
tblFleetMix	UBUS	3.7200e-004	0.00
tblGrading	MaterialExported	0.00	5,000.00
tblLandUse	LandUseSquareFeet	714,490.00	714,491.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	750.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.25
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	4.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	100.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	66.86

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	ST_TR	1.74	2.37
tblVehicleTrips	SU_TR	2.19	66.86
tblVehicleTrips	SU_TR	1.74	2.37
tblVehicleTrips	WD_TR	0.78	66.86
tblVehicleTrips	WD_TR	1.74	2.37

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2024	3.3010	34.4539	32.9143	0.1148	24.1674	1.3535	25.2422	10.1417	1.2459	11.2733	0.0000	11,815.0519	11,815.0519	1.9818	1.0607	12,084.5382
2025	47.9728	24.5392	36.2940	0.1235	7.4998	0.6667	8.1665	2.0252	0.6306	2.6558	0.0000	12,734.1605	12,734.1605	0.8289	0.8346	13,003.5759
Maximum	**47.9728**	**34.4539**	**36.2940**	**0.1235**	**24.1674**	**1.3535**	**25.2422**	**10.1417**	**1.2459**	**11.2733**	**0.0000**	**12,734.1605**	**12,734.1605**	**1.9818**	**1.0607**	**13,003.5759**

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	lb/day										lb/day					

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2024	3.3010	34.4539	32.9143	0.1148	11.3437	1.3535	12.4186	4.3561	1.2459	5.4878	0.0000	11,815.0519	11,815.0519	1.9818	1.0607	12,084.5382
2025	47.9728	24.5392	36.2940	0.1235	7.1236	0.6667	7.7903	1.9329	0.6306	2.5635	0.0000	12,734.1605	12,734.1605	0.8289	0.8346	13,003.5759
Maximum	**47.9728**	**34.4539**	**36.2940**	**0.1235**	**11.3437**	**1.3535**	**12.4186**	**4.3561**	**1.2459**	**5.4878**	**0.0000**	**12,734.1605**	**12,734.1605**	**1.9818**	**1.0607**	**13,003.5759**

	ROG	NOx	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**	**41.68**	**0.00**	**39.51**	**48.31**	**0.00**	**42.20**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	lb/day										lb/day					
Area	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Energy	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
Mobile	5.0873	24.5078	53.0622	0.1857	14.4998	0.2102	14.7099	3.8769	0.1992	4.0761		19,734.9190	19,734.9190	0.8406	1.7631	20,281.3374
Stationary	1.2308	5.5041	3.1383	5.9100e-003		0.1811	0.1811		0.1811	0.1811		629.6356	629.6356	0.0883		631.8425
Total	**23.9750**	**30.6732**	**56.8783**	**0.1956**	**14.4998**	**0.4418**	**14.9416**	**3.8769**	**0.4309**	**4.3078**		**21,157.0351**	**21,157.0351**	**0.9448**	**1.7776**	**21,710.3854**

Mitigated Operational

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Energy	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
Mobile	5.0873	24.5078	53.0622	0.1857	14.4998	0.2102	14.7099	3.8769	0.1992	4.0761		19,734.9190	19,734.9190	0.8406	1.7631	20,281.3374
Stationary	1.2308	5.5041	3.1383	5.9100e-003		0.1811	0.1811		0.1811	0.1811		629.6356	629.6356	0.0883		631.8425
Total	**23.9750**	**30.6732**	**56.8783**	**0.1956**	**14.4998**	**0.4418**	**14.9416**	**3.8769**	**0.4309**	**4.3078**		**21,157.0351**	**21,157.0351**	**0.9448**	**1.7776**	**21,710.3854**

	ROG	NOx	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**

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	4/1/2024	6/17/2024	5	56	
2	Site Preparation	Site Preparation	6/18/2024	6/24/2024	5	5	
3	Grading	Grading	6/25/2024	8/19/2024	5	40	
4	Building Construction	Building Construction	8/20/2024	8/20/2025	5	262	
5	Architectural Coating	Architectural Coating	2/3/2025	9/30/2025	5	172	
6	Paving	Paving	8/21/2025	9/30/2025	5	29	

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 120

Acres of Paving: 11.27

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,071,737; Non-Residential Outdoor: 357,246; Striped Parking Area: 29,444

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	6	15.00	0.00	5,756.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	625.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	600.00	234.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	120.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 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	lb/day										lb/day					
Fugitive Dust					22.2458	0.0000	22.2458	3.3682	0.0000	3.3682			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**2.2437**	**20.8781**	**19.7073**	**0.0388**	**22.2458**	**0.9602**	**23.2060**	**3.3682**	**0.8922**	**4.2604**		**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

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Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Hauling	0.2198	13.4791	3.2462	0.0611	1.7984	0.1141	1.9125	0.4930	0.1092	0.6022		6,674.9138	6,674.9138	0.2296	1.0583	6,996.0329
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
Worker	0.0371	0.0209	0.3395	1.0200e-003	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		105.2306	105.2306	2.4500e-003	2.4100e-003	106.0095
Total	**0.2569**	**13.5000**	**3.5857**	**0.0622**	**1.9216**	**0.1147**	**2.0363**	**0.5257**	**0.1097**	**0.6354**		**6,780.1444**	**6,780.1444**	**0.2321**	**1.0607**	**7,102.0424**

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	lb/day										lb/day					
Fugitive Dust					9.5101	0.0000	9.5101	1.4399	0.0000	1.4399			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**2.2437**	**20.8781**	**19.7073**	**0.0388**	**9.5101**	**0.9602**	**10.4702**	**1.4399**	**0.8922**	**2.3321**	**0.0000**	**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Hauling	0.2198	13.4791	3.2462	0.0611	1.7169	0.1141	1.8310	0.4730	0.1092	0.5821		6,674.9138	6,674.9138	0.2296	1.0583	6,996.0329
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
Worker	0.0371	0.0209	0.3395	1.0200e-003	0.1168	5.6000e-004	0.1174	0.0311	5.2000e-004	0.0316		105.2306	105.2306	2.4500e-003	2.4100e-003	106.0095
Total	**0.2569**	**13.5000**	**3.5857**	**0.0622**	**1.8337**	**0.1147**	**1.9483**	**0.5041**	**0.1097**	**0.6138**		**6,780.1444**	**6,780.1444**	**0.2321**	**1.0607**	**7,102.0424**

3.3 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**		**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

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Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
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
Worker	0.0445	0.0251	0.4074	1.2200e-003	0.1479	6.8000e-004	0.1485	0.0392	6.2000e-004	0.0398		126.2767	126.2767	2.9500e-003	2.8900e-003	127.2114
Total	**0.0445**	**0.0251**	**0.4074**	**1.2200e-003**	**0.1479**	**6.8000e-004**	**0.1485**	**0.0392**	**6.2000e-004**	**0.0398**		**126.2767**	**126.2767**	**2.9500e-003**	**2.8900e-003**	**127.2114**

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	lb/day										lb/day					
Fugitive Dust					8.4034	0.0000	8.4034	4.3188	0.0000	4.3188			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**8.4034**	**1.2294**	**9.6327**	**4.3188**	**1.1310**	**5.4498**	**0.0000**	**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
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
Worker	0.0445	0.0251	0.4074	1.2200e-003	0.1402	6.8000e-004	0.1408	0.0373	6.2000e-004	0.0380		126.2767	126.2767	2.9500e-003	2.8900e-003	127.2114
Total	**0.0445**	**0.0251**	**0.4074**	**1.2200e-003**	**0.1402**	**6.8000e-004**	**0.1408**	**0.0373**	**6.2000e-004**	**0.0380**		**126.2767**	**126.2767**	**2.9500e-003**	**2.8900e-003**	**127.2114**

3.4 Grading - 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	lb/day										lb/day					
Fugitive Dust					9.2177	0.0000	9.2177	3.6559	0.0000	3.6559			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**9.2177**	**1.3354**	**10.5531**	**3.6559**	**1.2286**	**4.8845**		**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

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Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Hauling	0.0334	2.0490	0.4935	9.2900e-003	0.2734	0.0173	0.2907	0.0749	0.0166	0.0915		1,014.6890	1,014.6890	0.0349	0.1609	1,063.5040
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
Worker	0.0494	0.0279	0.4526	1.3600e-003	0.1643	7.5000e-004	0.1651	0.0436	6.9000e-004	0.0443		140.3074	140.3074	3.2700e-003	3.2100e-003	141.3460
Total	**0.0828**	**2.0769**	**0.9461**	**0.0107**	**0.4377**	**0.0181**	**0.4558**	**0.1185**	**0.0173**	**0.1358**		**1,154.9964**	**1,154.9964**	**0.0382**	**0.1641**	**1,204.8499**

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	lb/day										lb/day					
Fugitive Dust					3.9406	0.0000	3.9406	1.5629	0.0000	1.5629			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**3.9406**	**1.3354**	**5.2760**	**1.5629**	**1.2286**	**2.7915**	**0.0000**	**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Hauling	0.0334	2.0490	0.4935	9.2900e-003	0.2610	0.0173	0.2783	0.0719	0.0166	0.0885		1,014.6890	1,014.6890	0.0349	0.1609	1,063.5040
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
Worker	0.0494	0.0279	0.4526	1.3600e-003	0.1557	7.5000e-004	0.1565	0.0415	6.9000e-004	0.0422		140.3074	140.3074	3.2700e-003	3.2100e-003	141.3460
Total	**0.0828**	**2.0769**	**0.9461**	**0.0107**	**0.4167**	**0.0181**	**0.4348**	**0.1134**	**0.0173**	**0.1307**		**1,154.9964**	**1,154.9964**	**0.0382**	**0.1641**	**1,204.8499**

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	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
Vendor	0.2552	10.0606	3.1692	0.0471	1.5851	0.0617	1.6468	0.4563	0.0590	0.5154		5,050.1309	5,050.1309	0.1069	0.7401	5,273.3518
Worker	1.4822	0.8358	13.5783	0.0408	4.9289	0.0225	4.9514	1.3074	0.0207	1.3281		4,209.2222	4,209.2222	0.0982	0.0963	4,240.3788
Total	**1.7374**	**10.8965**	**16.7475**	**0.0879**	**6.5139**	**0.0842**	**6.5981**	**1.7637**	**0.0797**	**1.8434**		**9,259.3530**	**9,259.3530**	**0.2051**	**0.8364**	**9,513.7306**

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	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Mitigated Construction Off-Site

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
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
Vendor	0.2552	10.0606	3.1692	0.0471	1.5173	0.0617	1.5790	0.4397	0.0590	0.4987		5,050.1309	5,050.1309	0.1069	0.7401	5,273.3518
Worker	1.4822	0.8358	13.5783	0.0408	4.6718	0.0225	4.6944	1.2443	0.0207	1.2650		4,209.2222	4,209.2222	0.0982	0.0963	4,240.3788
Total	**1.7374**	**10.8965**	**16.7475**	**0.0879**	**6.1892**	**0.0842**	**6.2734**	**1.6840**	**0.0797**	**1.7637**		**9,259.3530**	**9,259.3530**	**0.2051**	**0.8364**	**9,513.7306**

3.5 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	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
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
Vendor	0.2495	10.0188	3.1190	0.0463	1.5852	0.0617	1.6469	0.4564	0.0591	0.5154		4,964.4750	4,964.4750	0.1056	0.7261	5,183.4868
Worker	1.3947	0.7543	12.7343	0.0395	4.9289	0.0216	4.9504	1.3074	0.0198	1.3272		4,109.8025	4,109.8025	0.0891	0.0904	4,138.9660
Total	**1.6442**	**10.7731**	**15.8533**	**0.0857**	**6.5140**	**0.0833**	**6.5973**	**1.7637**	**0.0789**	**1.8426**		**9,074.2775**	**9,074.2775**	**0.1947**	**0.8165**	**9,322.4528**

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	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day											lb/day				
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
Vendor	0.2495	10.0188	3.1190	0.0463	1.5174	0.0617	1.5792	0.4397	0.0591	0.4988		4,964.4750	4,964.4750	0.1056	0.7261	5,183.4868
Worker	1.3947	0.7543	12.7343	0.0395	4.6718	0.0216	4.6934	1.2443	0.0198	1.2641		4,109.8025	4,109.8025	0.0891	0.0904	4,138.9660
Total	**1.6442**	**10.7731**	**15.8533**	**0.0857**	**6.1893**	**0.0833**	**6.2726**	**1.6840**	**0.0789**	**1.7629**		**9,074.2775**	**9,074.2775**	**0.1947**	**0.8165**	**9,322.4528**

3.6 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	lb/day										lb/day					
Archit. Coating	44.5114					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**44.6823**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

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

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day											lb/day				
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
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
Worker	0.2790	0.1509	2.5469	7.8900e-003	0.9858	4.3100e-003	0.9901	0.2615	3.9700e-003	0.2654		821.9605	821.9605	0.0178	0.0181	827.7932
Total	**0.2790**	**0.1509**	**2.5469**	**7.8900e-003**	**0.9858**	**4.3100e-003**	**0.9901**	**0.2615**	**3.9700e-003**	**0.2654**		**821.9605**	**821.9605**	**0.0178**	**0.0181**	**827.7932**

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	lb/day										lb/day					
Archit. Coating	44.5114					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**44.6823**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day											lb/day				
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
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
Worker	0.2790	0.1509	2.5469	7.8900e-003	0.9344	4.3100e-003	0.9387	0.2489	3.9700e-003	0.2528		821.9605	821.9605	0.0178	0.0181	827.7932
Total	**0.2790**	**0.1509**	**2.5469**	**7.8900e-003**	**0.9344**	**4.3100e-003**	**0.9387**	**0.2489**	**3.9700e-003**	**0.2528**		**821.9605**	**821.9605**	**0.0178**	**0.0181**	**827.7932**

3.7 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	lb/day											lb/day				
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.0182					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9333**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

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

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day											lb/day				
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
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
Worker	0.0349	0.0189	0.3184	9.9000e-004	0.1232	5.4000e-004	0.1238	0.0327	5.0000e-004	0.0332		102.7451	102.7451	2.2300e-003	2.2600e-003	103.4742
Total	**0.0349**	**0.0189**	**0.3184**	**9.9000e-004**	**0.1232**	**5.4000e-004**	**0.1238**	**0.0327**	**5.0000e-004**	**0.0332**		**102.7451**	**102.7451**	**2.2300e-003**	**2.2600e-003**	**103.4742**

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	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.0182					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9333**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

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

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day											lb/day				
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
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
Worker	0.0349	0.0189	0.3184	9.9000e-004	0.1168	5.4000e-004	0.1173	0.0311	5.0000e-004	0.0316		102.7451	102.7451	2.2300e-003	2.2600e-003	103.4742
Total	**0.0349**	**0.0189**	**0.3184**	**9.9000e-004**	**0.1168**	**5.4000e-004**	**0.1173**	**0.0311**	**5.0000e-004**	**0.0316**		**102.7451**	**102.7451**	**2.2300e-003**	**2.2600e-003**	**103.4742**

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	lb/day											lb/day				
Mitigated	5.0873	24.5078	53.0622	0.1857	14.4998	0.2102	14.7099	3.8769	0.1992	4.0761		19,734.9190	19,734.9190	0.8406	1.7631	20,281.3374
Unmitigated	5.0873	24.5078	53.0622	0.1857	14.4998	0.2102	14.7099	3.8769	0.1992	4.0761		19,734.9190	19,734.9190	0.8406	1.7631	20,281.3374

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	342.99	342.99	342.99	911,398	911,398
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,693.34	1,693.34	1693.34	5,855,574	5,855,574

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	2,036.33	2,036.33	2,036.33	6,766,972	6,766,972

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
City Park	9.50	7.30	7.30	0.00	0.00	100.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000
Parking Lot	0.573651	0.055882	0.186012	0.115369	0.020252	0.005158	0.008030	0.006377	0.000893	0.000372	0.024386	0.000900	0.002
Unrefrigerated Warehouse-No Rail	0.573651	0.055882	0.186012	0.115369	0.020252	0.005158	0.008030	0.006377	0.000893	0.000372	0.024386	0.000900	0.002

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	lb/day										lb/day					
NaturalGas Mitigated	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
NaturalGas Unmitigated	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
City Park	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
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
Unrefrigerated Warehouse-No Rail	6733.83	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
Total		**0.0726**	**0.6602**	**0.5546**	**3.9600e-003**		**0.0502**	**0.0502**		**0.0502**	**0.0502**		**792.2157**	**792.2157**	**0.0152**	**0.0145**	**796.9234**

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	lb/day										lb/day					
City Park	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
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
Unrefrigerated Warehouse-No Rail	6.73383	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total		**0.0726**	**0.6602**	**0.5546**	**3.9600e-003**		**0.0502**	**0.0502**		**0.0502**	**0.0502**		**792.2157**	**792.2157**	**0.0152**	**0.0145**	**796.9234**

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	lb/day										lb/day					
Mitigated	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Unmitigated	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821

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	lb/day										lb/day					
Architectural Coating	2.0975					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.4754					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Landscaping	0.0114	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Total	**17.5843**	**1.1200e-003**	**0.1233**	**1.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**		**0.2649**	**0.2649**	**6.9000e-004**		**0.2821**

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	lb/day										lb/day					
Architectural Coating	2.0975					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.4754					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0114	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Total	**17.5843**	**1.1200e-003**	**0.1233**	**1.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**		**0.2649**	**0.2649**	**6.9000e-004**		**0.2821**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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	0.25	50	750	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	lb/day										lb/day					
Emergency Generator - Diesel	1.2308	5.5041	3.1383	5.9100e-003		0.1811	0.1811		0.1811	0.1811		629.6356	629.6356	0.0883		631.8425
Total	**1.2308**	**5.5041**	**3.1383**	**5.9100e-003**		**0.1811**	**0.1811**		**0.1811**	**0.1811**		**629.6356**	**629.6356**	**0.0883**		**631.8425**

Bridge Qume - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.0 Vegetation

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Bridge Qume Exisiting

Santa Clara County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	428.43	1000sqft	9.84	428,433.00	0
Parking Lot	661.74	1000sqft	15.19	661,740.00	0
City Park	7.77	Acre	7.77	338,461.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - City Park Proxy for Landscape - Landscape numbers taken from Stormwater Evaluation Form

Construction Phase - Existing - No construction

Grading -

Vehicle Trips - Per TA - City park has no trips

Construction Off-road Equipment Mitigation - Per BAAQMD rule compliance

Water Mitigation -

Waste Mitigation - Per AB 939

Table Name	Column Name	Default Value	New Value

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	AcresOfGrading	135.00	0.00
tblGrading	AcresOfGrading	30.00	0.00
tblLandUse	LandUseSquareFeet	428,430.00	428,433.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	8.32
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	8.32
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	8.32

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2021	3.9443	40.5409	21.9670	0.0399	18.2141	2.0453	20.2594	9.9699	1.8816	11.8515	0.0000	3,853.2320	3,853.2320	1.1965	4.1400e-003	3,880.7254
2022	3.9644	38.8863	35.1259	0.1172	18.2141	1.6357	19.8274	9.9699	1.5049	11.4542	0.0000	12,008.4660	12,008.4660	1.9487	0.9171	12,303.4599
2023	3.4556	26.1656	33.3639	0.1139	6.5138	0.7847	7.2985	1.7637	0.7388	2.5025	0.0000	11,687.8553	11,687.8553	0.8378	0.8723	11,968.7595
2024	136.0318	25.1061	32.3427	0.1119	6.5139	0.6978	7.2117	1.7637	0.6569	2.4206	0.0000	11,515.9816	11,515.9816	0.8218	0.8520	11,790.4127

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Maximum	**136.0318**	**40.5409**	**35.1259**	**0.1172**	**18.2141**	**2.0453**	**20.2594**	**9.9699**	**1.8816**	**11.8515**	**0.0000**	**12,008.4660**	**12,008.4660**	**1.9487**	**0.9171**	**12,303.4599**

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	lb/day										lb/day					
2021	3.9443	40.5408	21.9670	0.0399	7.8635	2.0453	9.9087	4.2827	1.8816	6.1643	0.0000	3,853.2320	3,853.2320	1.1965	4.1400e-003	3,880.7254
2022	3.9644	38.8863	35.1259	0.1172	7.8635	1.6357	9.4768	4.2827	1.5049	5.7670	0.0000	12,008.4660	12,008.4660	1.9487	0.9171	12,303.4599
2023	3.4556	26.1656	33.3639	0.1139	6.1891	0.7847	6.9738	1.6840	0.7388	2.4228	0.0000	11,687.8553	11,687.8553	0.8378	0.8723	11,968.7595
2024	136.0318	25.1061	32.3427	0.1119	6.1892	0.6978	6.8869	1.6840	0.6569	2.3408	0.0000	11,515.9816	11,515.9816	0.8218	0.8520	11,790.4127
Maximum	**136.0318**	**40.5408**	**35.1259**	**0.1172**	**7.8635**	**2.0453**	**9.9087**	**4.2827**	**1.8816**	**6.1643**	**0.0000**	**12,008.4660**	**12,008.4660**	**1.9487**	**0.9171**	**12,303.4599**

	ROG	NOx	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**	**43.17**	**0.00**	**39.11**	**49.15**	**0.00**	**40.86**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.7306	1.0300e-003	0.1125	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		0.2403	0.2403	6.4000e-004		0.2562
Energy	0.0436	0.3959	0.3325	2.3800e-003		0.0301	0.0301		0.0301	0.0301		475.0393	475.0393	9.1000e-003	8.7100e-003	477.8623
Mobile	10.0499	14.4059	106.4171	0.2068	21.8867	0.2028	22.0895	5.8270	0.1901	6.0171		21,050.7524	21,050.7524	1.4083	1.0451	21,397.3997
Total	**20.8240**	**14.8028**	**106.8622**	**0.2092**	**21.8867**	**0.2333**	**22.1200**	**5.8270**	**0.2206**	**6.0476**		**21,526.0321**	**21,526.0321**	**1.4180**	**1.0538**	**21,875.5181**

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	lb/day										lb/day					
Area	10.7306	1.0300e-003	0.1125	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		0.2403	0.2403	6.4000e-004		0.2562
Energy	0.0436	0.3959	0.3325	2.3800e-003		0.0301	0.0301		0.0301	0.0301		475.0393	475.0393	9.1000e-003	8.7100e-003	477.8623
Mobile	10.0499	14.4059	106.4171	0.2068	21.8867	0.2028	22.0895	5.8270	0.1901	6.0171		21,050.7524	21,050.7524	1.4083	1.0451	21,397.3997
Total	**20.8240**	**14.8028**	**106.8622**	**0.2092**	**21.8867**	**0.2333**	**22.1200**	**5.8270**	**0.2206**	**6.0476**		**21,526.0321**	**21,526.0321**	**1.4180**	**1.0538**	**21,875.5181**

	ROG	NOx	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**

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	11/17/2021	12/28/2021	5	30	
2	Site Preparation	Site Preparation	12/29/2021	1/25/2022	5	20	
3	Grading	Grading	1/26/2022	3/29/2022	5	45	
4	Building Construction	Building Construction	3/30/2022	2/27/2024	5	500	
5	Paving	Paving	2/28/2024	4/16/2024	5	35	
6	Architectural Coating	Architectural Coating	4/17/2024	6/4/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 15.19

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 642,650; Non-Residential Outdoor: 214,217; Striped Parking Area: 39,704

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	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
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	600.00	234.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	120.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**		**1.5513**	**1.5513**		**1.4411**	**1.4411**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

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	lb/day										lb/day					
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
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
Worker	0.0468	0.0365	0.4020	1.0400e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		105.2871	105.2871	3.7400e-003	3.4500e-003	106.4080
Total	**0.0468**	**0.0365**	**0.4020**	**1.0400e-003**	**0.1232**	**6.6000e-004**	**0.1239**	**0.0327**	**6.1000e-004**	**0.0333**		**105.2871**	**105.2871**	**3.7400e-003**	**3.4500e-003**	**106.4080**

Mitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**		**1.5513**	**1.5513**		**1.4411**	**1.4411**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

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	lb/day										lb/day					
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
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
Worker	0.0468	0.0365	0.4020	1.0400e-003	0.1168	6.6000e-004	0.1175	0.0311	6.1000e-004	0.0317		105.2871	105.2871	3.7400e-003	3.4500e-003	106.4080
Total	**0.0468**	**0.0365**	**0.4020**	**1.0400e-003**	**0.1168**	**6.6000e-004**	**0.1175**	**0.0311**	**6.1000e-004**	**0.0317**		**105.2871**	**105.2871**	**3.7400e-003**	**3.4500e-003**	**106.4080**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	lb/day										lb/day					
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
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
Worker	0.0561	0.0438	0.4824	1.2500e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		126.3445	126.3445	4.4900e-003	4.1400e-003	127.6896
Total	**0.0561**	**0.0438**	**0.4824**	**1.2500e-003**	**0.1479**	**7.9000e-004**	**0.1487**	**0.0392**	**7.3000e-004**	**0.0400**		**126.3445**	**126.3445**	**4.4900e-003**	**4.1400e-003**	**127.6896**

Mitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.7233	0.0000	7.7233	4.2454	0.0000	4.2454			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**7.7233**	**2.0445**	**9.7678**	**4.2454**	**1.8809**	**6.1263**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	lb/day										lb/day					
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
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
Worker	0.0561	0.0438	0.4824	1.2500e-003	0.1402	7.9000e-004	0.1409	0.0373	7.3000e-004	0.0381		126.3445	126.3445	4.4900e-003	4.1400e-003	127.6896
Total	**0.0561**	**0.0438**	**0.4824**	**1.2500e-003**	**0.1402**	**7.9000e-004**	**0.1409**	**0.0373**	**7.3000e-004**	**0.0381**		**126.3445**	**126.3445**	**4.4900e-003**	**4.1400e-003**	**127.6896**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**18.0663**	**1.6126**	**19.6788**	**9.9307**	**1.4836**	**11.4143**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

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	lb/day										lb/day					
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
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
Worker	0.0522	0.0386	0.4450	1.2100e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		123.0851	123.0851	4.0500e-003	3.8200e-003	124.3234
Total	**0.0522**	**0.0386**	**0.4450**	**1.2100e-003**	**0.1479**	**7.5000e-004**	**0.1486**	**0.0392**	**6.9000e-004**	**0.0399**		**123.0851**	**123.0851**	**4.0500e-003**	**3.8200e-003**	**124.3234**

Mitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.7233	0.0000	7.7233	4.2454	0.0000	4.2454			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**7.7233**	**1.6126**	**9.3359**	**4.2454**	**1.4836**	**5.7289**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

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	lb/day										lb/day					
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
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
Worker	0.0522	0.0386	0.4450	1.2100e-003	0.1402	7.5000e-004	0.1409	0.0373	6.9000e-004	0.0380		123.0851	123.0851	4.0500e-003	3.8200e-003	124.3234
Total	**0.0522**	**0.0386**	**0.4450**	**1.2100e-003**	**0.1402**	**7.5000e-004**	**0.1409**	**0.0373**	**6.9000e-004**	**0.0380**		**123.0851**	**123.0851**	**4.0500e-003**	**3.8200e-003**	**124.3234**

3.4 Grading - 2022

Unmitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**6.0221**	**1.6349**	**7.6570**	**3.3102**	**1.5041**	**4.8143**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	lb/day										lb/day					
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
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
Worker	0.0580	0.0428	0.4944	1.3400e-003	0.1643	8.3000e-004	0.1651	0.0436	7.6000e-004	0.0443		136.7612	136.7612	4.5000e-003	4.2400e-003	138.1371
Total	**0.0580**	**0.0428**	**0.4944**	**1.3400e-003**	**0.1643**	**8.3000e-004**	**0.1651**	**0.0436**	**7.6000e-004**	**0.0443**		**136.7612**	**136.7612**	**4.5000e-003**	**4.2400e-003**	**138.1371**

Mitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5744	0.0000	2.5744	1.4151	0.0000	1.4151			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**2.5744**	**1.6349**	**4.2093**	**1.4151**	**1.5041**	**2.9192**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	lb/day										lb/day					
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
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
Worker	0.0580	0.0428	0.4944	1.3400e-003	0.1557	8.3000e-004	0.1566	0.0415	7.6000e-004	0.0422		136.7612	136.7612	4.5000e-003	4.2400e-003	138.1371
Total	**0.0580**	**0.0428**	**0.4944**	**1.3400e-003**	**0.1557**	**8.3000e-004**	**0.1566**	**0.0415**	**7.6000e-004**	**0.0422**		**136.7612**	**136.7612**	**4.5000e-003**	**4.2400e-003**	**138.1371**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	lb/day										lb/day					
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
Vendor	0.5168	13.4297	3.9309	0.0499	1.5849	0.1385	1.7234	0.4563	0.1325	0.5888		5,351.2962	5,351.2962	0.1205	0.7900	5,589.7157
Worker	1.7413	1.2849	14.8315	0.0403	4.9289	0.0249	4.9537	1.3074	0.0229	1.3303		4,102.8362	4,102.8362	0.1351	0.1272	4,144.1120
Total	**2.2582**	**14.7146**	**18.7625**	**0.0902**	**6.5137**	**0.1634**	**6.6771**	**1.7636**	**0.1554**	**1.9191**		**9,454.1324**	**9,454.1324**	**0.2557**	**0.9171**	**9,733.8277**

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

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	lb/day										lb/day					
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
Vendor	0.5168	13.4297	3.9309	0.0499	1.5171	0.1385	1.6557	0.4396	0.1325	0.5722		5,351.2962	5,351.2962	0.1205	0.7900	5,589.7157
Worker	1.7413	1.2849	14.8315	0.0403	4.6718	0.0249	4.6967	1.2443	0.0229	1.2672		4,102.8362	4,102.8362	0.1351	0.1272	4,144.1120
Total	**2.2582**	**14.7146**	**18.7625**	**0.0902**	**6.1890**	**0.1634**	**6.3524**	**1.6839**	**0.1554**	**1.8394**		**9,454.1324**	**9,454.1324**	**0.2557**	**0.9171**	**9,733.8277**

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	lb/day										lb/day					

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	lb/day										lb/day					
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
Vendor	0.2541	10.6413	3.3465	0.0478	1.5850	0.0613	1.6463	0.4563	0.0587	0.5150		5,132.9070	5,132.9070	0.1076	0.7544	5,360.4153
Worker	1.6287	1.1395	13.7734	0.0391	4.9289	0.0236	4.9525	1.3074	0.0218	1.3291		3,999.7384	3,999.7384	0.1224	0.1179	4,037.9382
Total	**1.8828**	**11.7807**	**17.1199**	**0.0869**	**6.5138**	**0.0850**	**6.5988**	**1.7637**	**0.0804**	**1.8441**		**9,132.6454**	**9,132.6454**	**0.2300**	**0.8723**	**9,398.3534**

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	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	lb/day										lb/day					
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
Vendor	0.2541	10.6413	3.3465	0.0478	1.5172	0.0613	1.5786	0.4397	0.0587	0.4983		5,132.9070	5,132.9070	0.1076	0.7544	5,360.4153
Worker	1.6287	1.1395	13.7734	0.0391	4.6718	0.0236	4.6955	1.2443	0.0218	1.2660		3,999.7384	3,999.7384	0.1224	0.1179	4,037.9382
Total	**1.8828**	**11.7807**	**17.1199**	**0.0869**	**6.1891**	**0.0850**	**6.2740**	**1.6840**	**0.0804**	**1.7644**		**9,132.6454**	**9,132.6454**	**0.2300**	**0.8723**	**9,398.3534**

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	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

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Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
Vendor	0.2469	10.6433	3.2834	0.0471	1.5851	0.0619	1.6470	0.4563	0.0592	0.5156		5,057.5053	5,057.5053	0.1062	0.7420	5,281.2734
Worker	1.5310	1.0191	12.8925	0.0378	4.9289	0.0225	4.9514	1.3074	0.0207	1.3281		3,902.7774	3,902.7774	0.1112	0.1100	3,938.3317
Total	**1.7779**	**11.6624**	**16.1759**	**0.0850**	**6.5139**	**0.0844**	**6.5984**	**1.7637**	**0.0800**	**1.8437**		**8,960.2827**	**8,960.2827**	**0.2174**	**0.8520**	**9,219.6051**

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	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
Vendor	0.2469	10.6433	3.2834	0.0471	1.5173	0.0619	1.5793	0.4397	0.0592	0.4989		5,057.5053	5,057.5053	0.1062	0.7420	5,281.2734
Worker	1.5310	1.0191	12.8925	0.0378	4.6718	0.0225	4.6944	1.2443	0.0207	1.2650		3,902.7774	3,902.7774	0.1112	0.1100	3,938.3317
Total	**1.7779**	**11.6624**	**16.1759**	**0.0850**	**6.1892**	**0.0844**	**6.2736**	**1.6840**	**0.0800**	**1.7639**		**8,960.2827**	**8,960.2827**	**0.2174**	**0.8520**	**9,219.6051**

3.6 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	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	1.1371					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1252**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
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
Worker	0.0383	0.0255	0.3223	9.5000e-004	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		97.5694	97.5694	2.7800e-003	2.7500e-003	98.4583
Total	**0.0383**	**0.0255**	**0.3223**	**9.5000e-004**	**0.1232**	**5.6000e-004**	**0.1238**	**0.0327**	**5.2000e-004**	**0.0332**		**97.5694**	**97.5694**	**2.7800e-003**	**2.7500e-003**	**98.4583**

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	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	1.1371					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1252**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
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
Worker	0.0383	0.0255	0.3223	9.5000e-004	0.1168	5.6000e-004	0.1174	0.0311	5.2000e-004	0.0316		97.5694	97.5694	2.7800e-003	2.7500e-003	98.4583
Total	**0.0383**	**0.0255**	**0.3223**	**9.5000e-004**	**0.1168**	**5.6000e-004**	**0.1174**	**0.0311**	**5.2000e-004**	**0.0316**		**97.5694**	**97.5694**	**2.7800e-003**	**2.7500e-003**	**98.4583**

3.7 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	lb/day										lb/day					
Archit. Coating	135.5448					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**135.7256**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
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
Worker	0.3062	0.2038	2.5785	7.5700e-003	0.9858	4.5000e-003	0.9903	0.2615	4.1400e-003	0.2656		780.5555	780.5555	0.0222	0.0220	787.6663
Total	**0.3062**	**0.2038**	**2.5785**	**7.5700e-003**	**0.9858**	**4.5000e-003**	**0.9903**	**0.2615**	**4.1400e-003**	**0.2656**		**780.5555**	**780.5555**	**0.0222**	**0.0220**	**787.6663**

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	lb/day										lb/day					
Archit. Coating	135.5448					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**135.7256**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
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
Worker	0.3062	0.2038	2.5785	7.5700e-003	0.9344	4.5000e-003	0.9389	0.2489	4.1400e-003	0.2530		780.5555	780.5555	0.0222	0.0220	787.6663
Total	**0.3062**	**0.2038**	**2.5785**	**7.5700e-003**	**0.9344**	**4.5000e-003**	**0.9389**	**0.2489**	**4.1400e-003**	**0.2530**		**780.5555**	**780.5555**	**0.0222**	**0.0220**	**787.6663**

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	lb/day										lb/day					
Mitigated	10.0499	14.4059	106.4171	0.2068	21.8867	0.2028	22.0895	5.8270	0.1901	6.0171		21,050.7524	21,050.7524	1.4083	1.0451	21,397.3997
Unmitigated	10.0499	14.4059	106.4171	0.2068	21.8867	0.2028	22.0895	5.8270	0.1901	6.0171		21,050.7524	21,050.7524	1.4083	1.0451	21,397.3997

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	3,564.54	3,564.54	3564.54	10,406,707	10,406,707
Total	3,564.54	3,564.54	3,564.54	10,406,707	10,406,707

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.567742	0.054883	0.190502	0.116880	0.020652	0.004894	0.008289	0.006425	0.000966	0.000407	0.024432	0.000950	0.00
Parking Lot	0.567742	0.054883	0.190502	0.116880	0.020652	0.004894	0.008289	0.006425	0.000966	0.000407	0.024432	0.000950	0.00
Unrefrigerated Warehouse-No Rail	0.567742	0.054883	0.190502	0.116880	0.020652	0.004894	0.008289	0.006425	0.000966	0.000407	0.024432	0.000950	0.00

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0436	0.3959	0.3325	2.3800e-003		0.0301	0.0301		0.0301	0.0301		475.0393	475.0393	9.1000e-003	8.7100e-003	477.8623
NaturalGas Unmitigated	0.0436	0.3959	0.3325	2.3800e-003		0.0301	0.0301		0.0301	0.0301		475.0393	475.0393	9.1000e-003	8.7100e-003	477.8623

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	lb/day										lb/day					
City Park	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
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
Unrefrigerated Warehouse-No Rail	4037.83	0.0436	0.3959	0.3325	2.3800e-003		0.0301	0.0301		0.0301	0.0301		475.0393	475.0393	9.1000e-003	8.7100e-003	477.8623
Total		**0.0436**	**0.3959**	**0.3325**	**2.3800e-003**		**0.0301**	**0.0301**		**0.0301**	**0.0301**		**475.0393**	**475.0393**	**9.1000e-003**	**8.7100e-003**	**477.8623**

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

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	kBTU/yr	lb/day										lb/day					
City Park	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
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
Unrefrigerated Warehouse-No Rail	4.03783	0.0436	0.3959	0.3325	2.3800e-003		0.0301	0.0301		0.0301	0.0301		475.0393	475.0393	9.1000e-003	8.7100e-003	477.8623
Total		**0.0436**	**0.3959**	**0.3325**	**2.3800e-003**		**0.0301**	**0.0301**		**0.0301**	**0.0301**		**475.0393**	**475.0393**	**9.1000e-003**	**8.7100e-003**	**477.8623**

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	lb/day										lb/day					
Mitigated	10.7306	1.0300e-003	0.1125	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		0.2403	0.2403	6.4000e-004		0.2562
Unmitigated	10.7306	1.0300e-003	0.1125	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		0.2403	0.2403	6.4000e-004		0.2562

6.2 Area by SubCategory

Unmitigated

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	lb/day										lb/day					
Architectural Coating	1.2997					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.4203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0105	1.0300e-003	0.1125	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		0.2403	0.2403	6.4000e-004		0.2562
Total	**10.7305**	**1.0300e-003**	**0.1125**	**1.0000e-005**		**4.0000e-004**	**4.0000e-004**		**4.0000e-004**	**4.0000e-004**		**0.2403**	**0.2403**	**6.4000e-004**		**0.2562**

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	lb/day										lb/day					
Architectural Coating	1.2997					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.4203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0105	1.0300e-003	0.1125	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		0.2403	0.2403	6.4000e-004		0.2562
Total	**10.7305**	**1.0300e-003**	**0.1125**	**1.0000e-005**		**4.0000e-004**	**4.0000e-004**		**4.0000e-004**	**4.0000e-004**		**0.2403**	**0.2403**	**6.4000e-004**		**0.2562**

7.0 Water Detail

7.1 Mitigation Measures Water

Bridge Qume Exisiting - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Bridge Qume

Santa Clara County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	714.49	1000sqft	16.40	714,491.00	0
Parking Lot	490.73	1000sqft	11.27	490,730.00	0
City Park	5.13	Acre	5.13	223,462.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - City Park Proxy for Landscape

Construction Phase - Per construction timeline

Demolition -

Grading -

Vehicle Trips - City park proxy for truck trips

Construction Off-road Equipment Mitigation - Per BAAQMD rule compliance

Water Mitigation -

Waste Mitigation - Per AB939

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Stationary Sources - Emergency Generators and Fire Pumps -

Fleet Mix - City Park heavy-duty trucks

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	56.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	45.00	40.00
tblConstructionPhase	NumDays	500.00	262.00
tblConstructionPhase	NumDays	35.00	172.00
tblConstructionPhase	NumDays	35.00	29.00
tblFleetMix	HHD	6.3770e-003	1.00
tblFleetMix	LDA	0.57	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.1580e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	2.7200e-003	0.00
tblFleetMix	MHD	8.0300e-003	0.00
tblFleetMix	OBUS	8.9300e-004	0.00
tblFleetMix	SBUS	9.0000e-004	0.00
tblFleetMix	UBUS	3.7200e-004	0.00
tblGrading	MaterialExported	0.00	5,000.00
tblLandUse	LandUseSquareFeet	714,490.00	714,491.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	750.00

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.25
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	4.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TL	7.30	31.00
tblVehicleTrips	CNW_TTP	19.00	100.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	79.34
tblVehicleTrips	ST_TR	1.74	2.28
tblVehicleTrips	SU_TR	2.19	79.34
tblVehicleTrips	SU_TR	1.74	2.28
tblVehicleTrips	WD_TR	0.78	79.34
tblVehicleTrips	WD_TR	1.74	2.28

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	lb/day										lb/day					
2024	3.3006	35.1542	32.3427	0.1119	24.1674	1.3535	25.2424	10.1417	1.2459	11.2733	0.0000	11,515.9816	11,515.9816	1.9822	1.0621	11,790.4127
2025	48.0254	25.3180	35.6738	0.1202	7.4998	0.6669	8.1667	2.0252	0.6308	2.6561	0.0000	12,383.2104	12,383.2104	0.8428	0.8517	12,658.0933
Maximum	**48.0254**	**35.1542**	**35.6738**	**0.1202**	**24.1674**	**1.3535**	**25.2424**	**10.1417**	**1.2459**	**11.2733**	**0.0000**	**12,383.2104**	**12,383.2104**	**1.9822**	**1.0621**	**12,658.0933**

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	lb/day										lb/day					
2024	3.3006	35.1542	32.3427	0.1119	11.3437	1.3535	12.4187	4.3561	1.2459	5.4878	0.0000	11,515.9816	11,515.9816	1.9822	1.0621	11,790.4127
2025	48.0254	25.3180	35.6738	0.1202	7.1236	0.6669	7.7905	1.9329	0.6308	2.5637	0.0000	12,383.2104	12,383.2104	0.8428	0.8517	12,658.0933
Maximum	**48.0254**	**35.1542**	**35.6738**	**0.1202**	**11.3437**	**1.3535**	**12.4187**	**4.3561**	**1.2459**	**5.4878**	**0.0000**	**12,383.2104**	**12,383.2104**	**1.9822**	**1.0621**	**12,658.0933**

	ROG	NOx	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**	**41.68**	**0.00**	**39.51**	**48.31**	**0.00**	**42.20**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Area	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Energy	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
Mobile	5.1339	87.7952	62.5279	0.4598	22.8702	0.7643	23.6345	6.1743	0.7295	6.9038		49,741.2696	49,741.2696	1.9592	6.7142	51,791.0680
Stationary	1.2308	5.5041	3.1383	5.9100e-003		0.1811	0.1811		0.1811	0.1811		629.6356	629.6356	0.0883		631.8425
Total	**24.0217**	**93.9606**	**66.3440**	**0.4697**	**22.8702**	**0.9960**	**23.8662**	**6.1743**	**0.9611**	**7.1355**		**51,163.3857**	**51,163.3857**	**2.0633**	**6.7287**	**53,220.1159**

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	lb/day										lb/day					
Area	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Energy	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
Mobile	5.1339	87.7952	62.5279	0.4598	22.8702	0.7643	23.6345	6.1743	0.7295	6.9038		49,741.2696	49,741.2696	1.9592	6.7142	51,791.0680
Stationary	1.2308	5.5041	3.1383	5.9100e-003		0.1811	0.1811		0.1811	0.1811		629.6356	629.6356	0.0883		631.8425
Total	**24.0217**	**93.9606**	**66.3440**	**0.4697**	**22.8702**	**0.9960**	**23.8662**	**6.1743**	**0.9611**	**7.1355**		**51,163.3857**	**51,163.3857**	**2.0633**	**6.7287**	**53,220.1159**

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	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

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	4/1/2024	6/17/2024	5	56	
2	Site Preparation	Site Preparation	6/18/2024	6/24/2024	5	5	
3	Grading	Grading	6/25/2024	8/19/2024	5	40	
4	Building Construction	Building Construction	8/20/2024	8/20/2025	5	262	
5	Architectural Coating	Architectural Coating	2/3/2025	9/30/2025	5	172	
6	Paving	Paving	8/21/2025	9/30/2025	5	29	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 120

Acres of Paving: 11.27

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,071,737; Non-Residential Outdoor: 357,246; Striped Parking Area: 29,444

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

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	6	15.00	0.00	5,756.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	625.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	600.00	234.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	120.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 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	lb/day										lb/day					
Fugitive Dust					22.2458	0.0000	22.2458	3.3682	0.0000	3.3682			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**2.2437**	**20.8781**	**19.7073**	**0.0388**	**22.2458**	**0.9602**	**23.2060**	**3.3682**	**0.8922**	**4.2604**		**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

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	lb/day										lb/day					
Hauling	0.2064	14.2505	3.2909	0.0612	1.7984	0.1143	1.9127	0.4930	0.1093	0.6023		6,681.3378	6,681.3378	0.2289	1.0594	7,002.7523
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

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	0.0383	0.0255	0.3223	9.5000e-004	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		97.5694	97.5694	2.7800e-003	2.7500e-003	98.4583
Total	**0.2447**	**14.2760**	**3.6132**	**0.0621**	**1.9216**	**0.1148**	**2.0365**	**0.5257**	**0.1098**	**0.6355**		**6,778.9072**	**6,778.9072**	**0.2316**	**1.0621**	**7,101.2106**

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	lb/day										lb/day					
Fugitive Dust					9.5101	0.0000	9.5101	1.4399	0.0000	1.4399			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**2.2437**	**20.8781**	**19.7073**	**0.0388**	**9.5101**	**0.9602**	**10.4702**	**1.4399**	**0.8922**	**2.3321**	**0.0000**	**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

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	lb/day										lb/day					
Hauling	0.2064	14.2505	3.2909	0.0612	1.7169	0.1143	1.8311	0.4730	0.1093	0.5823		6,681.3378	6,681.3378	0.2289	1.0594	7,002.7523
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

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	0.0383	0.0255	0.3223	9.5000e-004	0.1168	5.6000e-004	0.1174	0.0311	5.2000e-004	0.0316		97.5694	97.5694	2.7800e-003	2.7500e-003	98.4583
Total	**0.2447**	**14.2760**	**3.6132**	**0.0621**	**1.8337**	**0.1148**	**1.9485**	**0.5041**	**0.1098**	**0.6139**		**6,778.9072**	**6,778.9072**	**0.2316**	**1.0621**	**7,101.2106**

3.3 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**		**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

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	lb/day										lb/day					
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
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

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	0.0459	0.0306	0.3868	1.1300e-003	0.1479	6.8000e-004	0.1485	0.0392	6.2000e-004	0.0398		117.0833	117.0833	3.3400e-003	3.3000e-003	118.1500
Total	**0.0459**	**0.0306**	**0.3868**	**1.1300e-003**	**0.1479**	**6.8000e-004**	**0.1485**	**0.0392**	**6.2000e-004**	**0.0398**		**117.0833**	**117.0833**	**3.3400e-003**	**3.3000e-003**	**118.1500**

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	lb/day										lb/day					
Fugitive Dust					8.4034	0.0000	8.4034	4.3188	0.0000	4.3188			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**8.4034**	**1.2294**	**9.6327**	**4.3188**	**1.1310**	**5.4498**	**0.0000**	**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

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	lb/day										lb/day					
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
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

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	0.0459	0.0306	0.3868	1.1300e-003	0.1402	6.8000e-004	0.1408	0.0373	6.2000e-004	0.0380		117.0833	117.0833	3.3400e-003	3.3000e-003	118.1500
Total	**0.0459**	**0.0306**	**0.3868**	**1.1300e-003**	**0.1402**	**6.8000e-004**	**0.1408**	**0.0373**	**6.2000e-004**	**0.0380**		**117.0833**	**117.0833**	**3.3400e-003**	**3.3000e-003**	**118.1500**

3.4 Grading - 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	lb/day										lb/day					
Fugitive Dust					9.2177	0.0000	9.2177	3.6559	0.0000	3.6559			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**9.2177**	**1.3354**	**10.5531**	**3.6559**	**1.2286**	**4.8845**		**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

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	lb/day										lb/day					
Hauling	0.0314	2.1663	0.5003	9.3000e-003	0.2734	0.0174	0.2908	0.0749	0.0166	0.0916		1,015.6655	1,015.6655	0.0348	0.1610	1,064.5254
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

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	0.0510	0.0340	0.4298	1.2600e-003	0.1643	7.5000e-004	0.1651	0.0436	6.9000e-004	0.0443		130.0926	130.0926	3.7100e-003	3.6700e-003	131.2777
Total	**0.0824**	**2.2003**	**0.9300**	**0.0106**	**0.4377**	**0.0181**	**0.4558**	**0.1185**	**0.0173**	**0.1358**		**1,145.7581**	**1,145.7581**	**0.0385**	**0.1647**	**1,195.8031**

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	lb/day										lb/day					
Fugitive Dust					3.9406	0.0000	3.9406	1.5629	0.0000	1.5629			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**3.9406**	**1.3354**	**5.2760**	**1.5629**	**1.2286**	**2.7915**	**0.0000**	**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

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	lb/day										lb/day					
Hauling	0.0314	2.1663	0.5003	9.3000e-003	0.2610	0.0174	0.2784	0.0719	0.0166	0.0885		1,015.6655	1,015.6655	0.0348	0.1610	1,064.5254
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

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Worker	0.0510	0.0340	0.4298	1.2600e-003	0.1557	7.5000e-004	0.1565	0.0415	6.9000e-004	0.0422		130.0926	130.0926	3.7100e-003	3.6700e-003	131.2777
Total	**0.0824**	**2.2003**	**0.9300**	**0.0106**	**0.4167**	**0.0181**	**0.4348**	**0.1134**	**0.0173**	**0.1307**		**1,145.7581**	**1,145.7581**	**0.0385**	**0.1647**	**1,195.8031**

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	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

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	lb/day										lb/day					
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
Vendor	0.2469	10.6433	3.2834	0.0471	1.5851	0.0619	1.6470	0.4563	0.0592	0.5156		5,057.5053	5,057.5053	0.1062	0.7420	5,281.2734
Worker	1.5310	1.0191	12.8925	0.0378	4.9289	0.0225	4.9514	1.3074	0.0207	1.3281		3,902.7774	3,902.7774	0.1112	0.1100	3,938.3317

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**1.7779**	**11.6624**	**16.1759**	**0.0850**	**6.5139**	**0.0844**	**6.5984**	**1.7637**	**0.0800**	**1.8437**		**8,960.2827**	**8,960.2827**	**0.2174**	**0.8520**	**9,219.6051**

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	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

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	lb/day										lb/day					
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
Vendor	0.2469	10.6433	3.2834	0.0471	1.5173	0.0619	1.5793	0.4397	0.0592	0.4989		5,057.5053	5,057.5053	0.1062	0.7420	5,281.2734
Worker	1.5310	1.0191	12.8925	0.0378	4.6718	0.0225	4.6944	1.2443	0.0207	1.2650		3,902.7774	3,902.7774	0.1112	0.1100	3,938.3317
Total	**1.7779**	**11.6624**	**16.1759**	**0.0850**	**6.1892**	**0.0844**	**6.2736**	**1.6840**	**0.0800**	**1.7639**		**8,960.2827**	**8,960.2827**	**0.2174**	**0.8520**	**9,219.6051**

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 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	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	lb/day										lb/day					
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
Vendor	0.2409	10.5995	3.2330	0.0463	1.5852	0.0620	1.6471	0.4564	0.0593	0.5156		4,971.8561	4,971.8561	0.1050	0.7279	5,191.4010
Worker	1.4457	0.9195	12.1225	0.0366	4.9289	0.0216	4.9504	1.3074	0.0198	1.3272		3,811.1933	3,811.1933	0.1012	0.1032	3,844.4686
Total	**1.6866**	**11.5189**	**15.3555**	**0.0829**	**6.5140**	**0.0835**	**6.5975**	**1.7637**	**0.0791**	**1.8428**		**8,783.0494**	**8,783.0494**	**0.2062**	**0.8311**	**9,035.8696**

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	lb/day										lb/day					
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
Vendor	0.2409	10.5995	3.2330	0.0463	1.5174	0.0620	1.5794	0.4397	0.0593	0.4990		4,971.8561	4,971.8561	0.1050	0.7279	5,191.4010
Worker	1.4457	0.9195	12.1225	0.0366	4.6718	0.0216	4.6934	1.2443	0.0198	1.2641		3,811.1933	3,811.1933	0.1012	0.1032	3,844.4686
Total	**1.6866**	**11.5189**	**15.3555**	**0.0829**	**6.1893**	**0.0835**	**6.2728**	**1.6840**	**0.0791**	**1.7631**		**8,783.0494**	**8,783.0494**	**0.2062**	**0.8311**	**9,035.8696**

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	44.5114					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**44.6823**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

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	lb/day										lb/day					
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
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
Worker	0.2891	0.1839	2.4245	7.3200e-003	0.9858	4.3100e-003	0.9901	0.2615	3.9700e-003	0.2654		762.2387	762.2387	0.0203	0.0206	768.8937
Total	**0.2891**	**0.1839**	**2.4245**	**7.3200e-003**	**0.9858**	**4.3100e-003**	**0.9901**	**0.2615**	**3.9700e-003**	**0.2654**		**762.2387**	**762.2387**	**0.0203**	**0.0206**	**768.8937**

Mitigated Construction On-Site

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	44.5114					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**44.6823**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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	lb/day										lb/day					
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
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
Worker	0.2891	0.1839	2.4245	7.3200e-003	0.9344	4.3100e-003	0.9387	0.2489	3.9700e-003	0.2528		762.2387	762.2387	0.0203	0.0206	768.8937
Total	**0.2891**	**0.1839**	**2.4245**	**7.3200e-003**	**0.9344**	**4.3100e-003**	**0.9387**	**0.2489**	**3.9700e-003**	**0.2528**		**762.2387**	**762.2387**	**0.0203**	**0.0206**	**768.8937**

3.7 Paving - 2025

Unmitigated Construction On-Site

Date: 2/21/2022 9:07 AM

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.0182					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9333**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

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	lb/day										lb/day					
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
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
Worker	0.0361	0.0230	0.3031	9.1000e-004	0.1232	5.4000e-004	0.1238	0.0327	5.0000e-004	0.0332		95.2798	95.2798	2.5300e-003	2.5800e-003	96.1117
Total	**0.0361**	**0.0230**	**0.3031**	**9.1000e-004**	**0.1232**	**5.4000e-004**	**0.1238**	**0.0327**	**5.0000e-004**	**0.0332**		**95.2798**	**95.2798**	**2.5300e-003**	**2.5800e-003**	**96.1117**

Mitigated Construction On-Site

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.0182					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9333**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

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	lb/day										lb/day					
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
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
Worker	0.0361	0.0230	0.3031	9.1000e-004	0.1168	5.4000e-004	0.1173	0.0311	5.0000e-004	0.0316		95.2798	95.2798	2.5300e-003	2.5800e-003	96.1117
Total	**0.0361**	**0.0230**	**0.3031**	**9.1000e-004**	**0.1168**	**5.4000e-004**	**0.1173**	**0.0311**	**5.0000e-004**	**0.0316**		**95.2798**	**95.2798**	**2.5300e-003**	**2.5800e-003**	**96.1117**

4.0 Operational Detail - Mobile

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Mitigated	5.1339	87.7952	62.5279	0.4598	22.8702	0.7643	23.6345	6.1743	0.7295	6.9038		49,741.2696	49,741.2696	1.9592	6.7142	51,791.0680
Unmitigated	5.1339	87.7952	62.5279	0.4598	22.8702	0.7643	23.6345	6.1743	0.7295	6.9038		49,741.2696	49,741.2696	1.9592	6.7142	51,791.0680

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	407.01	407.01	407.01	4,592,748	4,592,748
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,629.04	1,629.04	1629.04	5,633,211	5,633,211
Total	2,036.05	2,036.05	2,036.05	10,225,959	10,225,959

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
City Park	9.50	7.30	31.00	0.00	0.00	100.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Parking Lot	0.573651	0.055882	0.186012	0.115369	0.020252	0.005158	0.008030	0.006377	0.000893	0.000372	0.024386	0.000900	0.002
Unrefrigerated Warehouse-No Rail	0.573651	0.055882	0.186012	0.115369	0.020252	0.005158	0.008030	0.006377	0.000893	0.000372	0.024386	0.000900	0.002

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	lb/day										lb/day					
NaturalGas Mitigated	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
NaturalGas Unmitigated	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234

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	lb/day										lb/day					
City Park	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

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Unrefrigerated Warehouse-No Rail	6733.83	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
Total		**0.0726**	**0.6602**	**0.5546**	**3.9600e-003**		**0.0502**	**0.0502**		**0.0502**	**0.0502**		**792.2157**	**792.2157**	**0.0152**	**0.0145**	**796.9234**

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	lb/day										lb/day					
City Park	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
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
Unrefrigerated Warehouse-No Rail	6.73383	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
Total		**0.0726**	**0.6602**	**0.5546**	**3.9600e-003**		**0.0502**	**0.0502**		**0.0502**	**0.0502**		**792.2157**	**792.2157**	**0.0152**	**0.0145**	**796.9234**

6.0 Area Detail

6.1 Mitigation Measures Area

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Unmitigated	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821

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	lb/day										lb/day					
Architectural Coating	2.0975					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.4754					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0114	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Total	**17.5843**	**1.1200e-003**	**0.1233**	**1.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**		**0.2649**	**0.2649**	**6.9000e-004**		**0.2821**

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

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

SubCategory	lb/day										lb/day					
Architectural Coating	2.0975					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.4754					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0114	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Total	**17.5843**	**1.1200e-003**	**0.1233**	**1.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**		**0.2649**	**0.2649**	**6.9000e-004**		**0.2821**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	4	0.25	50	750	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	lb/day										lb/day					
Emergency Generator - Diesel	1.2308	5.5041	3.1383	5.9100e-003		0.1811	0.1811		0.1811	0.1811		629.6356	629.6356	0.0883		631.8425
Total	**1.2308**	**5.5041**	**3.1383**	**5.9100e-003**		**0.1811**	**0.1811**		**0.1811**	**0.1811**		**629.6356**	**629.6356**	**0.0883**		**631.8425**

11.0 Vegetation

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Bridge Qume

Santa Clara County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	714.49	1000sqft	16.40	714,491.00	0
Parking Lot	490.73	1000sqft	11.27	490,730.00	0
City Park	5.13	Acre	5.13	223,462.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - City Park Proxy for Landscape

Construction Phase - Per construction timeline

Demolition -

Grading -

Vehicle Trips - City park proxy for truck trips

Construction Off-road Equipment Mitigation - Per BAAQMD rule compliance

Water Mitigation -

Waste Mitigation - Per AB939

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Fleet Mix - City Park heavy-duty trucks

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
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	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstructionPhase	NumDays	30.00	56.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	45.00	40.00
tblConstructionPhase	NumDays	500.00	262.00
tblConstructionPhase	NumDays	35.00	172.00
tblConstructionPhase	NumDays	35.00	29.00
tblFleetMix	HHD	6.3770e-003	1.00
tblFleetMix	LDA	0.57	0.00
tblFleetMix	LDT1	0.06	0.00

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.1580e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	2.7200e-003	0.00
tblFleetMix	MHD	8.0300e-003	0.00
tblFleetMix	OBUS	8.9300e-004	0.00
tblFleetMix	SBUS	9.0000e-004	0.00
tblFleetMix	UBUS	3.7200e-004	0.00
tblGrading	MaterialExported	0.00	5,000.00
tblLandUse	LandUseSquareFeet	714,490.00	714,491.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	750.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.25
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	4.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	100.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	66.86

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	ST_TR	1.74	2.37
tblVehicleTrips	SU_TR	2.19	66.86
tblVehicleTrips	SU_TR	1.74	2.37
tblVehicleTrips	WD_TR	0.78	66.86
tblVehicleTrips	WD_TR	1.74	2.37

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2024	3.3006	35.1542	32.3427	0.1119	24.1674	1.3535	25.2424	10.1417	1.2459	11.2733	0.0000	11,515.9816	11,515.9816	1.9822	1.0621	11,790.4127
2025	48.0254	25.3180	35.6738	0.1202	7.4998	0.6669	8.1667	2.0252	0.6308	2.6561	0.0000	12,383.2104	12,383.2104	0.8428	0.8517	12,658.0933
Maximum	**48.0254**	**35.1542**	**35.6738**	**0.1202**	**24.1674**	**1.3535**	**25.2424**	**10.1417**	**1.2459**	**11.2733**	**0.0000**	**12,383.2104**	**12,383.2104**	**1.9822**	**1.0621**	**12,658.0933**

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	lb/day										lb/day					

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2024	3.3006	35.1542	32.3427	0.1119	11.3437	1.3535	12.4187	4.3561	1.2459	5.4878	0.0000	11,515.9816	11,515.9816	1.9822	1.0621	11,790.4127
2025	48.0254	25.3180	35.6738	0.1202	7.1236	0.6669	7.7905	1.9329	0.6308	2.5637	0.0000	12,383.2104	12,383.2104	0.8428	0.8517	12,658.0933
Maximum	**48.0254**	**35.1542**	**35.6738**	**0.1202**	**11.3437**	**1.3535**	**12.4187**	**4.3561**	**1.2459**	**5.4878**	**0.0000**	**12,383.2104**	**12,383.2104**	**1.9822**	**1.0621**	**12,658.0933**

	ROG	NOx	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**	**41.68**	**0.00**	**39.51**	**48.31**	**0.00**	**42.20**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	lb/day										lb/day					
Area	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Energy	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
Mobile	4.6715	26.4041	54.3848	0.1794	14.4998	0.2108	14.7105	3.8769	0.1998	4.0767		19,081.2861	19,081.2861	0.8937	1.8054	19,641.6249
Stationary	1.2308	5.5041	3.1383	5.9100e-003		0.1811	0.1811		0.1811	0.1811		629.6356	629.6356	0.0883		631.8425
Total	**23.5592**	**32.5694**	**58.2009**	**0.1893**	**14.4998**	**0.4424**	**14.9422**	**3.8769**	**0.4315**	**4.3083**		**20,503.4022**	**20,503.4022**	**0.9979**	**1.8199**	**21,070.6729**

Mitigated Operational

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Energy	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
Mobile	4.6715	26.4041	54.3848	0.1794	14.4998	0.2108	14.7105	3.8769	0.1998	4.0767		19,081.2861	19,081.2861	0.8937	1.8054	19,641.6249
Stationary	1.2308	5.5041	3.1383	5.9100e-003		0.1811	0.1811		0.1811	0.1811		629.6356	629.6356	0.0883		631.8425
Total	**23.5592**	**32.5694**	**58.2009**	**0.1893**	**14.4998**	**0.4424**	**14.9422**	**3.8769**	**0.4315**	**4.3083**		**20,503.4022**	**20,503.4022**	**0.9979**	**1.8199**	**21,070.6729**

	ROG	NOx	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**

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	4/1/2024	6/17/2024	5	56	
2	Site Preparation	Site Preparation	6/18/2024	6/24/2024	5	5	
3	Grading	Grading	6/25/2024	8/19/2024	5	40	
4	Building Construction	Building Construction	8/20/2024	8/20/2025	5	262	
5	Architectural Coating	Architectural Coating	2/3/2025	9/30/2025	5	172	
6	Paving	Paving	8/21/2025	9/30/2025	5	29	

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 120

Acres of Paving: 11.27

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,071,737; Non-Residential Outdoor: 357,246; Striped Parking Area: 29,444

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	6	15.00	0.00	5,756.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	625.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	600.00	234.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	120.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 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	lb/day										lb/day					
Fugitive Dust					22.2458	0.0000	22.2458	3.3682	0.0000	3.3682			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**2.2437**	**20.8781**	**19.7073**	**0.0388**	**22.2458**	**0.9602**	**23.2060**	**3.3682**	**0.8922**	**4.2604**		**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Hauling	0.2064	14.2505	3.2909	0.0612	1.7984	0.1143	1.9127	0.4930	0.1093	0.6023		6,681.3378	6,681.3378	0.2289	1.0594	7,002.7523
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
Worker	0.0383	0.0255	0.3223	9.5000e-004	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		97.5694	97.5694	2.7800e-003	2.7500e-003	98.4583
Total	**0.2447**	**14.2760**	**3.6132**	**0.0621**	**1.9216**	**0.1148**	**2.0365**	**0.5257**	**0.1098**	**0.6355**		**6,778.9072**	**6,778.9072**	**0.2316**	**1.0621**	**7,101.2106**

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	lb/day										lb/day					
Fugitive Dust					9.5101	0.0000	9.5101	1.4399	0.0000	1.4399			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**2.2437**	**20.8781**	**19.7073**	**0.0388**	**9.5101**	**0.9602**	**10.4702**	**1.4399**	**0.8922**	**2.3321**	**0.0000**	**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Hauling	0.2064	14.2505	3.2909	0.0612	1.7169	0.1143	1.8311	0.4730	0.1093	0.5823		6,681.3378	6,681.3378	0.2289	1.0594	7,002.7523
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
Worker	0.0383	0.0255	0.3223	9.5000e-004	0.1168	5.6000e-004	0.1174	0.0311	5.2000e-004	0.0316		97.5694	97.5694	2.7800e-003	2.7500e-003	98.4583
Total	**0.2447**	**14.2760**	**3.6132**	**0.0621**	**1.8337**	**0.1148**	**1.9485**	**0.5041**	**0.1098**	**0.6139**		**6,778.9072**	**6,778.9072**	**0.2316**	**1.0621**	**7,101.2106**

3.3 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**		**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
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
Worker	0.0459	0.0306	0.3868	1.1300e-003	0.1479	6.8000e-004	0.1485	0.0392	6.2000e-004	0.0398		117.0833	117.0833	3.3400e-003	3.3000e-003	118.1500
Total	**0.0459**	**0.0306**	**0.3868**	**1.1300e-003**	**0.1479**	**6.8000e-004**	**0.1485**	**0.0392**	**6.2000e-004**	**0.0398**		**117.0833**	**117.0833**	**3.3400e-003**	**3.3000e-003**	**118.1500**

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	lb/day										lb/day					
Fugitive Dust					8.4034	0.0000	8.4034	4.3188	0.0000	4.3188			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**8.4034**	**1.2294**	**9.6327**	**4.3188**	**1.1310**	**5.4498**	**0.0000**	**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
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
Worker	0.0459	0.0306	0.3868	1.1300e-003	0.1402	6.8000e-004	0.1408	0.0373	6.2000e-004	0.0380		117.0833	117.0833	3.3400e-003	3.3000e-003	118.1500
Total	**0.0459**	**0.0306**	**0.3868**	**1.1300e-003**	**0.1402**	**6.8000e-004**	**0.1408**	**0.0373**	**6.2000e-004**	**0.0380**		**117.0833**	**117.0833**	**3.3400e-003**	**3.3000e-003**	**118.1500**

3.4 Grading - 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	lb/day										lb/day					
Fugitive Dust					9.2177	0.0000	9.2177	3.6559	0.0000	3.6559			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**9.2177**	**1.3354**	**10.5531**	**3.6559**	**1.2286**	**4.8845**		**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Hauling	0.0314	2.1663	0.5003	9.3000e-003	0.2734	0.0174	0.2908	0.0749	0.0166	0.0916		1,015.6655	1,015.6655	0.0348	0.1610	1,064.5254
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
Worker	0.0510	0.0340	0.4298	1.2600e-003	0.1643	7.5000e-004	0.1651	0.0436	6.9000e-004	0.0443		130.0926	130.0926	3.7100e-003	3.6700e-003	131.2777
Total	**0.0824**	**2.2003**	**0.9300**	**0.0106**	**0.4377**	**0.0181**	**0.4558**	**0.1185**	**0.0173**	**0.1358**		**1,145.7581**	**1,145.7581**	**0.0385**	**0.1647**	**1,195.8031**

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	lb/day										lb/day					
Fugitive Dust					3.9406	0.0000	3.9406	1.5629	0.0000	1.5629			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**3.9406**	**1.3354**	**5.2760**	**1.5629**	**1.2286**	**2.7915**	**0.0000**	**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Hauling	0.0314	2.1663	0.5003	9.3000e-003	0.2610	0.0174	0.2784	0.0719	0.0166	0.0885		1,015.6655	1,015.6655	0.0348	0.1610	1,064.5254
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
Worker	0.0510	0.0340	0.4298	1.2600e-003	0.1557	7.5000e-004	0.1565	0.0415	6.9000e-004	0.0422		130.0926	130.0926	3.7100e-003	3.6700e-003	131.2777
Total	**0.0824**	**2.2003**	**0.9300**	**0.0106**	**0.4167**	**0.0181**	**0.4348**	**0.1134**	**0.0173**	**0.1307**		**1,145.7581**	**1,145.7581**	**0.0385**	**0.1647**	**1,195.8031**

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	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
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
Vendor	0.2469	10.6433	3.2834	0.0471	1.5851	0.0619	1.6470	0.4563	0.0592	0.5156		5,057.5053	5,057.5053	0.1062	0.7420	5,281.2734
Worker	1.5310	1.0191	12.8925	0.0378	4.9289	0.0225	4.9514	1.3074	0.0207	1.3281		3,902.7774	3,902.7774	0.1112	0.1100	3,938.3317
Total	**1.7779**	**11.6624**	**16.1759**	**0.0850**	**6.5139**	**0.0844**	**6.5984**	**1.7637**	**0.0800**	**1.8437**		**8,960.2827**	**8,960.2827**	**0.2174**	**0.8520**	**9,219.6051**

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	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Mitigated Construction Off-Site

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
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
Vendor	0.2469	10.6433	3.2834	0.0471	1.5173	0.0619	1.5793	0.4397	0.0592	0.4989		5,057.5053	5,057.5053	0.1062	0.7420	5,281.2734
Worker	1.5310	1.0191	12.8925	0.0378	4.6718	0.0225	4.6944	1.2443	0.0207	1.2650		3,902.7774	3,902.7774	0.1112	0.1100	3,938.3317
Total	**1.7779**	**11.6624**	**16.1759**	**0.0850**	**6.1892**	**0.0844**	**6.2736**	**1.6840**	**0.0800**	**1.7639**		**8,960.2827**	**8,960.2827**	**0.2174**	**0.8520**	**9,219.6051**

3.5 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	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
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
Vendor	0.2409	10.5995	3.2330	0.0463	1.5852	0.0620	1.6471	0.4564	0.0593	0.5156		4,971.8561	4,971.8561	0.1050	0.7279	5,191.4010
Worker	1.4457	0.9195	12.1225	0.0366	4.9289	0.0216	4.9504	1.3074	0.0198	1.3272		3,811.1933	3,811.1933	0.1012	0.1032	3,844.4686
Total	**1.6866**	**11.5189**	**15.3555**	**0.0829**	**6.5140**	**0.0835**	**6.5975**	**1.7637**	**0.0791**	**1.8428**		**8,783.0494**	**8,783.0494**	**0.2062**	**0.8311**	**9,035.8696**

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	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day											lb/day				
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
Vendor	0.2409	10.5995	3.2330	0.0463	1.5174	0.0620	1.5794	0.4397	0.0593	0.4990		4,971.8561	4,971.8561	0.1050	0.7279	5,191.4010
Worker	1.4457	0.9195	12.1225	0.0366	4.6718	0.0216	4.6934	1.2443	0.0198	1.2641		3,811.1933	3,811.1933	0.1012	0.1032	3,844.4686
Total	**1.6866**	**11.5189**	**15.3555**	**0.0829**	**6.1893**	**0.0835**	**6.2728**	**1.6840**	**0.0791**	**1.7631**		**8,783.0494**	**8,783.0494**	**0.2062**	**0.8311**	**9,035.8696**

3.6 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	lb/day											lb/day				
Archit. Coating	44.5114					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**44.6823**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

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

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day											lb/day				
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
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
Worker	0.2891	0.1839	2.4245	7.3200e-003	0.9858	4.3100e-003	0.9901	0.2615	3.9700e-003	0.2654		762.2387	762.2387	0.0203	0.0206	768.8937
Total	**0.2891**	**0.1839**	**2.4245**	**7.3200e-003**	**0.9858**	**4.3100e-003**	**0.9901**	**0.2615**	**3.9700e-003**	**0.2654**		**762.2387**	**762.2387**	**0.0203**	**0.0206**	**768.8937**

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	lb/day										lb/day					
Archit. Coating	44.5114					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**44.6823**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day											lb/day				
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
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
Worker	0.2891	0.1839	2.4245	7.3200e-003	0.9344	4.3100e-003	0.9387	0.2489	3.9700e-003	0.2528		762.2387	762.2387	0.0203	0.0206	768.8937
Total	**0.2891**	**0.1839**	**2.4245**	**7.3200e-003**	**0.9344**	**4.3100e-003**	**0.9387**	**0.2489**	**3.9700e-003**	**0.2528**		**762.2387**	**762.2387**	**0.0203**	**0.0206**	**768.8937**

3.7 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	lb/day											lb/day				
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.0182					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9333**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

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

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day											lb/day				
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
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
Worker	0.0361	0.0230	0.3031	9.1000e-004	0.1232	5.4000e-004	0.1238	0.0327	5.0000e-004	0.0332		95.2798	95.2798	2.5300e-003	2.5800e-003	96.1117
Total	**0.0361**	**0.0230**	**0.3031**	**9.1000e-004**	**0.1232**	**5.4000e-004**	**0.1238**	**0.0327**	**5.0000e-004**	**0.0332**		**95.2798**	**95.2798**	**2.5300e-003**	**2.5800e-003**	**96.1117**

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	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	1.0182					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9333**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

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

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day											lb/day				
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
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
Worker	0.0361	0.0230	0.3031	9.1000e-004	0.1168	5.4000e-004	0.1173	0.0311	5.0000e-004	0.0316		95.2798	95.2798	2.5300e-003	2.5800e-003	96.1117
Total	**0.0361**	**0.0230**	**0.3031**	**9.1000e-004**	**0.1168**	**5.4000e-004**	**0.1173**	**0.0311**	**5.0000e-004**	**0.0316**		**95.2798**	**95.2798**	**2.5300e-003**	**2.5800e-003**	**96.1117**

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	lb/day											lb/day				
Mitigated	4.6715	26.4041	54.3848	0.1794	14.4998	0.2108	14.7105	3.8769	0.1998	4.0767		19,081.2861	19,081.2861	0.8937	1.8054	19,641.6249
Unmitigated	4.6715	26.4041	54.3848	0.1794	14.4998	0.2108	14.7105	3.8769	0.1998	4.0767		19,081.2861	19,081.2861	0.8937	1.8054	19,641.6249

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	342.99	342.99	342.99	911,398	911,398
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,693.34	1,693.34	1693.34	5,855,574	5,855,574

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	2,036.33	2,036.33	2,036.33	6,766,972	6,766,972

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
City Park	9.50	7.30	7.30	0.00	0.00	100.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000
Parking Lot	0.573651	0.055882	0.186012	0.115369	0.020252	0.005158	0.008030	0.006377	0.000893	0.000372	0.024386	0.000900	0.002
Unrefrigerated Warehouse-No Rail	0.573651	0.055882	0.186012	0.115369	0.020252	0.005158	0.008030	0.006377	0.000893	0.000372	0.024386	0.000900	0.002

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	lb/day										lb/day					
NaturalGas Mitigated	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
NaturalGas Unmitigated	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
City Park	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
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
Unrefrigerated Warehouse-No Rail	6733.83	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234
Total		**0.0726**	**0.6602**	**0.5546**	**3.9600e-003**		**0.0502**	**0.0502**		**0.0502**	**0.0502**		**792.2157**	**792.2157**	**0.0152**	**0.0145**	**796.9234**

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	lb/day										lb/day					
City Park	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
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
Unrefrigerated Warehouse-No Rail	6.73383	0.0726	0.6602	0.5546	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.2157	792.2157	0.0152	0.0145	796.9234

Bridge Qume - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total		**0.0726**	**0.6602**	**0.5546**	**3.9600e-003**		**0.0502**	**0.0502**		**0.0502**	**0.0502**		**792.2157**	**792.2157**	**0.0152**	**0.0145**	**796.9234**

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	lb/day										lb/day					
Mitigated	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Unmitigated	17.5843	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821

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	lb/day										lb/day					
Architectural Coating	2.0975					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.4754					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

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Landscaping	0.0114	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Total	**17.5843**	**1.1200e-003**	**0.1233**	**1.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**		**0.2649**	**0.2649**	**6.9000e-004**		**0.2821**

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	lb/day										lb/day					
Architectural Coating	2.0975					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.4754					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0114	1.1200e-003	0.1233	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2649	0.2649	6.9000e-004		0.2821
Total	**17.5843**	**1.1200e-003**	**0.1233**	**1.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**		**0.2649**	**0.2649**	**6.9000e-004**		**0.2821**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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	0.25	50	750	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	lb/day										lb/day					
Emergency Generator - Diesel	1.2308	5.5041	3.1383	5.9100e-003		0.1811	0.1811		0.1811	0.1811		629.6356	629.6356	0.0883		631.8425
Total	**1.2308**	**5.5041**	**3.1383**	**5.9100e-003**		**0.1811**	**0.1811**		**0.1811**	**0.1811**		**629.6356**	**629.6356**	**0.0883**		**631.8425**

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11.0 Vegetation