645 HORNING STREET GAS STATION AND MINI STORAGE COMMUNITY RISK ASSESSMENT

San Jose, California

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Introduction

The purpose of this report is to address air quality impacts associated with the 645 Horning Street gas station, convenience store, car wash, fast food restaurant, and mini storage development project in San Jose, California. The air quality impacts would be associated with the demolition of the existing uses at the site, construction of the new building and infrastructure, and operation of the project. Air pollutant emissions associated with the construction and operation of the project were predicted using models. In addition, the potential construction health risk impact to nearby sensitive receptors were evaluated. This analysis addresses those issues following the guidance provided by the Bay Area Air Quality Management District (BAAQMD).[1]

Project Description

The 3.26-acre project site is currently occupied by 52,634 square feet (sf) of general light industrial land use. The project proposes to demolish the existing use and redevelop the site with a convenience market, car wash, and gas station equipped with 12 vehicle fueling positions, a 2,494-sf fast food restaurant, and a 151,958-sf mini storage facility. There would be a total of 63 surface parking spaces.

Setting

The project is located in Santa Clara County, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$).

Air Pollutants of Concern

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

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

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

Toxic Air Contaminants

Toxic air contaminants (TAC) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants. TACs are found in ambient air, especially in urban areas, and are caused by diesel engines, fuel combustion, industry, agriculture, and commercial operations. In urban air, diesel particulates are most common along with lead, benzene, and formaldehyde. TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level.

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

Regulatory Agencies

CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways. These regulations include the solid waste collection vehicle (SWCV) rule, in-use public and utility fleets, and the heavy-duty diesel truck and bus regulations. In 2008, CARB approved a new regulation to reduce emissions of DPM and nitrogen oxides from existing on-road heavy-duty diesel fueled vehicles.[2] The regulation requires affected vehicles to meet specific performance requirements between 2014 and 2023, with all affected diesel vehicles required to have 2010 model-year engines or equivalent by 2023. These requirements are phased in over the compliance period and depend on the model year of the vehicle.

The BAAQMD is the regional agency tasked with managing air quality in the region. At the State level, the CARB (a part of the California Environmental Protection Agency [EPA]) oversees regional air district activities and regulates air quality at the State level. The BAAQMD has published California Environmental Quality Act (CEQA) Air Quality Guidelines that are used in this assessment to evaluate air quality impacts of projects.[3] The detailed community risk modeling methodology used in this assessment is contained in *Attachment 1*.

San José Envision 2040 General Plan

The San José Envision 2040 General Plan includes goals, policies, and actions to reduce exposure of the City's sensitive population to exposure of air pollution and toxic air

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

contaminants or TACs. The following goals, policies, and actions are applicable to the proposed project and this assessment:

Applicable Goals – Air Pollutant Emission Reduction

Goal MS-10 Minimize emissions from new development.

Applicable Policies – Air Pollutant Emission Reduction

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

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

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

Applicable Goals – Toxic Air Contaminants

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

Applicable Policies – Toxic Air Contaminants

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

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

Actions – Toxic Air Contaminants

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

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

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. For cancer risk assessments, children are the most sensitive receptors, since they are more susceptible to cancer causing TACs. Residential locations are assumed to include infants and small children. The closest sensitive receptors to the project site are the multi-family residences to the east opposite Oakland Road and the single-family residences to the south opposite Horning Street. There are additional residences at farther distances from the project site.

Significance Thresholds

In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA and these significance thresholds were contained in the District's 2011 *CEQA Air Quality Guidelines*. These thresholds were designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA. The thresholds were challenged through a series of court challenges and were mostly upheld. BAAQMD updated the *CEQA Air Quality Guidelines* in 2017 to include the latest significance thresholds, which were used in this analysis and are summarized in Table 1.

Table 1. Air Quality Significance Thresholds

Criteria Air Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
ROG	54	54	10
NO_x	54	54	10
PM_{10}	82 (Exhaust)	82	15
$PM_{2.5}$	54 (Exhaust)	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards	**Single Sources Within 1,000-foot Zone of Influence**	**Combined Sources (Cumulative from all sources within 1,000-foot zone of influence)**	
Excess Cancer Risk	>10.0 per one million	>100 per one million	
Hazard Index	>1.0	>10.0	
Incremental annual $PM_{2.5}$	>0.3 µg/m^3	>0.8 µg/m^3	

Note: ROG = reactive organic gases, NOx = nitrogen oxides, PM_{10} = course particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, $PM_{2.5}$ = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less.

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

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

The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate emissions from construction and operation of the project assuming full build-out conditions. The project land use types and size, and anticipated construction schedule were input to CalEEMod. The model output from CalEEMod along with construction and operational inputs are included as *Attachment 2*.

Construction Period Emissions

CalEEMod provided annual emissions for construction. CalEEMod provides emission estimates for both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. A construction build-out scenario, including equipment list and schedule, was based a construction data worksheet provided by the project applicant for only the storage facility portion. The construction build-out scenario for the remainder of the project (gas station/market/car wash and fast food) was based on CalEEMod defaults for a project of those types and sizes. Due to part of the project having definitive construction information and part using default information, the project was broken into two CalEEMod models and then combined annual construction and operational emissions. The proposed project land uses and demolition/earthwork volumes were entered into CalEEMod as follows:

Storage Facility

- 151,958-sf entered as "Unrefrigerated Warehouse-No Rail" on 1.9-acres,
- 36 spaces entered as "Parking Lot",
- 250 cement truck round trips during building construction, and
- 38 concrete truck round trips during paving.

Gas Station and Fast Food

- 12 pumps and 9,025-sf entered as "Convenience Market with Gas Pumps" on 1.3-acres,
- 2,494-sf entered as "Fast Food Restaurant with Drive Thru" on 0.06-acres,
- 27 spaces entered as "Parking Lot", and
- 52,634-sf of existing building demolition.

Construction was assumed to begin March 2021 and last 18 months. There were an estimated 380 construction workdays. Average daily emissions were computed by dividing the total construction emissions by the number of construction days. Table 2 shows average daily construction emissions of ROG, NO_X, PM_{10} exhaust, and $PM_{2.5}$ exhaust during construction of the project. As indicated in Table 2, predicted the construction period emissions would not exceed the BAAQMD significance thresholds.

Table 2. Construction Period Emissions

Scenario	ROG	NOx	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Total Construction Emissions (tons)	1.1 tons	2.1 tons	0.1 tons	0.1 tons
Average Daily Emissions (pounds/day)[1]	5.9 lbs./day	11.2 lbs./day	0.5 lbs./day	0.4 lbs./day
BAAQMD Thresholds (pounds per day)	*54* lbs./day	*54* lbs./day	*82* lbs./day	*54* lbs./day
Exceed Threshold?	No	No	No	No
Note: Assumes 380 construction workdays				

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless

properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD *CEQA Air Quality Guidelines* consider these impacts to be less-than-significant if best management practices are implemented to reduce these emissions. *Mitigation Measure AQ-1 would implement BAAQMD-recommended best management practices*.

Mitigation Measure AQ-1: **Include measures to control dust and exhaust during construction.**

During any construction period ground disturbance, the applicant shall ensure that the project contractor implement measures to control dust and exhaust. Implementation of the measures recommended by BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a less-than-significant level. Additional measures are identified to reduce construction equipment exhaust emissions. The contractor shall implement the following best management practices that are required of all projects:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

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

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

4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).

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

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

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

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

Effectiveness of Mitigation Measure AQ-1

The measures above are consistent with BAAQMD-recommended basic control measures for reducing fugitive particulate matter that are contained in the BAAQMD CEQA Air Quality Guidelines.

Operational Period Emissions

Operational air emissions from the project would be generated primarily from autos accessing the project. The project includes a Gasoline Dispensing Facility that would have ROG emissions. Evaporative emissions from architectural coatings and maintenance products (classified as consumer products) are typical emissions from these types of uses. CalEEMod was used to predict emissions from operation of the proposed project assuming full build-out. Evaporative ROG emissions from the Gasoline Dispensing Facility were computed separately and added to the emissions computed by CalEEMod.

Land Uses

The project land uses were entered into CalEEMod as described above for the construction period modeling.

Model Year

Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CalEEMod. The earliest full year the buildout project could possibly be constructed and begin operating would be 2023. Emissions associated with build-out later than 2023 would be lower.

Trip Generation Rates

CalEEMod allows the user to enter specific vehicle trip generation rates. Therefore, the project-specific daily trip generation rate provided by the traffic consultant was entered into the model.[4] For each land use type, the forecasted daily trip rate was divided by the quantity of that land use to identify the weekday daily trip rate. The Saturday and Sunday trip rates were assumed to be the weekday rate adjusted by multiplying the ratio of the CalEEMod default rates for Saturday and Sunday trips to the default weekday rate. The commercial to customer trip lengths for the gas station and fast food land uses were changed to 3 miles, as customers of these uses would local. The default trip lengths for the storage facility and trip types for all land uses specified by CalEEMod were used.

Energy

CalEEMod defaults for energy use were used, which include the 2016 Title 24 Building

[4] Hexagon Transportation Consultants, Inc., 2020, *Supplemental Traffic Analysis for the Mixed-Use Development at 645 Horning Street in San Jose, CA.* March.

Standards. GHG emissions modeling includes those indirect emissions from electricity consumption. The electricity produced emission rate was modified in CalEEMod. CalEEMod has a default emission factor of 641.3 pounds of CO_2 per megawatt of electricity produced, which is based on PG&E's 2008 emissions rate. PG&E published 2015 emissions rates for 2009 through 2015, which showed the emission rate for delivered electricity had been reduced to 405 pounds CO_2 per megawatt of electricity delivered.[5] The projected GHG intensity factor for the year 2020 is 290 pounds of CO_2 per megawatt of electricity produced, which was input to the model.[6]

Other Inputs

Default model assumptions for emissions associated with solid waste generation use were applied to the project. Water/wastewater use were changed to 100% aerobic conditions to represent wastewater treatment plant conditions.

Gasoline Dispensing Facility

The project would include a gasoline dispensing facility (GDF). The emissions from traffic associated with the GDF were addressed using the CalEEMod model, as described above. GDFs are a source of ROG emissions associated with loading, storage, refueling of vehicles and spillage that results in evaporative emissions. GDFs are regulated by BAAQMD. Because GDFs require permits from BAAQMD (unlike other "unpermitted" operational sources), emissions associated with GDFs were computed separately from other operational emissions above using the latest emission factors made available from CARB.[7] The emissions computations are based on annual throughput expected for the facility. Since the throughput for project GDFs is not known, a throughput of 18,000,000 gallons per year was assumed for the station. This represents a throughput associated with the largest size GDFs in the State, and therefore, considered an overestimation.[8] The evaporative ROG emissions associated with these GDFs are included in Table 3.

Existing Uses

A CalEEMod model run was developed to compute emissions from use of the existing land uses as if they were operating in 2023. Inputs for the existing modeling scenario included 52,634-sf entered as "General Light Industry" and 2.05-acres entered as "Parking Lot". Other inputs were applied to the modeling in the same manner described for the proposed project. Historical energy usage rates were assigned by CalEEMod.

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[5] PG&E 2017. Climate Change. See http://www.pgecorp.com/corp_responsibility/reports/2017/en02_climate_change.html accessed March 13, 2018.

[6] PG&E. 2015. Greenhouse Gas Emission Factors: Guidance for PG&E Customers See: https://www.ca-ilg.org/sites/main/files/file-attachments/ghg_emission_factor_guidance.pdf

[7] CARB. 2013. Revised Emissions Factors for Gasoline Marketing Operations at California Gasoline Dispensing Facilities". December 23. Assumes use of enhanced vapor recovery systems.

[8] CARB. 2005. Air Quality and Land Use Handbook: A Community Perspective. Page 31-32 reports that "very large gasoline dispensing facilities located at large wholesale and discount centers may dispense nine million gallons of gasoline per year or more."

Project Operational Emissions

Table 3 reports the predicted emission in terms of annual emissions in tons and average daily operational emissions, assuming 365 days of operation per year. As shown in Table 3, average daily and annual emissions of ROG, NOx, PM_{10}, or $PM_{2.5}$ emissions associated with operation would not exceed the BAAQMD significance thresholds.

Table 3. Operational Emissions

Scenario	ROG	NOx	PM_{10}	$PM_{2.5}$
2023 Project Operational Emissions (*tons/year*)	1.8 tons	3.4 tons	1.3 tons	0.3 tons
Gasoline Dispensing Facility (*tons/year*)	2.6 tons	--	--	--
2023 Existing Operational Emissions (*tons/year*)	0.4 tons	0.7 tons	0.9 tons	0.2 tons
Net Annual Emissions (*tons/year*)	4.0 tons	2.7 tons	0.4 tons	0.1 tons
BAAQMD Thresholds (tons /year)	*10 tons*	*10 tons*	*15 tons*	*10 tons*
Exceed Threshold?	No	No	No	No
2023 Project Operational Emissions (*lbs/day*)[1]	22.0 lbs.	14.5 lbs.	2.1 lbs.	0.6 lbs.
BAAQMD Thresholds (pounds/day)	*54* lbs.	*54* lbs.	*82* lbs.	*54* lbs.
Exceed Threshold?	No	No	No	No
Notes: [1] Assumes 365-day operation.				

Impact: Expose sensitive receptors to substantial pollutant concentrations?

Project impacts related to increased community risk can occur either by introducing a new sensitive receptor, such as a residential use, in proximity to an existing source of TACs or by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the project vicinity. The project would not introduce new sensitive receptors. The project includes the development of a fueling station. Construction activity would generate dust and equipment exhaust on a temporary basis that could affect nearby sensitive receptors. The BAAQMD recommends using a 1,000-foot screening radius around a project site for purposes of identifying community health risk from siting a new sensitive receptor or a new source of TACs.

Construction Community Health Risk Impacts

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. These exhaust air pollutant emissions would not be considered to contribute substantially to existing or projected air quality violations as shown in Table 2. Construction exhaust emissions may still pose health risks for sensitive receptors such as surrounding residents. The primary community risk impact issue associated with construction emissions are cancer risk and exposure to $PM_{2.5}$. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. A health risk assessment of the project construction activities was conducted that evaluated potential health effects to nearby sensitive receptors from construction

emissions of DPM and $PM_{2.5}$.[9] This assessment included dispersion modeling to predict the offsite and onsite concentrations resulting from project construction, so that increased cancer risks and non-cancer health effects could be evaluated.

On-Site Construction TAC Emissions

The CalEEMod model provided total annual PM_{10} exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road vehicles, with total emissions from all construction stages as 0.0853 tons (171 pounds). The on-road emissions are a result of haul truck travel during demolition and grading activities, worker travel, and vendor deliveries during construction. A trip length of one mile was used to represent vehicle travel while at or near the construction site. It was assumed that these emissions from on-road vehicles traveling at or near the site would occur at the construction site. Fugitive $PM_{2.5}$ dust emissions were calculated by CalEEMod as 0.0149 tons (30 pounds) for the overall construction period.

Dispersion Modeling

The U.S. EPA AERMOD dispersion model was used to predict DPM and $PM_{2.5}$ concentrations at sensitive receptors (residences) in the vicinity of the project construction area. The AERMOD dispersion model is a BAAQMD-recommended model for use in modeling analysis of these types of emission activities for CEQA projects.[10] The modeling utilized two area sources to represent the on-site construction emissions, one for exhaust emissions and one for fugitive dust emissions. To represent the construction equipment exhaust emissions, an emission release height of 19.7 feet (6 meters) was used for the area source. The elevated source height reflects the height of the equipment exhaust pipes plus an additional distance for the height of the exhaust plume above the exhaust pipes to account for plume rise of the exhaust gases. For modeling fugitive $PM_{2.5}$ emissions, a near-ground level release height of 6.6 feet (2 meters) was used for the area source. Emissions from the construction equipment and on-road vehicle travel were distributed throughout the modeled area sources. Construction emissions were modeled as occurring daily between 7:00 a.m. to 5:00 p.m., when the majority of construction activity would occur according to the provided construction worksheet.

The modeling used a 5-year meteorological data set (2013-2017) from the San José International Airport prepared for use with the AERMOD model by the BAAQMD. Annual DPM and $PM_{2.5}$ concentrations from construction activities at the project site during the 2021-2022 period were calculated using the model. DPM and $PM_{2.5}$ concentrations were calculated at nearby sensitive receptor locations. Receptor heights of 5 feet (1.5 meters) and 15 feet (4.5 meters) were used to represent the breathing height of residences on the first and second floors in nearby single- and multi-family residences.

[9] DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.
[10] Bay Area Air Quality Management District (BAAQMD), 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0.* May.

Construction Community Risk Summary

The maximum-modeled annual DPM and $PM_{2.5}$ concentrations, which includes both the DPM and fugitive $PM_{2.5}$ concentrations, were identified at nearby sensitive receptors (as shown in Figure 1) to find the maximally exposed individuals (MEI). Using the maximum annual modeled DPM concentrations, the maximum increased cancer risks were calculated using BAAQMD recommended methods and exposure parameters described in *Attachment 1*. Non-cancer health hazards and maximum $PM_{2.5}$ concentrations were also calculated and identified. *Attachment 3* to this report includes the emission calculations used for the construction area source modeling and the cancer risk calculations.

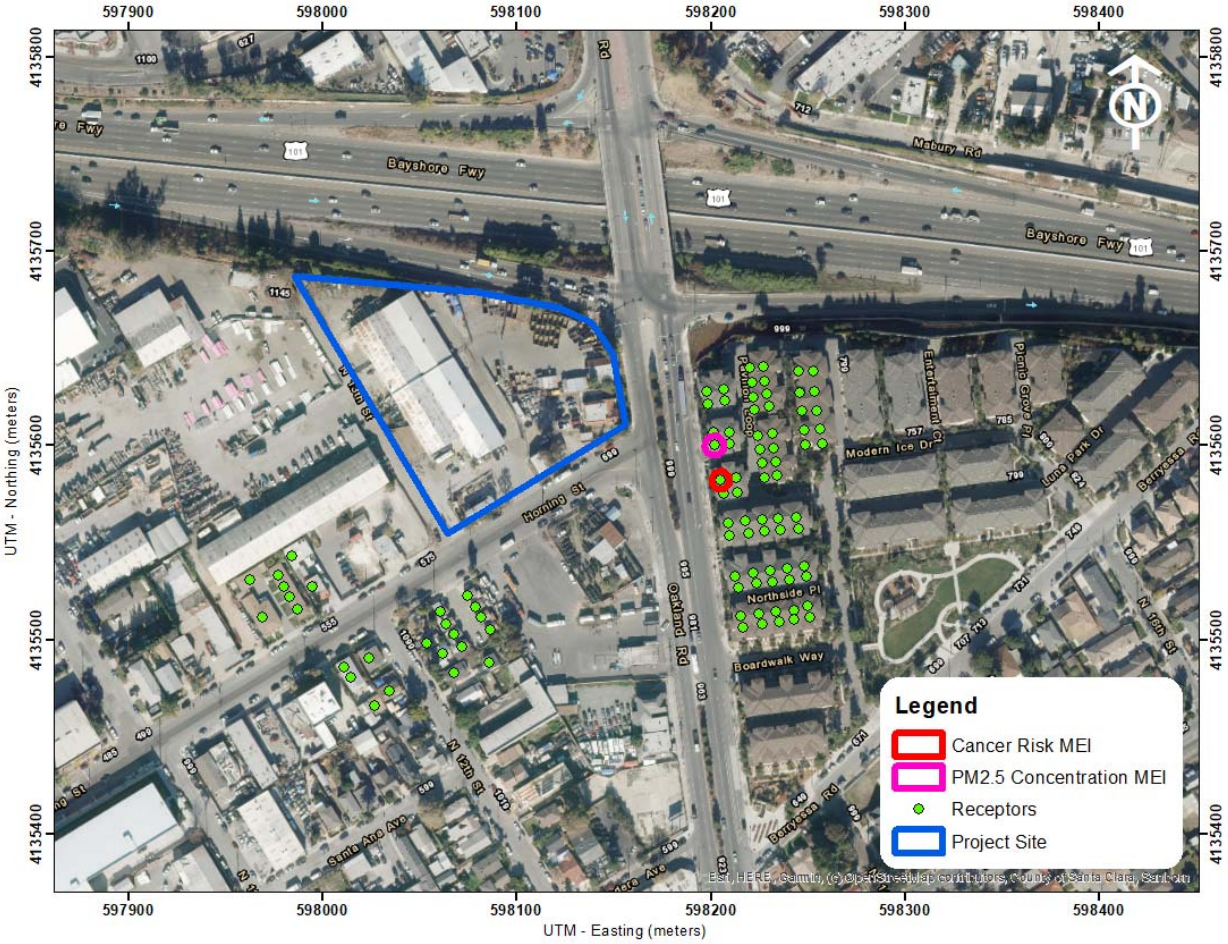
Results of this assessment indicated that the cancer risk MEI and the $PM_{2.5}$ concentration MEI were located on the first floors (5 feet above ground) of the multi-family residences to the east of the project site opposite Oakland Road (as seen in Figure 1). The maximum increased cancer risks from construction exceeds its respective BAAQMD single-source thresholds of greater than 10.0 per million. Table 4 summarizes the maximum cancer risks, $PM_{2.5}$ concentrations, and health hazard indexes for project related construction activities affecting the MEIs.

Table 4. Construction Risk Impacts at the Offsite Residential MEI

Source		Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Construction	Unmitigated	**29.0 (infant)**	0.19	0.03
	Mitigated*	4.2 (infant)	0.03	<0.01
BAAQMD Single-Source Threshold		***>10.0***	***>0.3***	***>1.0***
Exceed Threshold?	Unmitigated	***Yes***	*No*	*No*
	Mitigated*	*No*	*No*	*No*

* Construction equipment engines with Tier 3 DPF Level 3 with electric crane mitigation measures.

Figure 1. Project Construction Site, Locations of Off-Site Sensitive Receptors, and TAC Impacts



Operational Gasoline Dispensing Facility

A screening analysis was conducted to predict cancer risks associated with the proposed gasoline dispensing facility (DPF) or gas station. As previously described, emissions from the project GDF were computed based on projected annual throughput of gasoline (i.e., 10 million gallons). Emissions of benzene, toluene, and xylenes which are TACs were computed based on recent emission factors developed by CARB.[11] The emission factors are based on annual gasoline throughput and account for emissions from fuel storage tank loading and pressure driven (breathing) losses, motor vehicle refueling, spillage while refueling, and minor emissions from vapor permeation through gasoline dispensing hoses. The fueling emission factors take into account the effects of vehicles equipped with onboard refueling vapor recovery (ORVR) systems. ORVR systems were phased in beginning with 1998 model year passenger vehicles, and are now installed on all passenger, light-duty, and medium-duty vehicles manufactured since the 2006 model year. Emissions of benzene, toluene, and xylene which are TACs were computed

[11] CARB. 2013. *Revised Emissions Factors for Gasoline Marketing Operations at California Gasoline Dispensing Facilities*. December 23, 2013.

assuming that benzene, toluene, and xylene make up 0.3%, 8.0%, and 2.4% of gasoline vapor, respectively.[12]

The average daily emissions of each TAC were input to the BAAQMD's Risk and Hazards Screening Calculator to compute community risk impacts in terms of increased cancer risk and non-cancer hazards. The calculator predicts the near source risk levels, which is then entered into BAAQMD's Gasoline Station Distance Multiplier Tool. The MEIs would be approximately 140 feet from the gas station, and with the distance adjustments the cancer risk at the MEI locations were found to be 1.7 in a million. This cancer risk calculations include the latest recommendations from the State's Office of Environmental Health and hazards (OEHHA), as described in *Attachment 1*. The non-cancer risk (HI) due to the emissions from the gasoline dispensing facility would almost be less than 0.01. *Attachment 3* to this report includes the gas station's operational emission and community risk calculations.

Summary of Project-Related Community Risks at MEI

The cumulative risk impacts from a project is the combination of construction and operation sources. These sources include on-site construction activity and gas station from the project. The project impact is computed by adding the construction cancer risk for an infant to the increased cancer risk for the project operational conditions for the gas station at the MEI. The project MEI is identified as the sensitive receptor that is most impacted by the project's construction and operation. The cancer risks from construction and operation of the project were summed together. Unlike, the increased maximum cancer risk, the annual $PM_{2.5}$ concentration and HI risks are not additive but based on an annual maximum risk for the entirety of the project.

The unmitigated maximum cancer risks would exceed the BAAQMD single-source thresholds of greater than 10.0 per million. However, with *Mitigation Measure AQ-1 and AQ-2* the mitigated increased project cancer risk would not exceed the single-source thresholds. The unmitigated $PM_{2.5}$ concentration and non-cancer hazards from construction and operation activities would be below their respective single-source significance thresholds as seen in Table 5

Table 5. Construction and Operation Risk Impacts at the Offsite Project MEI

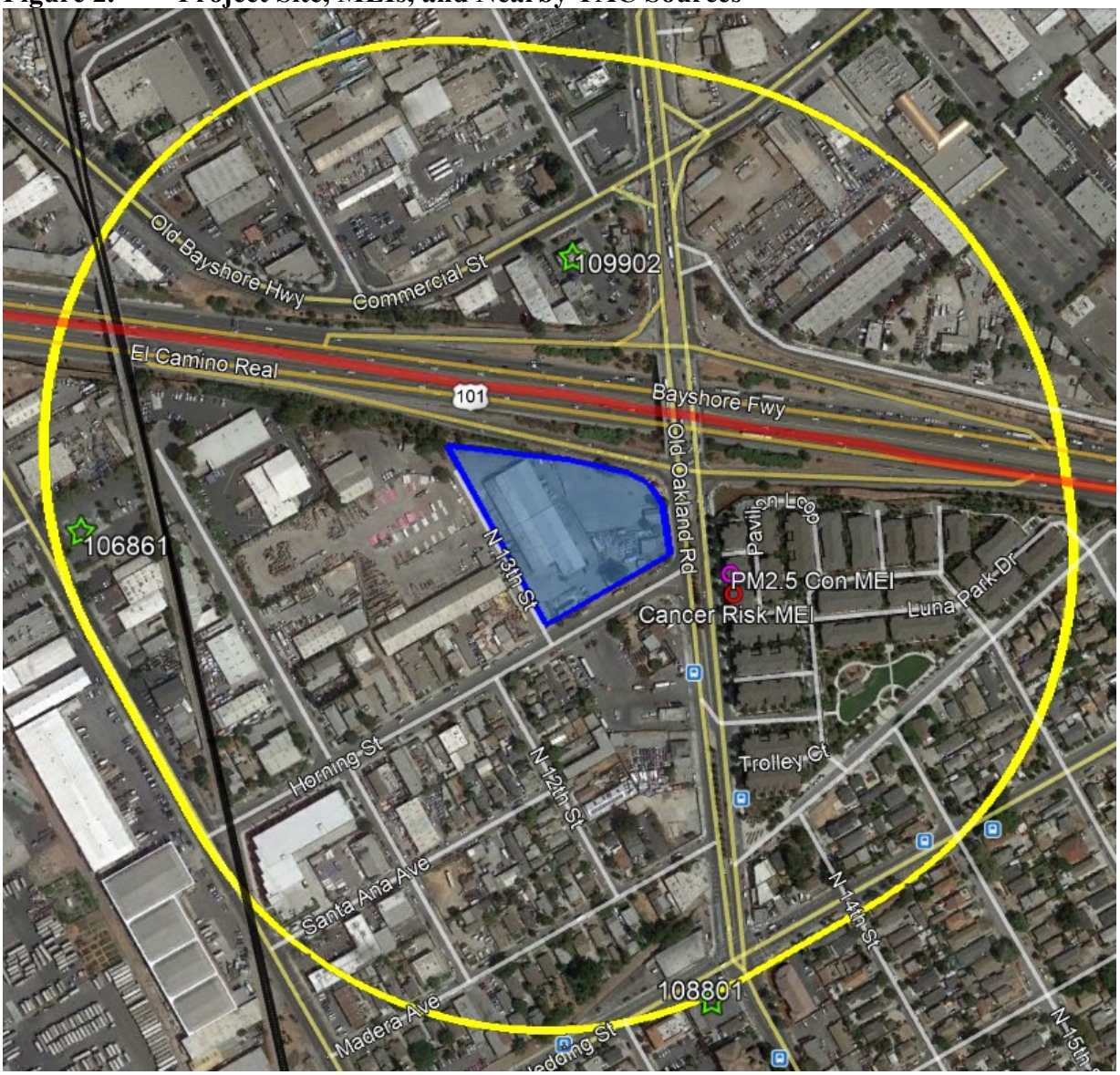
Source		Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Construction	Unmitigated	**29.0 (infant)**	0.19	0.03
	Mitigated	4.2 (infant)	0.03	<0.01
Project Gas Station		1.7	--	<0.01
	Unmitigated Total/Maximum Project	**30.7**	0.19	0.03
	Mitigated Total/Maximum Project	5.9	0.03	<0.01
	BAAQMD Single-Source Threshold	***>10.0***	***>0.3***	***>1.0***
Exceed Threshold?	Unmitigated	***Yes***	*No*	*No*
	Mitigated	*No*	*No*	*No*

[12] CAPCOA. 1997. *Air Toxics "Hot Spots" Program, Gasoline Service Station Industrywide Risk Assessment Guidelines*, November 1997

Cumulative Community Risks of all TAC Sources at Project MEIs

Community health risk assessments typically look at all substantial sources of TACs located within 1,000 feet of a project site. These sources include rail lines, highways, busy surface streets, and stationary sources identified by BAAQMD. A review of the project area indicates that the Union Pacific Railroad (UPRR) has a rail line that passes through the project influence area. Traffic on U.S. Highway 101 (U.S. 101) and Oakland Road have an average daily traffic (ADT) that exceeds 10,000 vehicles. All other roadways within the area are assumed to have an ADT that is less than 10,000 vehicles. Three stationary sources were identified within the 1,000-foot influence area using BAAQMD's stationary source stationary source website map and Google Earth map. Figure 2 shows the sources affecting the project site. Details of the screening, modeling, and community risk calculations are included in *Attachment 4.* Cumulative risk impacts from these sources upon the construction MEI are reported in Table 6.

Figure 2. Project Site, MEIs, and Nearby TAC Sources



Rail Line - UPRR

A UPRR line is within 1,000-feet of the project site. The activity on this rail line has been considered to be infrequent as it used by about four freight trains on a daily basis. The rail line is located beyond 1,000 feet from the project MEIs. The DPM and $PM_{2.5}$ emissions from trains would have negligible impacts on the MEIs given the infrequent rail activity and the large distance between the rail line and MEIs.

Highways- U.S. 101

BAAQMD provides a *Highway Screening Analysis Google Earth Map Tool* to identify estimated risk and hazard impacts from highways throughout the Bay Area. Cumulative risk, hazard, and $PM_{2.5}$ impacts at various distances from the highway are estimated for different segments of the highways. The tool uses the average annual daily traffic (AADT) count, fleet mix, and other modeling parameters specific to that segment of the highway. The lifetime cancer risk, annual $PM_{2.5}$ exposure, and non-cancer HI impacts were identified using this tool. The MEIs were approximately 300 feet south of U.S. 101 at Link 568 (6ft elevation). Cancer risk levels were adjusted for exposure duration, age, and new exposure guidance provided by OEHHA, as described in *Attachment 1*. The risk impacts from these highways are discussed in Table 6.

Roadways - Oakland Road

For local roadways, BAAQMD has provided the *Roadway Screening Analysis Calculator* to assess whether roadways with traffic volumes of over 10,000 vehicles per day may have a potentially significant effect on a proposed project. . Note this is a screening model and more refined modeling could be conducted if potentially significant impacts are identified. Two adjustments were made to the cancer risk predictions made by this calculator: (1) adjustment for latest vehicle emissions rates predicted using EMFAC2014 and (2) adjustment of cancer risk to reflect OEHHA guidance (see *Attachment 1*).

The calculator uses EMFAC2011 emission rates for the year 2014. However, a new version of the emissions factor model, EMFAC2014 is available. This version predicts lower emission rates. An adjustment factor of 0.5 was developed by comparing emission rates of total organic gases (TOG) for running exhaust and running losses developed using EMFAC2011 for year 2014 and those from EMFAC2014 for 2018. The predicted cancer risk was then adjusted using a factor of 1.3744 to account for new OEHHA guidance. This factor was provided by BAAQMD for use with their CEQA screening tools that are used to predict cancer risk.[13]

The ADT on Oakland Road was estimated to be approximately 17,500 vehicles. This estimate was based on traffic volumes included in the *Envision San Jose General Plan EIR*.[14] The BAAQMD *Roadway Screening Analysis Calculator* for Santa Clara County was used. Oakland Road was identified as a north-south directional roadway with the MEIs located approximately 30 feet east of the roadway. Estimated risk values for this roadway at the MEIs are listed in

[13] Correspondence with Alison Kirk, BAAQMD, November 23, 2015.
[14] Available online: http://www.sanjoseca.gov/DocumentCenter/View/2198, Accessed: October 28, 2016.

Table 6. Note that BAAQMD has found that non-cancer hazards (i.e. HI) were found to be minimal for all surface streets[15] and the HI value is therefore not included.

Stationary Sources

Permitted stationary sources of air pollution near the project site were identified using BAAQMD's *Permitted Stationary Sources 2018* GIS website[16] and *Stationary Source Risk & Hazard Analysis Google Earth Tool,* which identifies the location of nearby stationary sources and their estimated risk and hazard impacts, with the website including new OEHHA guidance adjustments. The website identified risk values were then adjusted for distance using the appropriate BAAQMD *Distance Multiplier Tool for Diesel Internal Combustion Engines, Gasoline Dispensing Facilities (GDFs), or Generic Sources* or the emissions information was used in refined modeling.

The three stationary sources that were identified, Plant #109902, #106861, and #108801, are all gas dispensing facilities. Estimated risk values for these stationary sources at the MEIs are listed in Table 6.

Combined Community Health Risk at Off-Site MEIs

Table 6 reports both the project and cumulative community risk impacts at the sensitive receptors most affected by construction (i.e. the MEIs). Without mitigation, the project's community risk from project construction activities would exceed the single-source maximum cancer risk and $PM_{2.5}$ concentration significance thresholds. The combined annual cancer risk, $PM_{2.5}$ concentration, and Hazard risk values, which includes unmitigated and mitigated, would not exceed their respective cumulative thresholds. With the incorporation of *Mitigation Measures AQ-1 and AQ-2*, the project construction's single-source and cumulative-source risks would no longer exceed the significance thresholds.

[15] BAAQMD, *Recommended Methods for Screening and Modeling Local Risks and Hazards*, May 2012, https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en
[16] BAAQMD, https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65

Table 6. Impacts from Combined Sources at Off-Site MEIs

Source		Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Impacts				
Unmitigated Total/Maximum Project		**30.7**	0.19	0.03
Mitigated Total/Maximum Project		5.9	0.03	<0.01
BAAQMD Single-Source Source Threshold		***>10.0***	***>0.3***	***>1.0***
Exceed Threshold?	Unmitigated	***Yes***	*No*	*No*
	Mitigated	*No*	*No*	*No*
Cumulative Sources				
U.S. 101 (Link 568, 6ft Elevation), MEI ~300 feet south		42.8	0.22	0.03
Oakland Road (north-south), MEI 30 feet east, ADT 17,500		9.7	0.33	--
Plant #109902 (GDF) at 800 feet		0.1	--	<0.01
Plant #106861 (GDF) at 1,000 feet		<0.1	--	<0.01
Plant #108801 (GDF) at 950 feet		<0.1	--	<0.01
Cumulative Total	Unmitigated	<83.5 (infant)	0.74	<0.09
	Mitigated	<58.7 (infant)	0.58	<0.07
BAAQMD Cumulative Source Threshold		***>100***	***>0.8***	***>10.0***
Exceed Threshold?	Unmitigated	*No*	*No*	*No*
	Mitigated	*No*	*No*	*No*

Mitigation Measure AQ-2: **Selection of equipment during construction to minimize emissions. Such equipment selection would include the following:**

The project shall develop a plan demonstrating that the off-road equipment used onsite to construct the project would achieve a fleet-wide average 67-percent reduction in DPM exhaust emissions or greater. One feasible plan to achieve this reduction would include the following:

- All diesel-powered off-road equipment, larger than 25 horsepower, operating on the site for more than two days continuously shall, at a minimum, meet U.S. EPA particulate matter emissions standards for Tier 3 engines that include CARB-certified Level 3 Diesel Particulate Filters (DPF)[17] or equivalent. Alternatively, equipment that meets U.S. EPA Tier 4 standards for particulate matter or the use of equipment that includes electric or alternatively-fueled equipment (i.e., non-diesel) would meet this requirement.

- Stationary construction cranes (building cranes) shall be powered by electricity.

Effectiveness of Mitigation Measure AQ-2

Implementation of *Mitigation Measure AQ-2* using Tier 3 engines with Level 3 DPFs and electric cranes would reduce on-site diesel exhaust emissions from construction equipment by 85 percent. With mitigation, the computed maximum increased lifetime residential cancer risk from construction at the MEI location, assuming infant exposure, would be 4.2 in one million or less. The mitigated cancer risk would no longer exceed its respective single-source significance threshold.

[17] See http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm

Supporting Documentation

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

Attachment 2 includes the CalEEMod output for project construction and operational emissions. The operational outputs for existing uses are also included in this attachment. Also included are any modeling assumptions.

Attachment 3 is the construction and operational health risk assessment. AERMOD dispersion modeling files for this assessment, which are quite voluminous, are available upon request and would be provided in digital format.

Attachment 4 includes the screening community risk calculations, modeling results, and health risk calculations from sources affecting the construction MEI and project, including refined highway modeling. Due to the large size of the BAAQMD health risk calculators, these files were not included but are available upon request and would be provided in digital format.

Attachment 1: Health Impact Evaluation Methodology

A health risk assessment (HRA) for exposure to Toxic Air Contaminates (TACs) requires the application of a risk characterization model to the results from the air dispersion model to estimate potential health risk at each sensitive receptor location. The State of California Office of Environmental Health Hazard Assessment (OEHHA) and California Air Resources Board (CARB) develop recommended methods for conducting health risk assessments. The most recent OEHHA risk assessment guidelines were published in February of 2015.[18] These guidelines incorporate substantial changes designed to provide for enhanced protection of children, as required by State law, compared to previous published risk assessment guidelines. CARB has provided additional guidance on implementing OEHHA's recommended methods.[19] This HRA used the 2015 OEHHA risk assessment guidelines and CARB guidance. The BAAQMD has adopted recommended procedures for applying the newest OEHHA guidelines as part of Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants.[20] Exposure parameters from the OEHHA guidelines and the recent BAAQMD HRA Guidelines were used in this evaluation.

Cancer Risk

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

The current OEHHA guidance recommends that cancer risk be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, they recommend evaluating risks for the third trimester of pregnancy to age zero, ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 70 (adult exposure). Age sensitivity factors (ASFs) associated with the different types of exposure are an ASF of 10 for the third trimester and infant exposures, an ASF of 3 for a child exposure, and an ASF of 1 for an adult exposure. Also associated with each exposure type are different breathing rates, expressed as liters per kilogram of body weight per day (L/kg-day) or liters per kilogram of body weight per 8-hour period for the case of worker or school child exposures. As recommended by the BAAQMD for residential exposures, 95th percentile breathing rates are used for the third trimester and infant exposures, and 80th percentile breathing rates for child and adult exposures. For children at schools and daycare facilities, BAAQMD recommends using the 95th percentile 8-hour breathing rates. Additionally, CARB and the BAAQMD recommend the use of a

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

residential exposure duration of 30 years for sources with long-term emissions (e.g., roadways). For workers, assumed to be adults, a 25-year exposure period is recommended by the BAAQMD. For school children a 9-year exposure period is recommended by the BAAQMD.

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

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

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

Where:

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

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

Where:

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

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

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

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

Non-Cancer Hazards

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

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

Annual $PM_{2.5}$ Concentrations

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

Attachment 2: CalEEMod Modeling Inputs and Outputs

Air Quality/Noise Construction Information Data Request

Project Name: Trojan San Jose - Horning Street

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size ____ Dwelling Units 1.9 total project acres disturbed

____ s.f. residential

____ s.f. retail

151,958 s.f. office/commercial

____ s.f. other, specify:

____ s.f. parking garage ____ spaces

24,500 s.f. parking lot 36 spaces

Construction Hours 7 am to 5 pm

Pile Driving? NO

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

IF YES (if BOTH separate values) -->

Kilowatts/Horsepower: _____

Fuel Type: _____

Location in project (Plans Desired if Available):

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

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Annual Hours	Comments
	Demolition	**Start Date:**	**3/1/2021**	**Total phase:**	**1**			**Overall Import/Export Volumes**
		End Date:	**3/1/2021**					
1	Concrete/Industrial Saws	81	0.73	2	1	2	2	**Demolition Volume**
	Excavators	158	0.38			0	0	Square footage of buildings to be demolished
	Rubber-Tired Dozers	247	0.4			0	0	(*or* total tons to be hauled)
	Tractors/Loaders/Backhoes	97	0.37			0	0	**_0_** square feet *or*
								_0_ Hauling volume (tons)
								Any pavement demolished and hauled? **_0_ tons**
	Site Preparation	**Start Date:**	**3/2/2021**	**Total phase:**	**1**			DEMOLITION HAS BEEN COMPLETED
		End Date:	**3/2/2021**			0		
	Graders	187	0.41			0	0	
	Rubber Tired Dozers	247	0.4			0	0	
1	Tractors/Loaders/Backhoes	97	0.37	8	1	8	8	
	Grading / Excavation	**Start Date:**	**3/3/2021**	**Total phase:**	**3**			
		End Date:	**3/5/2021**					**Soil Hauling Volume**
	Excavators	158	0.38			0	0	Export volume = **_0_** cubic yards?
1	Graders	187	0.41	8	1	2.66666667	8	Import volume = **_0_** cubic yards?
	Rubber Tired Dozers	247	0.4			0	0	BALANCED SITE
	Concrete/Industrial Saws	81	0.73			0	0	
2	Tractors/Loaders/Backhoes	97	0.37	8	3	8	48	
	Other Equipment?							
	Trenching/Foundation	**Start Date:**	**3/7/2021**	**Total phase:**	**2**			
		End Date:	**3/9/2021**					
1	Tractor/Loader/Backhoe	97	0.37	8	2	8	16	
	Excavators	158	0.38			0	0	
	Other Equipment?							
	Building - Exterior	**Start Date:**	**4/20/2021**	**Total phase:**	**180**			**Cement Trucks, YES _250_ Total Round-Trips**
		End Date:	**12/27/2021**					
1	Cranes	231	0.29	4	4	0.08888889	16	Electric? (Y/N) _Yes_ Otherwise assumed diesel
1	Forklifts	89	0.2	2	90	1	180	Liquid Propane (LPG)? (Y/N) _No_ Otherwise Assumed diesel
	Generator Sets	84	0.74			0	0	Or temporary line power? (Y/N) _Y_
	Tractors/Loaders/Backhoes	97	0.37			0	0	if above has to do with Site Power, we will be using temp power line to build project
	Welders	46	0.45			0	0	
	Other Equipment?					0		
	Building - Interior/Architectural Coating	**Start Date:**	**6/20/2021**	**Total phase:**	**300**			
		End Date:	**8/12/2022**					
	Air Compressors	78	0.48			0	0	
2	Aerial Lift	62	0.31	8	30	0.8	480	
	Other Equipment?							
	Paving	**Start Date:**	**2/1/2022**	**Total phase:**	**2**			
		Start Date:	**2/2/2022**					
6	Cement and Mortar Mixers	9	0.56	8	2	8	96	
1	Pavers	130	0.42	6	2	6	12	**Concrete, 380 cubic yards or 38 round trips**
	Paving Equipment	132	0.36			0	0	
	Rollers	80	0.38			0	0	
	Tractors/Loaders/Backhoes	97	0.37			0	0	
	Other Equipment?							

Equipment types listed in "Equipment Types" worksheet tab.

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

It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate

Modify horepower or load factor, as appropriate

Complete one sheet for each project component

Table 2
Revised Project Trip Generation Estimates

Land Use	Size		Daily Trip Rates	Daily Trips	AM Peak Hour Pk-Hr Rate	AM Peak Hour Trips In	AM Peak Hour Trips Out	AM Peak Hour Trips Total	PM Peak Hour Pk-Hr Rate	PM Peak Hour Trips In	PM Peak Hour Trips Out	PM Peak Hour Trips Total
Existing Use												
General Light Industrial [1]	52.634	ksf	20.00	1,053	1.60	59	25	84	2.20	46	70	116
Proposed Use [2]												
Convenience Market with Gas Pumps (and Car Wash) [4]	12	fuel pos.	542.60	6,511	16.57	100	99	199	19.07	115	114	229
		Pass-By Trips [3]		*-4,200*	*63%*	*(63)*	*(62)*	*(125)*	*66%*	*(76)*	*(75)*	*(151)*
		Gas Station Total:		**2,311**		**37**	**37**	**74**		**39**	**39**	**78**
Fast Food with Drive-Through	2.494	ksf	496.12	1,237	45.42	58	55	113	32.65	42	39	81
		Pass-By Trips [3]		*-612*	*49%*	*(28)*	*(27)*	*(55)*	*50%*	*(21)*	*(20)*	*(41)*
		Fast Food Total:		**625**		**30**	**28**	**58**		**21**	**19**	**40**
Mini-Warehouse	151.958	ksf	2.50	380	0.14	12	9	21	0.26	20	20	40
Total Proposed Trips:				***3,316***		***79***	***74***	***153***		***80***	***78***	***158***
Net Project Trips (Proposed - Existing):				**2,263**		**20**	**49**	**69**		**34**	**8**	**42**

Notes:
[1] Light Industrial trips based on *San Jose Traffic Impact Analysis Handbook* (November 2009) trip rates for Auto Repair.
[2] Proposed use daily and peak hour trip rates based on ITE *Trip Generation Manual, 9th Edition* (2012).
Convenience Market with Gasoline Pumps (Land Use 853), average rates per fueling position were used.
Fast Food with Drive-Through (Land Use 934), average rates per 1,000 SF were used.
Mini-Warehouse (Land Use 151), average rates per 1,000 SF were used.
[3] Pass-By trips based on ITE rates and applied to Convenience Store with Gas Station and Fast Food with Drive-Through uses as directed by the City of San Jose. Peak hour pass-by percentages applied are shown in the Pk-Hr Rate column.
[4] Trips associated with the Car Wash use are included in the Convience Market with Gas Station trip generation.

US 101/Oakland/Mabury Transportation Development Policy

The City of San Jose has identified operational problems along the Oakland Road corridor at the US 101 interchange, which are due primarily to the capacity constraints of the interchange. As a result, the City has identified two key capital improvement projects: 1) modification of the US 101/Oakland Road interchange, including improvements to the Oakland Road/Commercial Street intersection, and 2) construction of a new US 101/Mabury Road interchange. To fund these interchange improvements, the City has developed the US 101/Oakland/Mabury Transportation Development Policy (TDP).

As part of the Policy, a fee to fund the planned interchange improvements has been adopted. Any project that would add traffic to the US 101/Oakland Road interchange is required to participate in the TDP program. The fee for the US 101/Oakland/Mabury TDP is based on the number of PM peak hour vehicular trips that a project would add to the interchange. The current TDP traffic impact fee (as of May 2019) is $38,623 per each new PM peak hour vehicle trip that would be added to the interchange. Note that the signalized intersections of Oakland Road/US 101 (South), Oakland Road/US 101 (North), and Oakland Road/Commercial Street make up the interchange.

Based on the trip distribution pattern contained in the original TIA for light industrial land uses, the increase in mini-storage square footage would add another 7 PM peak hour vehicle trips to the US 101/Oakland Road interchange (see intersection #3 in Figure 1). This would increase the US 101/Oakland/Mabury TDP fee by $270,361 (based on the 2019 rate). The original 2017 fee calculation totaled $958,022 as follows: 26 PM peak hour trips x $36,847 = $958,022. Therefore, with the proposed changes the project would be required to pay a total of $1,228,383 to help fund the interchange improvements described in the US 101/Oakland/Mabury TDP.

645 Horning Street, San Jose - Storage - Santa Clara County, Annual

645 Horning Street, San Jose - Storage

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	36.00	Space	0.00	24,500.00	0
Unrefrigerated Warehouse-No Rail	151.96	1000sqft	1.90	151,958.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2020 CO2 rate = 290

Land Use - From the Site Plan and Trip Generation Study

Construction Phase - Provided construction schedule

Off-road Equipment -

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Trips and VMT - building const = 250 total cement truck round trips, paving = 38 total concrete truck round trips

Demolition - existing demo already accounted

Grading -

Vehicle Trips - Trip Generation Study warehouse - 2.50

Energy Use -

Water And Wastewater - WTP treatment 100% aerobic

Off-road Equipment - Provided construction equip & hours

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	300.00
tblConstructionPhase	NumDays	200.00	180.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	4.00	3.00
tblConstructionPhase	NumDays	10.00	2.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	2/7/2022	8/12/2022
tblConstructionPhase	PhaseEndDate	1/10/2022	12/27/2021
tblConstructionPhase	PhaseEndDate	3/26/2021	3/1/2021
tblConstructionPhase	PhaseEndDate	4/5/2021	3/5/2021
tblConstructionPhase	PhaseEndDate	1/24/2022	2/2/2022
tblConstructionPhase	PhaseEndDate	3/30/2021	3/2/2021
tblConstructionPhase	PhaseStartDate	1/25/2022	6/20/2021
tblConstructionPhase	PhaseStartDate	4/6/2021	4/20/2021
tblConstructionPhase	PhaseStartDate	3/31/2021	3/3/2021
tblConstructionPhase	PhaseStartDate	1/11/2022	2/1/2022
tblConstructionPhase	PhaseStartDate	3/27/2021	3/2/2021
tblLandUse	LandUseSquareFeet	14,400.00	24,500.00
tblLandUse	LotAcreage	0.32	0.00

tblLandUse	LotAcreage	3.49	1.90
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	6.00	0.10
tblOffRoadEquipment	UsageHours	6.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	2.70
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00

tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblTripsAndVMT	HaulingTripNumber	0.00	500.00
tblTripsAndVMT	HaulingTripNumber	0.00	76.00
tblVehicleTrips	ST_TR	1.68	2.50
tblVehicleTrips	SU_TR	1.68	2.50
tblVehicleTrips	WD_TR	1.68	2.50
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.4099	0.3891	0.3032	1.5200e-003	0.0830	3.0500e-003	0.0860	0.0225	2.8300e-003	0.0253	0.0000	142.6897	142.6897	6.7200e-003	0.0000	142.8578

2022	0.4302	0.0244	0.0492	1.5000e-004	0.0103	4.1000e-004	0.0107	2.7500e-003	3.9000e-004	3.1300e-003	0.0000	13.4606	13.4606	1.1800e-003	0.0000	13.4900
Maximum	**0.4302**	**0.3891**	**0.3032**	**1.5200e-003**	**0.0830**	**3.0500e-003**	**0.0860**	**0.0225**	**2.8300e-003**	**0.0253**	**0.0000**	**142.6897**	**142.6897**	**6.7200e-003**	**0.0000**	**142.8578**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.4099	0.3891	0.3032	1.5200e-003	0.0830	3.0500e-003	0.0860	0.0225	2.8300e-003	0.0253	0.0000	142.6897	142.6897	6.7200e-003	0.0000	142.8578
2022	0.4302	0.0244	0.0492	1.5000e-004	0.0103	4.1000e-004	0.0107	2.7500e-003	3.9000e-004	3.1300e-003	0.0000	13.4606	13.4606	1.1800e-003	0.0000	13.4900
Maximum	**0.4302**	**0.3891**	**0.3032**	**1.5200e-003**	**0.0830**	**3.0500e-003**	**0.0860**	**0.0225**	**2.8300e-003**	**0.0253**	**0.0000**	**142.6897**	**142.6897**	**6.7200e-003**	**0.0000**	**142.8578**

	ROG	NOx	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**3-1-2021**	**5-31-2021**	0.0744	0.0744
2	**6-1-2021**	**8-31-2021**	0.2885	0.2885
3	**9-1-2021**	**11-30-2021**	0.3247	0.3247
4	**12-1-2021**	**2-28-2022**	0.2308	0.2308
5	**3-1-2022**	**5-31-2022**	0.1810	0.1810
6	**6-1-2022**	**8-31-2022**	0.1435	0.1435
		Highest	0.3247	0.3247

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6750	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3600e-003	3.3600e-003	1.0000e-005	0.0000	3.5800e-003
Energy	2.8400e-003	0.0259	0.0217	1.6000e-004		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	99.8270	99.8270	7.7100e-003	2.0000e-003	100.6154
Mobile	0.0880	0.3446	1.1363	4.2500e-003	0.4124	3.2600e-003	0.4157	0.1104	3.0400e-003	0.1134	0.0000	389.5605	389.5605	0.0120	0.0000	389.8592
Waste						0.0000	0.0000		0.0000	0.0000	28.9952	0.0000	28.9952	1.7136	0.0000	71.8345
Water						0.0000	0.0000		0.0000	0.0000	12.4329	25.0122	37.4451	0.0453	0.0276	46.7888
Total	**0.7658**	**0.3705**	**1.1597**	**4.4100e-003**	**0.4124**	**5.2300e-003**	**0.4177**	**0.1104**	**5.0100e-003**	**0.1154**	**41.4281**	**514.4030**	**555.8311**	**1.7785**	**0.0296**	**609.1014**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6750	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3600e-003	3.3600e-003	1.0000e-005	0.0000	3.5800e-003
Energy	2.8400e-003	0.0259	0.0217	1.6000e-004		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	99.8270	99.8270	7.7100e-003	2.0000e-003	100.6154
Mobile	0.0880	0.3446	1.1363	4.2500e-003	0.4124	3.2600e-003	0.4157	0.1104	3.0400e-003	0.1134	0.0000	389.5605	389.5605	0.0120	0.0000	389.8592
Waste						0.0000	0.0000		0.0000	0.0000	28.9952	0.0000	28.9952	1.7136	0.0000	71.8345
Water						0.0000	0.0000		0.0000	0.0000	12.4329	25.0122	37.4451	0.0453	0.0276	46.7888
Total	**0.7658**	**0.3705**	**1.1597**	**4.4100e-003**	**0.4124**	**5.2300e-003**	**0.4177**	**0.1104**	**5.0100e-003**	**0.1154**	**41.4281**	**514.4030**	**555.8311**	**1.7785**	**0.0296**	**609.1014**

	ROG	NOx	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	3/1/2021	3/1/2021	5	1	
2	Site Preparation	Site Preparation	3/2/2021	3/2/2021	5	1	
3	Grading	Grading	3/3/2021	3/5/2021	5	3	
4	Trenching	Trenching	3/7/2021	3/9/2021	5	2	
5	Building Construction	Building Construction	4/20/2021	12/27/2021	5	180	
6	Architectural Coating	Architectural Coating	6/20/2021	8/12/2022	5	300	
7	Paving	Paving	2/1/2022	2/2/2022	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.51

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 227,937; Non-Residential Outdoor: 75,979; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	2.00	81	0.73
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Graders	0	0.00	187	0.41
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	2.70	187	0.41

Grading	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	0.10	231	0.29
Building Construction	Forklifts	1	1.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Architectural Coating	Air Compressors	0	0.00	78	0.48
Paving	Cement and Mortar Mixers	6	8.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	0	0.00	132	0.36
Paving	Rollers	0	0.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Trenching	Tractors/Loaders/Backhoes	1	2.00	97	0.37
Architectural Coating	Aerial Lifts	2	0.80	63	0.31

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	2	74.00	29.00	500.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	76.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0000e-005	3.8000e-004	4.6000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**5.0000e-005**	**3.8000e-004**	**4.6000e-004**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	9.8500e-003	9.8500e-003	0.0000	0.0000	9.8500e-003
Total	**0.0000**	**0.0000**	**3.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**9.8500e-003**	**9.8500e-003**	**0.0000**	**0.0000**	**9.8500e-003**

Mitigated Construction On-Site

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

Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0000e-005	3.8000e-004	4.6000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**5.0000e-005**	**3.8000e-004**	**4.6000e-004**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	9.8500e-003	9.8500e-003	0.0000	0.0000	9.8500e-003
Total	**0.0000**	**0.0000**	**3.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**9.8500e-003**	**9.8500e-003**	**0.0000**	**0.0000**	**9.8500e-003**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-005	9.5000e-004	1.1300e-003	0.0000		6.0000e-005	6.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.1365	0.1365	4.0000e-005	0.0000	0.1376

Total	**9.0000e-005**	**9.5000e-004**	**1.1300e-003**	**0.0000**	**0.0000**	**6.0000e-005**	**6.0000e-005**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.1365**	**0.1365**	**4.0000e-005**	**0.0000**	**0.1376**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	9.8500e-003	9.8500e-003	0.0000	0.0000	9.8500e-003
Total	**0.0000**	**0.0000**	**3.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**9.8500e-003**	**9.8500e-003**	**0.0000**	**0.0000**	**9.8500e-003**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-005	9.5000e-004	1.1300e-003	0.0000		6.0000e-005	6.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.1365	0.1365	4.0000e-005	0.0000	0.1376
Total	**9.0000e-005**	**9.5000e-004**	**1.1300e-003**	**0.0000**	**0.0000**	**6.0000e-005**	**6.0000e-005**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.1365**	**0.1365**	**4.0000e-005**	**0.0000**	**0.1376**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	9.8500e-003	9.8500e-003	0.0000	0.0000	9.8500e-003
Total	**0.0000**	**0.0000**	**3.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**9.8500e-003**	**9.8500e-003**	**0.0000**	**0.0000**	**9.8500e-003**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9000e-004	8.6900e-003	7.6800e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.0000e-004	4.0000e-004	0.0000	1.1136	1.1136	3.6000e-004	0.0000	1.1226
Total	**7.9000e-004**	**8.6900e-003**	**7.6800e-003**	**1.0000e-005**	**2.7000e-004**	**4.3000e-004**	**7.0000e-004**	**3.0000e-005**	**4.0000e-004**	**4.3000e-004**	**0.0000**	**1.1136**	**1.1136**	**3.6000e-004**	**0.0000**	**1.1226**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0788	0.0788	0.0000	0.0000	0.0788
Total	**4.0000e-005**	**3.0000e-005**	**2.7000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0788**	**0.0788**	**0.0000**	**0.0000**	**0.0788**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9000e-004	8.6900e-003	7.6800e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.0000e-004	4.0000e-004	0.0000	1.1136	1.1136	3.6000e-004	0.0000	1.1226
Total	**7.9000e-004**	**8.6900e-003**	**7.6800e-003**	**1.0000e-005**	**2.7000e-004**	**4.3000e-004**	**7.0000e-004**	**3.0000e-005**	**4.0000e-004**	**4.3000e-004**	**0.0000**	**1.1136**	**1.1136**	**3.6000e-004**	**0.0000**	**1.1226**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0788	0.0788	0.0000	0.0000	0.0788

Total	**4.0000e-005**	**3.0000e-005**	**2.7000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0788**	**0.0788**	**0.0000**	**0.0000**	**0.0788**

3.5 Trenching - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.0000e-005	4.7000e-004	5.6000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0680	0.0680	2.0000e-005	0.0000	0.0685
Total	**5.0000e-005**	**4.7000e-004**	**5.6000e-004**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0680**	**0.0680**	**2.0000e-005**	**0.0000**	**0.0685**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0197	0.0197	0.0000	0.0000	0.0197
Total	**1.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0197**	**0.0197**	**0.0000**	**0.0000**	**0.0197**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.0000e-005	4.7000e-004	5.6000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0680	0.0680	2.0000e-005	0.0000	0.0685
Total	**5.0000e-005**	**4.7000e-004**	**5.6000e-004**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0680**	**0.0680**	**2.0000e-005**	**0.0000**	**0.0685**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0197	0.0197	0.0000	0.0000	0.0197
Total	**1.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0197**	**0.0197**	**0.0000**	**0.0000**	**0.0197**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

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

Off-Road	1.9200e-003	0.0187	0.0154	2.0000e-005		1.1600e-003	1.1600e-003		1.0700e-003	1.0700e-003	0.0000	2.0810	2.0810	6.7000e-004	0.0000	2.0978
Total	**1.9200e-003**	**0.0187**	**0.0154**	**2.0000e-005**		**1.1600e-003**	**1.1600e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**2.0810**	**2.0810**	**6.7000e-004**	**0.0000**	**2.0978**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9600e-003	0.0669	0.0146	1.9000e-004	4.2400e-003	2.1000e-004	4.4500e-003	1.1700e-003	2.0000e-004	1.3700e-003	0.0000	18.8258	18.8258	8.5000e-004	0.0000	18.8472
Vendor	8.5100e-003	0.2682	0.0714	7.0000e-004	0.0172	5.9000e-004	0.0178	4.9600e-003	5.7000e-004	5.5300e-003	0.0000	67.6067	67.6067	2.9500e-003	0.0000	67.6803
Worker	0.0205	0.0142	0.1524	4.8000e-004	0.0528	3.3000e-004	0.0532	0.0141	3.1000e-004	0.0144	0.0000	43.7257	43.7257	9.9000e-004	0.0000	43.7506
Total	**0.0310**	**0.3493**	**0.2383**	**1.3700e-003**	**0.0742**	**1.1300e-003**	**0.0754**	**0.0202**	**1.0800e-003**	**0.0213**	**0.0000**	**130.1582**	**130.1582**	**4.7900e-003**	**0.0000**	**130.2781**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.9200e-003	0.0187	0.0154	2.0000e-005		1.1600e-003	1.1600e-003		1.0700e-003	1.0700e-003	0.0000	2.0810	2.0810	6.7000e-004	0.0000	2.0978
Total	**1.9200e-003**	**0.0187**	**0.0154**	**2.0000e-005**		**1.1600e-003**	**1.1600e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**2.0810**	**2.0810**	**6.7000e-004**	**0.0000**	**2.0978**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9600e-003	0.0669	0.0146	1.9000e-004	4.2400e-003	2.1000e-004	4.4500e-003	1.1700e-003	2.0000e-004	1.3700e-003	0.0000	18.8258	18.8258	8.5000e-004	0.0000	18.8472
Vendor	8.5100e-003	0.2682	0.0714	7.0000e-004	0.0172	5.9000e-004	0.0178	4.9600e-003	5.7000e-004	5.5300e-003	0.0000	67.6067	67.6067	2.9500e-003	0.0000	67.6803
Worker	0.0205	0.0142	0.1524	4.8000e-004	0.0528	3.3000e-004	0.0532	0.0141	3.1000e-004	0.0144	0.0000	43.7257	43.7257	9.9000e-004	0.0000	43.7506
Total	**0.0310**	**0.3493**	**0.2383**	**1.3700e-003**	**0.0742**	**1.1300e-003**	**0.0754**	**0.0202**	**1.0800e-003**	**0.0213**	**0.0000**	**130.1582**	**130.1582**	**4.7900e-003**	**0.0000**	**130.2781**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-004	8.3600e-003	0.0152	2.0000e-005		1.6000e-004	1.6000e-004		1.5000e-004	1.5000e-004	0.0000	2.0534	2.0534	6.6000e-004	0.0000	2.0700
Total	**0.3727**	**8.3600e-003**	**0.0152**	**2.0000e-005**		**1.6000e-004**	**1.6000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**2.0534**	**2.0534**	**6.6000e-004**	**0.0000**	**2.0700**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2300e-003	2.2400e-003	0.0240	8.0000e-005	8.3300e-003	5.0000e-005	8.3800e-003	2.2100e-003	5.0000e-005	2.2600e-003	0.0000	6.8937	6.8937	1.6000e-004	0.0000	6.8976
Total	**3.2300e-003**	**2.2400e-003**	**0.0240**	**8.0000e-005**	**8.3300e-003**	**5.0000e-005**	**8.3800e-003**	**2.2100e-003**	**5.0000e-005**	**2.2600e-003**	**0.0000**	**6.8937**	**6.8937**	**1.6000e-004**	**0.0000**	**6.8976**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-004	8.3600e-003	0.0152	2.0000e-005		1.6000e-004	1.6000e-004		1.5000e-004	1.5000e-004	0.0000	2.0534	2.0534	6.6000e-004	0.0000	2.0700
Total	**0.3727**	**8.3600e-003**	**0.0152**	**2.0000e-005**		**1.6000e-004**	**1.6000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**2.0534**	**2.0534**	**6.6000e-004**	**0.0000**	**2.0700**

Mitigated Construction Off-Site

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

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2300e-003	2.2400e-003	0.0240	8.0000e-005	8.3300e-003	5.0000e-005	8.3800e-003	2.2100e-003	5.0000e-005	2.2600e-003	0.0000	6.8937	6.8937	1.6000e-004	0.0000	6.8976
Total	**3.2300e-003**	**2.2400e-003**	**0.0240**	**8.0000e-005**	**8.3300e-003**	**5.0000e-005**	**8.3800e-003**	**2.2100e-003**	**5.0000e-005**	**2.2600e-003**	**0.0000**	**6.8937**	**6.8937**	**1.6000e-004**	**0.0000**	**6.8976**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4253					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7000e-004	8.9100e-003	0.0174	3.0000e-005		1.7000e-004	1.7000e-004		1.5000e-004	1.5000e-004	0.0000	2.3467	2.3467	7.6000e-004	0.0000	2.3657
Total	**0.4259**	**8.9100e-003**	**0.0174**	**3.0000e-005**		**1.7000e-004**	**1.7000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**2.3467**	**2.3467**	**7.6000e-004**	**0.0000**	**2.3657**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4500e-003	2.3000e-003	0.0252	8.0000e-005	9.5200e-003	6.0000e-005	9.5800e-003	2.5300e-003	5.0000e-005	2.5900e-003	0.0000	7.5923	7.5923	1.6000e-004	0.0000	7.5963
Total	**3.4500e-003**	**2.3000e-003**	**0.0252**	**8.0000e-005**	**9.5200e-003**	**6.0000e-005**	**9.5800e-003**	**2.5300e-003**	**5.0000e-005**	**2.5900e-003**	**0.0000**	**7.5923**	**7.5923**	**1.6000e-004**	**0.0000**	**7.5963**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4253					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7000e-004	8.9100e-003	0.0174	3.0000e-005		1.7000e-004	1.7000e-004		1.5000e-004	1.5000e-004	0.0000	2.3467	2.3467	7.6000e-004	0.0000	2.3657
Total	**0.4259**	**8.9100e-003**	**0.0174**	**3.0000e-005**		**1.7000e-004**	**1.7000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**2.3467**	**2.3467**	**7.6000e-004**	**0.0000**	**2.3657**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4500e-003	2.3000e-003	0.0252	8.0000e-005	9.5200e-003	6.0000e-005	9.5800e-003	2.5300e-003	5.0000e-005	2.5900e-003	0.0000	7.5923	7.5923	1.6000e-004	0.0000	7.5963
Total	**3.4500e-003**	**2.3000e-003**	**0.0252**	**8.0000e-005**	**9.5200e-003**	**6.0000e-005**	**9.5800e-003**	**2.5300e-003**	**5.0000e-005**	**2.5900e-003**	**0.0000**	**7.5923**	**7.5923**	**1.6000e-004**	**0.0000**	**7.5963**

3.8 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.1000e-004	3.7800e-003	4.0100e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.5000e-004	1.5000e-004	0.0000	0.5847	0.5847	1.3000e-004	0.0000	0.5879
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1000e-004**	**3.7800e-003**	**4.0100e-003**	**1.0000e-005**		**1.6000e-004**	**1.6000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**0.5847**	**0.5847**	**1.3000e-004**	**0.0000**	**0.5879**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	9.3300e-003	2.1800e-003	3.0000e-005	6.4000e-004	3.0000e-005	6.7000e-004	1.8000e-004	3.0000e-005	2.0000e-004	0.0000	2.8230	2.8230	1.3000e-004	0.0000	2.8261
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.8000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1139	0.1139	0.0000	0.0000	0.1140
Total	**3.3000e-004**	**9.3600e-003**	**2.5600e-003**	**3.0000e-005**	**7.8000e-004**	**3.0000e-005**	**8.1000e-004**	**2.2000e-004**	**3.0000e-005**	**2.4000e-004**	**0.0000**	**2.9368**	**2.9368**	**1.3000e-004**	**0.0000**	**2.9401**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.1000e-004	3.7800e-003	4.0100e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.5000e-004	1.5000e-004	0.0000	0.5847	0.5847	1.3000e-004	0.0000	0.5879

Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1000e-004**	**3.7800e-003**	**4.0100e-003**	**1.0000e-005**		**1.6000e-004**	**1.6000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**0.5847**	**0.5847**	**1.3000e-004**	**0.0000**	**0.5879**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	9.3300e-003	2.1800e-003	3.0000e-005	6.4000e-004	3.0000e-005	6.7000e-004	1.8000e-004	3.0000e-005	2.0000e-004	0.0000	2.8230	2.8230	1.3000e-004	0.0000	2.8261
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.8000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1139	0.1139	0.0000	0.0000	0.1140
Total	**3.3000e-004**	**9.3600e-003**	**2.5600e-003**	**3.0000e-005**	**7.8000e-004**	**3.0000e-005**	**8.1000e-004**	**2.2000e-004**	**3.0000e-005**	**2.4000e-004**	**0.0000**	**2.9368**	**2.9368**	**1.3000e-004**	**0.0000**	**2.9401**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0880	0.3446	1.1363	4.2500e-003	0.4124	3.2600e-003	0.4157	0.1104	3.0400e-003	0.1134	0.0000	389.5605	389.5605	0.0120	0.0000	389.8592

Unmitigated	0.0880	0.3446	1.1363	4.2500e-003	0.4124	3.2600e-003	0.4157	0.1104	3.0400e-003	0.1134	0.0000	389.5605	389.5605	0.0120	0.0000	389.8592

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	379.90	379.90	379.90	1,109,108	1,109,108
Parking Lot	0.00	0.00	0.00		
Total	379.90	379.90	379.90	1,109,108	1,109,108

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
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.612822	0.036208	0.182365	0.105071	0.013933	0.005011	0.012748	0.021514	0.002168	0.001529	0.005280	0.000629	0.000720
Parking Lot	0.612822	0.036208	0.182365	0.105071	0.013933	0.005011	0.012748	0.021514	0.002168	0.001529	0.005280	0.000629	0.000720

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	71.6885	71.6885	7.1700e-003	1.4800e-003	72.3098
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	71.6885	71.6885	7.1700e-003	1.4800e-003	72.3098
NaturalGas Mitigated	2.8400e-003	0.0259	0.0217	1.6000e-004		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	28.1384	28.1384	5.4000e-004	5.2000e-004	28.3056
NaturalGas Unmitigated	2.8400e-003	0.0259	0.0217	1.6000e-004		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	28.1384	28.1384	5.4000e-004	5.2000e-004	28.3056

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	527294	2.8400e-003	0.0259	0.0217	1.6000e-004		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	28.1384	28.1384	5.4000e-004	5.2000e-004	28.3056
Total		**2.8400e-003**	**0.0259**	**0.0217**	**1.6000e-004**		**1.9600e-003**	**1.9600e-003**		**1.9600e-003**	**1.9600e-003**	**0.0000**	**28.1384**	**28.1384**	**5.4000e-004**	**5.2000e-004**	**28.3056**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	527294	2.8400e-003	0.0259	0.0217	1.6000e-004		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	28.1384	28.1384	5.4000e-004	5.2000e-004	28.3056

Total		**2.8400e-003**	**0.0259**	**0.0217**	**1.6000e-004**		**1.9600e-003**	**1.9600e-003**		**1.9600e-003**	**1.9600e-003**	**0.0000**	**28.1384**	**28.1384**	**5.4000e-004**	**5.2000e-004**	**28.3056**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	8575	1.1280	1.1000e-004	2.0000e-005	1.1378
Unrefrigerated Warehouse-No Rail	536412	70.5606	7.0600e-003	1.4600e-003	71.1720
Total		**71.6885**	**7.1700e-003**	**1.4800e-003**	**72.3098**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	8575	1.1280	1.1000e-004	2.0000e-005	1.1378
Unrefrigerated Warehouse-No Rail	536412	70.5606	7.0600e-003	1.4600e-003	71.1720
Total		**71.6885**	**7.1700e-003**	**1.4800e-003**	**72.3098**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6750	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3600e-003	3.3600e-003	1.0000e-005	0.0000	3.5800e-003
Unmitigated	0.6750	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3600e-003	3.3600e-003	1.0000e-005	0.0000	3.5800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0798					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5951					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3600e-003	3.3600e-003	1.0000e-005	0.0000	3.5800e-003
Total	**0.6750**	**2.0000e-005**	**1.7300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.3600e-003**	**3.3600e-003**	**1.0000e-005**	**0.0000**	**3.5800e-003**

Mitigated

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

SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0798					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5951					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3600e-003	3.3600e-003	1.0000e-005	0.0000	3.5800e-003
Total	**0.6750**	**2.0000e-005**	**1.7300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.3600e-003**	**3.3600e-003**	**1.0000e-005**	**0.0000**	**3.5800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	37.4451	0.0453	0.0276	46.7888
Unmitigated	37.4451	0.0453	0.0276	46.7888

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			

Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	35.1407 / 0	37.4451	0.0453	0.0276	46.7888
Total		**37.4451**	**0.0453**	**0.0276**	**46.7888**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	35.1407 / 0	37.4451	0.0453	0.0276	46.7888
Total		**37.4451**	**0.0453**	**0.0276**	**46.7888**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	28.9952	1.7136	0.0000	71.8345
Unmitigated	28.9952	1.7136	0.0000	71.8345

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	142.84	28.9952	1.7136	0.0000	71.8345
Total		**28.9952**	**1.7136**	**0.0000**	**71.8345**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	142.84	28.9952	1.7136	0.0000	71.8345
Total		**28.9952**	**1.7136**	**0.0000**	**71.8345**

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

645 Horning Street, San Jose - Gas, Market, Fast Food - Santa Clara County, Annual

645 Horning Street, San Jose - Gas, Market, Fast Food

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	27.00	Space	0.00	10,800.00	0
Fast Food Restaurant with Drive Thru	2.49	1000sqft	0.06	2,494.00	0
Convenience Market With Gas Pumps	12.00	Pump	1.30	9,025.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2020 CO2 rate = 290

Land Use - From the Site Plan and Trip Generation Study

Construction Phase - Default Constrcution Schedule used

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - default construction equip & hours

Off-road Equipment - Default Constrcution Schedule equip&hours

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Demolition - Existing Land Use : Auto Repair (52,634 sf)

Grading -

Vehicle Trips - From the trip generation rate document, 3 mile customer trip length

Energy Use -

Water And Wastewater - WTP treatment 100% aerobic

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	2/7/2022	1/24/2022
tblConstructionPhase	PhaseEndDate	1/24/2022	2/7/2022
tblConstructionPhase	PhaseStartDate	1/25/2022	1/11/2022
tblConstructionPhase	PhaseStartDate	1/11/2022	1/25/2022
tblLandUse	LandUseSquareFeet	2,490.00	2,494.00
tblLandUse	LandUseSquareFeet	1,694.10	9,025.00
tblLandUse	LotAcreage	0.24	0.00
tblLandUse	LotAcreage	0.04	1.30
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblVehicleTrips	CC_TL	7.30	3.00
tblVehicleTrips	CC_TL	7.30	3.00
tblVehicleTrips	CC_TL	7.30	3.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2049	1.6396	1.4552	2.6900e-003	0.0535	0.0791	0.1326	0.0152	0.0759	0.0911	0.0000	226.3160	226.3160	0.0391	0.0000	227.2936
2022	0.0721	0.0798	0.0937	1.6000e-004	8.6000e-004	3.9200e-003	4.7800e-003	2.3000e-004	3.7200e-003	3.9600e-003	0.0000	13.5430	13.5430	2.9200e-003	0.0000	13.6161
Maximum	**0.2049**	**1.6396**	**1.4552**	**2.6900e-003**	**0.0535**	**0.0791**	**0.1326**	**0.0152**	**0.0759**	**0.0911**	**0.0000**	**226.3160**	**226.3160**	**0.0391**	**0.0000**	**227.2936**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2049	1.6396	1.4552	2.6900e-003	0.0535	0.0791	0.1326	0.0152	0.0759	0.0911	0.0000	226.3158	226.3158	0.0391	0.0000	227.2933
2022	0.0721	0.0798	0.0937	1.6000e-004	8.6000e-004	3.9200e-003	4.7800e-003	2.3000e-004	3.7200e-003	3.9600e-003	0.0000	13.5430	13.5430	2.9200e-003	0.0000	13.6161
Maximum	**0.2049**	**1.6396**	**1.4552**	**2.6900e-003**	**0.0535**	**0.0791**	**0.1326**	**0.0152**	**0.0759**	**0.0911**	**0.0000**	**226.3158**	**226.3158**	**0.0391**	**0.0000**	**227.2933**

	ROG	NOx	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2021	5-31-2021	0.6117	0.6117
2	6-1-2021	8-31-2021	0.5227	0.5227
3	9-1-2021	11-30-2021	0.5172	0.5172
4	12-1-2021	2-28-2022	0.3365	0.3365
		Highest	0.6117	0.6117

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0520	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
Energy	2.9100e-003	0.0265	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	52.7303	52.7303	2.9400e-003	1.0200e-003	53.1088
Mobile	1.0062	3.0437	6.0915	0.0123	0.8331	0.0122	0.8453	0.2230	0.0113	0.2343	0.0000	1,128.3119	1,128.3119	0.0624	0.0000	1,129.8707
Waste						0.0000	0.0000		0.0000	0.0000	5.8218	0.0000	5.8218	0.3441	0.0000	14.4232
Water						0.0000	0.0000		0.0000	0.0000	0.3118	0.6849	0.9967	1.1400e-003	6.9000e-004	1.2315
Total	**1.0611**	**3.0702**	**6.1141**	**0.0124**	**0.8331**	**0.0142**	**0.8474**	**0.2230**	**0.0133**	**0.2364**	**6.1336**	**1,181.7279**	**1,187.8615**	**0.4105**	**1.7100e-003**	**1,198.6351**

Mitigated Operational

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

Area	0.0520	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
Energy	2.9100e-003	0.0265	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	52.7303	52.7303	2.9400e-003	1.0200e-003	53.1088
Mobile	1.0062	3.0437	6.0915	0.0123	0.8331	0.0122	0.8453	0.2230	0.0113	0.2343	0.0000	1,128.3119	1,128.3119	0.0624	0.0000	1,129.8707
Waste						0.0000	0.0000		0.0000	0.0000	5.8218	0.0000	5.8218	0.3441	0.0000	14.4232
Water						0.0000	0.0000		0.0000	0.0000	0.3118	0.6849	0.9967	1.1400e-003	6.9000e-004	1.2315
Total	**1.0611**	**3.0702**	**6.1141**	**0.0124**	**0.8331**	**0.0142**	**0.8474**	**0.2230**	**0.0133**	**0.2364**	**6.1336**	**1,181.7279**	**1,187.8615**	**0.4105**	**1.7100e-003**	**1,198.6351**

	ROG	NOx	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	3/1/2021	3/26/2021	5	20	
2	Site Preparation	Site Preparation	3/27/2021	3/30/2021	5	2	
3	Grading	Grading	3/31/2021	4/5/2021	5	4	
4	Building Construction	Building Construction	4/6/2021	1/10/2022	5	200	
5	Architectural Coating	Architectural Coating	1/11/2022	1/24/2022	5	10	
6	Paving	Paving	1/25/2022	2/7/2022	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 17,279; Non-Residential Outdoor: 5,760; Striped Parking Area:

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	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	239.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	8.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0259	0.0000	0.0259	3.9200e-003	0.0000	3.9200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	**0.0199**	**0.1970**	**0.1449**	**2.4000e-004**	**0.0259**	**0.0104**	**0.0363**	**3.9200e-003**	**9.7100e-003**	**0.0136**	**0.0000**	**21.0713**	**21.0713**	**5.3900e-003**	**0.0000**	**21.2060**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.4000e-004	0.0320	6.9600e-003	9.0000e-005	2.0300e-003	1.0000e-004	2.1300e-003	5.6000e-004	1.0000e-004	6.5000e-004	0.0000	8.9987	8.9987	4.1000e-004	0.0000	9.0090
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.8000e-004	2.9700e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0400e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8535	0.8535	2.0000e-005	0.0000	0.8540
Total	**1.3400e-003**	**0.0322**	**9.9300e-003**	**1.0000e-004**	**3.0600e-003**	**1.1000e-004**	**3.1700e-003**	**8.3000e-004**	**1.1000e-004**	**9.3000e-004**	**0.0000**	**9.8522**	**9.8522**	**4.3000e-004**	**0.0000**	**9.8629**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0259	0.0000	0.0259	3.9200e-003	0.0000	3.9200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	**0.0199**	**0.1970**	**0.1449**	**2.4000e-004**	**0.0259**	**0.0104**	**0.0363**	**3.9200e-003**	**9.7100e-003**	**0.0136**	**0.0000**	**21.0713**	**21.0713**	**5.3900e-003**	**0.0000**	**21.2060**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.4000e-004	0.0320	6.9600e-003	9.0000e-005	2.0300e-003	1.0000e-004	2.1300e-003	5.6000e-004	1.0000e-004	6.5000e-004	0.0000	8.9987	8.9987	4.1000e-004	0.0000	9.0090
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.8000e-004	2.9700e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0400e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8535	0.8535	2.0000e-005	0.0000	0.8540
Total	**1.3400e-003**	**0.0322**	**9.9300e-003**	**1.0000e-004**	**3.0600e-003**	**1.1000e-004**	**3.1700e-003**	**8.3000e-004**	**1.1000e-004**	**9.3000e-004**	**0.0000**	**9.8522**	**9.8522**	**4.3000e-004**	**0.0000**	**9.8629**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

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

Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5600e-003	0.0174	7.5600e-003	2.0000e-005		7.7000e-004	7.7000e-004		7.0000e-004	7.0000e-004	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241
Total	**1.5600e-003**	**0.0174**	**7.5600e-003**	**2.0000e-005**	**5.8000e-003**	**7.7000e-004**	**6.5700e-003**	**2.9500e-003**	**7.0000e-004**	**3.6500e-003**	**0.0000**	**1.5118**	**1.5118**	**4.9000e-004**	**0.0000**	**1.5241**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0525	0.0525	0.0000	0.0000	0.0526
Total	**2.0000e-005**	**2.0000e-005**	**1.8000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0525**	**0.0525**	**0.0000**	**0.0000**	**0.0526**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5600e-003	0.0174	7.5600e-003	2.0000e-005		7.7000e-004	7.7000e-004		7.0000e-004	7.0000e-004	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241

Total	**1.5600e-003**	**0.0174**	**7.5600e-003**	**2.0000e-005**	**5.8000e-003**	**7.7000e-004**	**6.5700e-003**	**2.9500e-003**	**7.0000e-004**	**3.6500e-003**	**0.0000**	**1.5118**	**1.5118**	**4.9000e-004**	**0.0000**	**1.5241**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0525	0.0525	0.0000	0.0000	0.0526
Total	**2.0000e-005**	**2.0000e-005**	**1.8000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0525**	**0.0525**	**0.0000**	**0.0000**	**0.0526**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5800e-003	0.0287	0.0127	3.0000e-005		1.2800e-003	1.2800e-003		1.1700e-003	1.1700e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968
Total	**2.5800e-003**	**0.0287**	**0.0127**	**3.0000e-005**	**9.8300e-003**	**1.2800e-003**	**0.0111**	**5.0500e-003**	**1.1700e-003**	**6.2200e-003**	**0.0000**	**2.4767**	**2.4767**	**8.0000e-004**	**0.0000**	**2.4968**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.7000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1051	0.1051	0.0000	0.0000	0.1051
Total	**5.0000e-005**	**3.0000e-005**	**3.7000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1051**	**0.1051**	**0.0000**	**0.0000**	**0.1051**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5800e-003	0.0287	0.0127	3.0000e-005		1.2800e-003	1.2800e-003		1.1700e-003	1.1700e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968
Total	**2.5800e-003**	**0.0287**	**0.0127**	**3.0000e-005**	**9.8300e-003**	**1.2800e-003**	**0.0111**	**5.0500e-003**	**1.1700e-003**	**6.2200e-003**	**0.0000**	**2.4767**	**2.4767**	**8.0000e-004**	**0.0000**	**2.4968**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.7000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1051	0.1051	0.0000	0.0000	0.1051
Total	**5.0000e-005**	**3.0000e-005**	**3.7000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1051**	**0.1051**	**0.0000**	**0.0000**	**0.1051**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1758	1.3227	1.2512	2.1400e-003		0.0664	0.0664		0.0641	0.0641	0.0000	176.1012	176.1012	0.0314	0.0000	176.8872
Total	**0.1758**	**1.3227**	**1.2512**	**2.1400e-003**		**0.0664**	**0.0664**		**0.0641**	**0.0641**	**0.0000**	**176.1012**	**176.1012**	**0.0314**	**0.0000**	**176.8872**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2700e-003	0.0399	0.0106	1.0000e-004	2.5500e-003	9.0000e-005	2.6400e-003	7.4000e-004	8.0000e-005	8.2000e-004	0.0000	10.0503	10.0503	4.4000e-004	0.0000	10.0613
Worker	2.3900e-003	1.6600e-003	0.0178	6.0000e-005	6.1500e-003	4.0000e-005	6.1900e-003	1.6400e-003	4.0000e-005	1.6700e-003	0.0000	5.0948	5.0948	1.2000e-004	0.0000	5.0977

Total	**3.6600e-003**	**0.0415**	**0.0284**	**1.6000e-004**	**8.7000e-003**	**1.3000e-004**	**8.8300e-003**	**2.3800e-003**	**1.2000e-004**	**2.4900e-003**	**0.0000**	**15.1451**	**15.1451**	**5.6000e-004**	**0.0000**	**15.1590**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1758	1.3227	1.2512	2.1400e-003		0.0664	0.0664		0.0641	0.0641	0.0000	176.1010	176.1010	0.0314	0.0000	176.8870
Total	**0.1758**	**1.3227**	**1.2512**	**2.1400e-003**		**0.0664**	**0.0664**		**0.0641**	**0.0641**	**0.0000**	**176.1010**	**176.1010**	**0.0314**	**0.0000**	**176.8870**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2700e-003	0.0399	0.0106	1.0000e-004	2.5500e-003	9.0000e-005	2.6400e-003	7.4000e-004	8.0000e-005	8.2000e-004	0.0000	10.0503	10.0503	4.4000e-004	0.0000	10.0613
Worker	2.3900e-003	1.6600e-003	0.0178	6.0000e-005	6.1500e-003	4.0000e-005	6.1900e-003	1.6400e-003	4.0000e-005	1.6700e-003	0.0000	5.0948	5.0948	1.2000e-004	0.0000	5.0977
Total	**3.6600e-003**	**0.0415**	**0.0284**	**1.6000e-004**	**8.7000e-003**	**1.3000e-004**	**8.8300e-003**	**2.3800e-003**	**1.2000e-004**	**2.4900e-003**	**0.0000**	**15.1451**	**15.1451**	**5.6000e-004**	**0.0000**	**15.1590**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.9500e-003	0.0375	0.0382	7.0000e-005		1.7700e-003	1.7700e-003		1.7100e-003	1.7100e-003	0.0000	5.4473	5.4473	9.5000e-004	0.0000	5.4710
Total	**4.9500e-003**	**0.0375**	**0.0382**	**7.0000e-005**		**1.7700e-003**	**1.7700e-003**		**1.7100e-003**	**1.7100e-003**	**0.0000**	**5.4473**	**5.4473**	**9.5000e-004**	**0.0000**	**5.4710**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.1700e-003	3.1000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.3079	0.3079	1.0000e-005	0.0000	0.3082
Worker	7.0000e-005	5.0000e-005	5.0000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1519	0.1519	0.0000	0.0000	0.1519
Total	**1.1000e-004**	**1.2200e-003**	**8.1000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.7000e-004**	**7.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.4597**	**0.4597**	**1.0000e-005**	**0.0000**	**0.4601**

Mitigated Construction On-Site

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

Off-Road	4.9500e-003	0.0375	0.0382	7.0000e-005		1.7700e-003	1.7700e-003		1.7100e-003	1.7100e-003	0.0000	5.4473	5.4473	9.5000e-004	0.0000	5.4710
Total	**4.9500e-003**	**0.0375**	**0.0382**	**7.0000e-005**		**1.7700e-003**	**1.7700e-003**		**1.7100e-003**	**1.7100e-003**	**0.0000**	**5.4473**	**5.4473**	**9.5000e-004**	**0.0000**	**5.4710**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.1700e-003	3.1000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.3079	0.3079	1.0000e-005	0.0000	0.3082
Worker	7.0000e-005	5.0000e-005	5.0000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1519	0.1519	0.0000	0.0000	0.1519
Total	**1.1000e-004**	**1.2200e-003**	**8.1000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.7000e-004**	**7.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.4597**	**0.4597**	**1.0000e-005**	**0.0000**	**0.4601**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0623					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.0633**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.1000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0633	0.0633	0.0000	0.0000	0.0633
Total	**3.0000e-005**	**2.0000e-005**	**2.1000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0633**	**0.0633**	**0.0000**	**0.0000**	**0.0633**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0623					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.0633**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.1000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0633	0.0633	0.0000	0.0000	0.0633
Total	**3.0000e-005**	**2.0000e-005**	**2.1000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0633**	**0.0633**	**0.0000**	**0.0000**	**0.0633**

3.7 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4400e-003	0.0339	0.0440	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	5.8848	5.8848	1.8700e-003	0.0000	5.9315
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.4400e-003**	**0.0339**	**0.0440**	**7.0000e-005**		**1.7400e-003**	**1.7400e-003**		**1.6000e-003**	**1.6000e-003**	**0.0000**	**5.8848**	**5.8848**	**1.8700e-003**	**0.0000**	**5.9315**

Unmitigated Construction Off-Site

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

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.2000e-004	1.3700e-003	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4113	0.4113	1.0000e-005	0.0000	0.4115
Total	**1.9000e-004**	**1.2000e-004**	**1.3700e-003**	**0.0000**	**5.2000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4113**	**0.4113**	**1.0000e-005**	**0.0000**	**0.4115**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4400e-003	0.0339	0.0440	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	5.8848	5.8848	1.8700e-003	0.0000	5.9314
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.4400e-003**	**0.0339**	**0.0440**	**7.0000e-005**		**1.7400e-003**	**1.7400e-003**		**1.6000e-003**	**1.6000e-003**	**0.0000**	**5.8848**	**5.8848**	**1.8700e-003**	**0.0000**	**5.9314**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.2000e-004	1.3700e-003	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4113	0.4113	1.0000e-005	0.0000	0.4115
Total	**1.9000e-004**	**1.2000e-004**	**1.3700e-003**	**0.0000**	**5.2000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4113**	**0.4113**	**1.0000e-005**	**0.0000**	**0.4115**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0062	3.0437	6.0915	0.0123	0.8331	0.0122	0.8453	0.2230	0.0113	0.2343	0.0000	1,128.3119	1,128.3119	0.0624	0.0000	1,129.8707
Unmitigated	1.0062	3.0437	6.0915	0.0123	0.8331	0.0122	0.8453	0.2230	0.0113	0.2343	0.0000	1,128.3119	1,128.3119	0.0624	0.0000	1,129.8707

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	6,511.20	2,453.64	2002.56	1,558,535	1,558,535
Fast Food Restaurant with Drive Thru	1,235.34	1,797.85	1351.37	681,982	681,982
Parking Lot	0.00	0.00	0.00		
Total	7,746.54	4,251.49	3,353.93	2,240,518	2,240,518

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
Convenience Market With Gas Pumps	9.50	3.00	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive Thru	9.50	3.00	7.30	2.20	78.80	19.00	29	21	50
Parking Lot	9.50	3.00	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.612822	0.036208	0.182365	0.105071	0.013933	0.005011	0.012748	0.021514	0.002168	0.001529	0.005280	0.000629	0.000720
Fast Food Restaurant with Drive Thru	0.612822	0.036208	0.182365	0.105071	0.013933	0.005011	0.012748	0.021514	0.002168	0.001529	0.005280	0.000629	0.000720
Parking Lot	0.612822	0.036208	0.182365	0.105071	0.013933	0.005011	0.012748	0.021514	0.002168	0.001529	0.005280	0.000629	0.000720

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	23.9223	23.9223	2.3900e-003	4.9000e-004	24.1296
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	23.9223	23.9223	2.3900e-003	4.9000e-004	24.1296
NaturalGas Mitigated	2.9100e-003	0.0265	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	28.8080	28.8080	5.5000e-004	5.3000e-004	28.9792
NaturalGas Unmitigated	2.9100e-003	0.0265	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	28.8080	28.8080	5.5000e-004	5.3000e-004	28.9792

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

Convenience Market With Gas Pumps	21389.3	1.2000e-004	1.0500e-003	8.8000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1414	1.1414	2.0000e-005	2.0000e-005	1.1482
Fast Food Restaurant with Drive Thru	518453	2.8000e-003	0.0254	0.0214	1.5000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	27.6666	27.6666	5.3000e-004	5.1000e-004	27.8310
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.9200e-003**	**0.0265**	**0.0222**	**1.6000e-004**		**2.0100e-003**	**2.0100e-003**		**2.0100e-003**	**2.0100e-003**	**0.0000**	**28.8080**	**28.8080**	**5.5000e-004**	**5.3000e-004**	**28.9792**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Convenience Market With Gas Pumps	21389.3	1.2000e-004	1.0500e-003	8.8000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1414	1.1414	2.0000e-005	2.0000e-005	1.1482
Fast Food Restaurant with Drive Thru	518453	2.8000e-003	0.0254	0.0214	1.5000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	27.6666	27.6666	5.3000e-004	5.1000e-004	27.8310
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.9200e-003**	**0.0265**	**0.0222**	**1.6000e-004**		**2.0100e-003**	**2.0100e-003**		**2.0100e-003**	**2.0100e-003**	**0.0000**	**28.8080**	**28.8080**	**5.5000e-004**	**5.3000e-004**	**28.9792**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	96477.3	12.6908	1.2700e-003	2.6000e-004	12.8008
Fast Food Restaurant with Drive Thru	81603.7	10.7343	1.0700e-003	2.2000e-004	10.8273
Parking Lot	3780	0.4972	5.0000e-005	1.0000e-005	0.5015

Total		**23.9223**	**2.3900e-003**	**4.9000e-004**	**24.1296**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	96477.3	12.6908	1.2700e-003	2.6000e-004	12.8008
Fast Food Restaurant with Drive Thru	81603.7	10.7343	1.0700e-003	2.2000e-004	10.8273
Parking Lot	3780	0.4972	5.0000e-005	1.0000e-005	0.5015
Total		**23.9223**	**2.3900e-003**	**4.9000e-004**	**24.1296**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0520	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
Unmitigated	0.0520	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.2300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0457					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
Total	**0.0520**	**0.0000**	**3.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.4000e-004**	**7.4000e-004**	**0.0000**	**0.0000**	**7.9000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.2300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0457					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
Total	**0.0520**	**0.0000**	**3.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.4000e-004**	**7.4000e-004**	**0.0000**	**0.0000**	**7.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.9967	1.1400e-003	6.9000e-004	1.2315
Unmitigated	0.9967	1.1400e-003	6.9000e-004	1.2315

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.125486 / 0.0769109	0.1691	1.7000e-004	1.0000e-004	0.2028
Fast Food Restaurant with Drive Thru	0.755799 / 0.0482425	0.8276	9.8000e-004	5.9000e-004	1.0287
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.9967**	**1.1500e-003**	**6.9000e-004**	**1.2315**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.125486 / 0.0769109	0.1691	1.7000e-004	1.0000e-004	0.2028
Fast Food Restaurant with Drive Thru	0.755799 / 0.0482425	0.8276	9.8000e-004	5.9000e-004	1.0287
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.9967**	**1.1500e-003**	**6.9000e-004**	**1.2315**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	5.8218	0.3441	0.0000	14.4232
Unmitigated	5.8218	0.3441	0.0000	14.4232

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Fast Food Restaurant with Drive Thru	28.68	5.8218	0.3441	0.0000	14.4232
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**5.8218**	**0.3441**	**0.0000**	**14.4232**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	28.68	5.8218	0.3441	0.0000	14.4232
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**5.8218**	**0.3441**	**0.0000**	**14.4232**

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

645 Horning Street, San Jose - Existing

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	52.63	1000sqft	1.21	52,634.00	0
Parking Lot	2.05	Acre	2.05	89,298.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Existing land uses

Construction Phase - Existing land uses- no construction

Off-road Equipment - Existing land uses- no construction

Demolition -

Trips and VMT -

Vehicle Trips - Trip Generation Study warehouse - 20.00, 3.79, 1.95

Energy Use - Historical energy use

Water And Wastewater -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	PhaseEndDate	4/2/2021	3/1/2021
tblConstructionPhase	PhaseStartDate	3/27/2021	3/1/2021
tblEnergyUse	LightingElect	3.80	3.08
tblEnergyUse	LightingElect	0.88	0.35
tblEnergyUse	T24E	1.93	1.48
tblEnergyUse	T24NG	22.58	19.71
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	0.00	18.00
tblVehicleTrips	ST_TR	1.32	3.79
tblVehicleTrips	SU_TR	0.68	1.95
tblVehicleTrips	WD_TR	6.97	20.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2407	0.0000	5.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.8000e-004	9.8000e-004	0.0000	0.0000	1.0400e-003
Energy	7.4900e-003	0.0681	0.0572	4.1000e-004		5.1700e-003	5.1700e-003		5.1700e-003	5.1700e-003	0.0000	209.6628	209.6628	7.5500e-003	2.6300e-003	210.6343

Mobile	0.1842	0.7213	2.3781	8.9000e-003	0.8631	6.8200e-003	0.8700	0.2310	6.3600e-003	0.2374	0.0000	815.3028	815.3028	0.0250	0.0000	815.9281
Waste						0.0000	0.0000		0.0000	0.0000	13.2472	0.0000	13.2472	0.7829	0.0000	32.8194
Water						0.0000	0.0000		0.0000	0.0000	3.8612	19.1582	23.0193	0.3975	9.5400e-003	35.7995
Total	**0.4324**	**0.7893**	**2.4357**	**9.3100e-003**	**0.8631**	**0.0120**	**0.8751**	**0.2310**	**0.0115**	**0.2426**	**17.1084**	**1,044.1248**	**1,061.2332**	**1.2129**	**0.0122**	**1,095.1823**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2407	0.0000	5.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.8000e-004	9.8000e-004	0.0000	0.0000	1.0400e-003
Energy	7.4900e-003	0.0681	0.0572	4.1000e-004		5.1700e-003	5.1700e-003		5.1700e-003	5.1700e-003	0.0000	209.6628	209.6628	7.5500e-003	2.6300e-003	210.6343
Mobile	0.1842	0.7213	2.3781	8.9000e-003	0.8631	6.8200e-003	0.8700	0.2310	6.3600e-003	0.2374	0.0000	815.3028	815.3028	0.0250	0.0000	815.9281
Waste						0.0000	0.0000		0.0000	0.0000	13.2472	0.0000	13.2472	0.7829	0.0000	32.8194
Water						0.0000	0.0000		0.0000	0.0000	3.8612	19.1582	23.0193	0.3975	9.5400e-003	35.7995
Total	**0.4324**	**0.7893**	**2.4357**	**9.3100e-003**	**0.8631**	**0.0120**	**0.8751**	**0.2310**	**0.0115**	**0.2426**	**17.1084**	**1,044.1248**	**1,061.2332**	**1.2129**	**0.0122**	**1,095.1823**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1842	0.7213	2.3781	8.9000e-003	0.8631	6.8200e-003	0.8700	0.2310	6.3600e-003	0.2374	0.0000	815.3028	815.3028	0.0250	0.0000	815.9281
Unmitigated	0.1842	0.7213	2.3781	8.9000e-003	0.8631	6.8200e-003	0.8700	0.2310	6.3600e-003	0.2374	0.0000	815.3028	815.3028	0.0250	0.0000	815.9281

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	1,052.68	199.48	102.64	2,321,228	2,321,228
Parking Lot	0.00	0.00	0.00		
Total	1,052.68	199.48	102.64	2,321,228	2,321,228

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.612822	0.036208	0.182365	0.105071	0.013933	0.005011	0.012748	0.021514	0.002168	0.001529	0.005280	0.000629	0.000720
Parking Lot	0.612822	0.036208	0.182365	0.105071	0.013933	0.005011	0.012748	0.021514	0.002168	0.001529	0.005280	0.000629	0.000720

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	135.5680	135.5680	6.1300e-003	1.2700e-003	136.0992
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	135.5680	135.5680	6.1300e-003	1.2700e-003	136.0992
NaturalGas Mitigated	7.4900e-003	0.0681	0.0572	4.1000e-004		5.1700e-003	5.1700e-003		5.1700e-003	5.1700e-003	0.0000	74.0948	74.0948	1.4200e-003	1.3600e-003	74.5352
NaturalGas Unmitigated	7.4900e-003	0.0681	0.0572	4.1000e-004		5.1700e-003	5.1700e-003		5.1700e-003	5.1700e-003	0.0000	74.0948	74.0948	1.4200e-003	1.3600e-003	74.5352

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.38848e+006	7.4900e-003	0.0681	0.0572	4.1000e-004		5.1700e-003	5.1700e-003		5.1700e-003	5.1700e-003	0.0000	74.0948	74.0948	1.4200e-003	1.3600e-003	74.5352
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**7.4900e-003**	**0.0681**	**0.0572**	**4.1000e-004**		**5.1700e-003**	**5.1700e-003**		**5.1700e-003**	**5.1700e-003**	**0.0000**	**74.0948**	**74.0948**	**1.4200e-003**	**1.3600e-003**	**74.5352**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.38848e+006	7.4900e-003	0.0681	0.0572	4.1000e-004		5.1700e-003	5.1700e-003		5.1700e-003	5.1700e-003	0.0000	74.0948	74.0948	1.4200e-003	1.3600e-003	74.5352
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**7.4900e-003**	**0.0681**	**0.0572**	**4.1000e-004**		**5.1700e-003**	**5.1700e-003**		**5.1700e-003**	**5.1700e-003**	**0.0000**	**74.0948**	**74.0948**	**1.4200e-003**	**1.3600e-003**	**74.5352**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	434757	126.4758	5.7200e-003	1.1800e-003	126.9713
Parking Lot	31254.3	9.0922	4.1000e-004	9.0000e-005	9.1279
Total		**135.5680**	**6.1300e-003**	**1.2700e-003**	**136.0992**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	434757	126.4758	5.7200e-003	1.1800e-003	126.9713

Parking Lot	31254.3	9.0922	4.1000e-004	9.0000e-005	9.1279
Total		**135.5680**	**6.1300e-003**	**1.2700e-003**	**136.0992**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2407	0.0000	5.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.8000e-004	9.8000e-004	0.0000	0.0000	1.0400e-003
Unmitigated	0.2407	0.0000	5.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.8000e-004	9.8000e-004	0.0000	0.0000	1.0400e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0293					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2113					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	0.0000	5.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.8000e-004	9.8000e-004	0.0000	0.0000	1.0400e-003

Total	**0.2407**	**0.0000**	**5.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**9.8000e-004**	**9.8000e-004**	**0.0000**	**0.0000**	**1.0400e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0293					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2113					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	0.0000	5.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.8000e-004	9.8000e-004	0.0000	0.0000	1.0400e-003
Total	**0.2407**	**0.0000**	**5.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**9.8000e-004**	**9.8000e-004**	**0.0000**	**0.0000**	**1.0400e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	23.0193	0.3975	9.5400e-003	35.7995
Unmitigated	23.0193	0.3975	9.5400e-003	35.7995

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	12.1707 / 0	23.0193	0.3975	9.5400e-003	35.7995
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**23.0193**	**0.3975**	**9.5400e-003**	**35.7995**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	12.1707 / 0	23.0193	0.3975	9.5400e-003	35.7995
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**23.0193**	**0.3975**	**9.5400e-003**	**35.7995**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	13.2472	0.7829	0.0000	32.8194
Unmitigated	13.2472	0.7829	0.0000	32.8194

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	65.26	13.2472	0.7829	0.0000	32.8194
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**13.2472**	**0.7829**	**0.0000**	**32.8194**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	65.26	13.2472	0.7829	0.0000	32.8194

Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**13.2472**	**0.7829**	**0.0000**	**32.8194**

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

645 Horning Street, San Jose - Storage - Santa Clara County, Annual

645 Horning Street, San Jose - Storage - Construction

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	151.96	1000sqft	1.90	151,958.00	0
Parking Lot	36.00	Space	0.00	24,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2020 CO2 rate = 290

Land Use - From the Site Plan and Trip Generation Study

Construction Phase - Provided construction schedule

Off-road Equipment -

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Off-road Equipment - Provided construction equip & hours

Trips and VMT - 1 mile nearby TACs, building const = 250 total cement truck round trips, paving = 38 total concrete truck round trips

Demolition - existing demo already accounted

Grading -

Vehicle Trips - Trip Generation Study warehouse - 2.50

Energy Use -

Water And Wastewater - WTP treatment 100% aerobic

Construction Off-road Equipment Mitigation - BMPs, Tier 3 DPF 3 mitigation electric cranes

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	300.00
tblConstructionPhase	NumDays	200.00	180.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	4.00	3.00
tblConstructionPhase	NumDays	10.00	2.00
tblConstructionPhase	NumDays	2.00	1.00
tblLandUse	LandUseSquareFeet	151,960.00	151,958.00
tblLandUse	LandUseSquareFeet	14,400.00	24,500.00
tblLandUse	LotAcreage	3.49	1.90
tblLandUse	LotAcreage	0.32	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	6.00	0.10
tblOffRoadEquipment	UsageHours	6.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	2.70
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290

tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	500.00
tblTripsAndVMT	HaulingTripNumber	0.00	76.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblVehicleTrips	ST_TR	1.68	2.50
tblVehicleTrips	SU_TR	1.68	2.50
tblVehicleTrips	WD_TR	1.68	2.50
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.3883	0.2318	0.1349	3.8000e-004	8.6400e-003	2.1000e-003	0.0107	2.3300e-003	1.9400e-003	4.2700e-003	0.0000	35.5685	35.5685	4.2600e-003	0.0000	35.6751
2022	0.4276	0.0169	0.0286	5.0000e-005	9.4000e-004	3.4000e-004	1.2800e-003	2.5000e-004	3.2000e-004	5.7000e-004	0.0000	4.3512	4.3512	9.7000e-004	0.0000	4.3755
Maximum	**0.4276**	**0.2318**	**0.1349**	**3.8000e-004**	**8.6400e-003**	**2.1000e-003**	**0.0107**	**2.3300e-003**	**1.9400e-003**	**4.2700e-003**	**0.0000**	**35.5685**	**35.5685**	**4.2600e-003**	**0.0000**	**35.6751**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.3863	0.2255	0.1364	3.8000e-004	8.4900e-003	5.6000e-004	9.0500e-003	2.3100e-003	5.5000e-004	2.8500e-003	0.0000	34.9983	34.9983	4.0800e-003	0.0000	35.1003
2022	0.4273	0.0209	0.0302	5.0000e-005	9.4000e-004	1.9000e-004	1.1200e-003	2.5000e-004	1.8000e-004	4.4000e-004	0.0000	4.3512	4.3512	9.7000e-004	0.0000	4.3755
Maximum	**0.4273**	**0.2255**	**0.1364**	**3.8000e-004**	**8.4900e-003**	**5.6000e-004**	**9.0500e-003**	**2.3100e-003**	**5.5000e-004**	**2.8500e-003**	**0.0000**	**34.9983**	**34.9983**	**4.0800e-003**	**0.0000**	**35.1003**

	ROG	NOx	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	**0.29**	**0.90**	**-1.82**	**0.00**	**1.57**	**69.26**	**15.39**	**0.78**	**67.70**	**32.02**	**0.00**	**1.43**	**1.43**	**3.44**	**0.00**	**1.44**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2021	5-31-2021	0.0465	0.0428
2	6-1-2021	8-31-2021	0.2259	0.2239
3	9-1-2021	11-30-2021	0.2590	0.2575
4	12-1-2021	2-28-2022	0.2051	0.2046
5	3-1-2022	5-31-2022	0.1793	0.1819
6	6-1-2022	8-31-2022	0.1423	0.1443
		Highest	0.2590	0.2575

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	3/1/2021	3/1/2021	5	1	
2	Site Preparation	Site Preparation	3/2/2021	3/2/2021	5	1	
3	Grading	Grading	3/3/2021	3/5/2021	5	3	
4	Trenching	Trenching	3/7/2021	3/9/2021	5	2	
5	Building Construction	Building Construction	4/20/2021	12/27/2021	5	180	
6	Architectural Coating	Architectural Coating	6/20/2021	8/12/2022	5	300	
7	Paving	Paving	2/1/2022	2/2/2022	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.51

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 227,937; Non-Residential Outdoor: 75,979; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

Demolition	Concrete/Industrial Saws	1	2.00	81	0.73
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Graders	0	0.00	187	0.41
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	2.70	187	0.41
Grading	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Tractors/Loaders/Backhoes	1	2.00	97	0.37
Building Construction	Cranes	1	0.10	231	0.29
Building Construction	Forklifts	1	1.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Architectural Coating	Aerial Lifts	2	0.80	63	0.31
Architectural Coating	Air Compressors	0	0.00	78	0.48
Paving	Cement and Mortar Mixers	6	8.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	0	0.00	132	0.36
Paving	Rollers	0	0.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	0.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	1	3.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	1	3.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Trenching	1	3.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT

Building Construction	2	74.00	29.00	500.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	15.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	76.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0000e-005	3.8000e-004	4.6000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**5.0000e-005**	**3.8000e-004**	**4.6000e-004**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

Unmitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.1800e-003	1.1800e-003	0.0000	0.0000	1.1800e-003
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.1800e-003**	**1.1800e-003**	**0.0000**	**0.0000**	**1.1800e-003**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0000e-005	3.6000e-004	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**2.0000e-005**	**3.6000e-004**	**4.8000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

Mitigated Construction Off-Site

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

Worker	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.1800e-003	1.1800e-003	0.0000	0.0000	1.1800e-003
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.1800e-003**	**1.1800e-003**	**0.0000**	**0.0000**	**1.1800e-003**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-005	9.5000e-004	1.1300e-003	0.0000		6.0000e-005	6.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.1365	0.1365	4.0000e-005	0.0000	0.1376
Total	**9.0000e-005**	**9.5000e-004**	**1.1300e-003**	**0.0000**	**0.0000**	**6.0000e-005**	**6.0000e-005**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.1365**	**0.1365**	**4.0000e-005**	**0.0000**	**0.1376**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.1800e-003	1.1800e-003	0.0000	0.0000	1.1800e-003
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.1800e-003**	**1.1800e-003**	**0.0000**	**0.0000**	**1.1800e-003**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0000e-005	8.7000e-004	1.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1365	0.1365	4.0000e-005	0.0000	0.1376
Total	**4.0000e-005**	**8.7000e-004**	**1.1700e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.1365**	**0.1365**	**4.0000e-005**	**0.0000**	**0.1376**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.1800e-003	1.1800e-003	0.0000	0.0000	1.1800e-003
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.1800e-003**	**1.1800e-003**	**0.0000**	**0.0000**	**1.1800e-003**

3.4 Grading - 2021

Unmitigated Construction On-Site

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

Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9000e-004	8.6900e-003	7.6800e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.0000e-004	4.0000e-004	0.0000	1.1136	1.1136	3.6000e-004	0.0000	1.1226
Total	**7.9000e-004**	**8.6900e-003**	**7.6800e-003**	**1.0000e-005**	**2.7000e-004**	**4.3000e-004**	**7.0000e-004**	**3.0000e-005**	**4.0000e-004**	**4.3000e-004**	**0.0000**	**1.1136**	**1.1136**	**3.6000e-004**	**0.0000**	**1.1226**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	9.4300e-003	9.4300e-003	0.0000	0.0000	9.4400e-003
Total	**1.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**9.4300e-003**	**9.4300e-003**	**0.0000**	**0.0000**	**9.4400e-003**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2000e-004	0.0000	1.2000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1000e-004	6.7900e-003	8.8100e-003	1.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	1.1136	1.1136	3.6000e-004	0.0000	1.1226

Total	**3.1000e-004**	**6.7900e-003**	**8.8100e-003**	**1.0000e-005**	**1.2000e-004**	**6.0000e-005**	**1.8000e-004**	**1.0000e-005**	**6.0000e-005**	**7.0000e-005**	**0.0000**	**1.1136**	**1.1136**	**3.6000e-004**	**0.0000**	**1.1226**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	9.4300e-003	9.4300e-003	0.0000	0.0000	9.4400e-003
Total	**1.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**9.4300e-003**	**9.4300e-003**	**0.0000**	**0.0000**	**9.4400e-003**

3.5 Trenching - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.0000e-005	4.7000e-004	5.7000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0682	0.0682	2.0000e-005	0.0000	0.0688
Total	**5.0000e-005**	**4.7000e-004**	**5.7000e-004**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0682**	**0.0682**	**2.0000e-005**	**0.0000**	**0.0688**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.3600e-003	2.3600e-003	0.0000	0.0000	2.3600e-003
Total	**0.0000**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.3600e-003**	**2.3600e-003**	**0.0000**	**0.0000**	**2.3600e-003**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.0000e-005	4.3000e-004	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0682	0.0682	2.0000e-005	0.0000	0.0688
Total	**2.0000e-005**	**4.3000e-004**	**5.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0682**	**0.0682**	**2.0000e-005**	**0.0000**	**0.0688**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.3600e-003	2.3600e-003	0.0000	0.0000	2.3600e-003
Total	**0.0000**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.3600e-003**	**2.3600e-003**	**0.0000**	**0.0000**	**2.3600e-003**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.9200e-003	0.0187	0.0154	2.0000e-005		1.1600e-003	1.1600e-003		1.0700e-003	1.0700e-003	0.0000	2.0810	2.0810	6.7000e-004	0.0000	2.0978
Total	**1.9200e-003**	**0.0187**	**0.0154**	**2.0000e-005**		**1.1600e-003**	**1.1600e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**2.0810**	**2.0810**	**6.7000e-004**	**0.0000**	**2.0978**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.1000e-004	0.0248	4.0600e-003	3.0000e-005	2.2000e-004	2.0000e-005	2.4000e-004	6.0000e-005	2.0000e-005	8.0000e-005	0.0000	3.2128	3.2128	3.3000e-004	0.0000	3.2210
Vendor	4.4000e-003	0.1659	0.0447	2.2000e-004	2.4100e-003	1.4000e-004	2.5500e-003	7.0000e-004	1.3000e-004	8.4000e-004	0.0000	20.7527	20.7527	1.9300e-003	0.0000	20.8008
Worker	6.7400e-003	2.9800e-003	0.0394	6.0000e-005	4.9500e-003	7.0000e-005	5.0200e-003	1.3200e-003	6.0000e-005	1.3900e-003	0.0000	5.2321	5.2321	2.1000e-004	0.0000	5.2372

Total	**0.0117**	**0.1937**	**0.0881**	**3.1000e-004**	**7.5800e-003**	**2.3000e-004**	**7.8100e-003**	**2.0800e-003**	**2.1000e-004**	**2.3100e-003**	**0.0000**	**29.1976**	**29.1976**	**2.4700e-003**	**0.0000**	**29.2591**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.2000e-004	9.6800e-003	0.0131	2.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.5108	1.5108	4.9000e-004	0.0000	1.5230
Total	**4.2000e-004**	**9.6800e-003**	**0.0131**	**2.0000e-005**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**	**0.0000**	**1.5108**	**1.5108**	**4.9000e-004**	**0.0000**	**1.5230**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.1000e-004	0.0248	4.0600e-003	3.0000e-005	2.2000e-004	2.0000e-005	2.4000e-004	6.0000e-005	2.0000e-005	8.0000e-005	0.0000	3.2128	3.2128	3.3000e-004	0.0000	3.2210
Vendor	4.4000e-003	0.1659	0.0447	2.2000e-004	2.4100e-003	1.4000e-004	2.5500e-003	7.0000e-004	1.3000e-004	8.4000e-004	0.0000	20.7527	20.7527	1.9300e-003	0.0000	20.8008
Worker	6.7400e-003	2.9800e-003	0.0394	6.0000e-005	4.9500e-003	7.0000e-005	5.0200e-003	1.3200e-003	6.0000e-005	1.3900e-003	0.0000	5.2321	5.2321	2.1000e-004	0.0000	5.2372
Total	**0.0117**	**0.1937**	**0.0881**	**3.1000e-004**	**7.5800e-003**	**2.3000e-004**	**7.8100e-003**	**2.0800e-003**	**2.1000e-004**	**2.3100e-003**	**0.0000**	**29.1976**	**29.1976**	**2.4700e-003**	**0.0000**	**29.2591**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-004	8.4100e-003	0.0153	2.0000e-005		1.6000e-004	1.6000e-004		1.5000e-004	1.5000e-004	0.0000	2.0654	2.0654	6.7000e-004	0.0000	2.0821
Total	**0.3727**	**8.4100e-003**	**0.0153**	**2.0000e-005**		**1.6000e-004**	**1.6000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**2.0654**	**2.0654**	**6.7000e-004**	**0.0000**	**2.0821**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	4.7000e-004	6.2000e-003	1.0000e-005	7.8000e-004	1.0000e-005	7.9000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.8249	0.8249	3.0000e-005	0.0000	0.8257
Total	**1.0600e-003**	**4.7000e-004**	**6.2000e-003**	**1.0000e-005**	**7.8000e-004**	**1.0000e-005**	**7.9000e-004**	**2.1000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.8249**	**0.8249**	**3.0000e-005**	**0.0000**	**0.8257**

Mitigated Construction On-Site

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

Archit. Coating	0.3722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.8000e-004	0.0132	0.0178	2.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	2.0654	2.0654	6.7000e-004	0.0000	2.0821
Total	**0.3727**	**0.0132**	**0.0178**	**2.0000e-005**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**	**0.0000**	**2.0654**	**2.0654**	**6.7000e-004**	**0.0000**	**2.0821**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	4.7000e-004	6.2000e-003	1.0000e-005	7.8000e-004	1.0000e-005	7.9000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.8249	0.8249	3.0000e-005	0.0000	0.8257
Total	**1.0600e-003**	**4.7000e-004**	**6.2000e-003**	**1.0000e-005**	**7.8000e-004**	**1.0000e-005**	**7.9000e-004**	**2.1000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.8249**	**0.8249**	**3.0000e-005**	**0.0000**	**0.8257**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4253					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.8000e-004	8.9600e-003	0.0175	3.0000e-005		1.7000e-004	1.7000e-004		1.5000e-004	1.5000e-004	0.0000	2.3604	2.3604	7.6000e-004	0.0000	2.3795
Total	**0.4259**	**8.9600e-003**	**0.0175**	**3.0000e-005**		**1.7000e-004**	**1.7000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**2.3604**	**2.3604**	**7.6000e-004**	**0.0000**	**2.3795**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1100e-003	4.7000e-004	6.4200e-003	1.0000e-005	8.9000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.9091	0.9091	3.0000e-005	0.0000	0.9099
Total	**1.1100e-003**	**4.7000e-004**	**6.4200e-003**	**1.0000e-005**	**8.9000e-004**	**1.0000e-005**	**9.0000e-004**	**2.4000e-004**	**1.0000e-005**	**2.5000e-004**	**0.0000**	**0.9091**	**0.9091**	**3.0000e-005**	**0.0000**	**0.9099**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4253					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	0.0151	0.0204	3.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.3604	2.3604	7.6000e-004	0.0000	2.3795
Total	**0.4260**	**0.0151**	**0.0204**	**3.0000e-005**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**	**0.0000**	**2.3604**	**2.3604**	**7.6000e-004**	**0.0000**	**2.3795**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1100e-003	4.7000e-004	6.4200e-003	1.0000e-005	8.9000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.9091	0.9091	3.0000e-005	0.0000	0.9099
Total	**1.1100e-003**	**4.7000e-004**	**6.4200e-003**	**1.0000e-005**	**8.9000e-004**	**1.0000e-005**	**9.0000e-004**	**2.4000e-004**	**1.0000e-005**	**2.5000e-004**	**0.0000**	**0.9091**	**0.9091**	**3.0000e-005**	**0.0000**	**0.9099**

3.8 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.1000e-004	3.7800e-003	4.0100e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.5000e-004	1.5000e-004	0.0000	0.5847	0.5847	1.3000e-004	0.0000	0.5879
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1000e-004**	**3.7800e-003**	**4.0100e-003**	**1.0000e-005**		**1.6000e-004**	**1.6000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**0.5847**	**0.5847**	**1.3000e-004**	**0.0000**	**0.5879**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	3.6200e-003	6.0000e-004	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.4833	0.4833	5.0000e-005	0.0000	0.4845

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0136	0.0136	0.0000	0.0000	0.0137
Total	**9.0000e-005**	**3.6300e-003**	**7.0000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**5.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.4969**	**0.4969**	**5.0000e-005**	**0.0000**	**0.4981**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.0000e-005	1.6800e-003	2.6700e-003	1.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.5847	0.5847	1.3000e-004	0.0000	0.5879
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.0000e-005**	**1.6800e-003**	**2.6700e-003**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.5847**	**0.5847**	**1.3000e-004**	**0.0000**	**0.5879**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	3.6200e-003	6.0000e-004	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.4833	0.4833	5.0000e-005	0.0000	0.4845
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0136	0.0136	0.0000	0.0000	0.0137
Total	**9.0000e-005**	**3.6300e-003**	**7.0000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**5.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.4969**	**0.4969**	**5.0000e-005**	**0.0000**	**0.4981**

645 Horning Street, San Jose - Gas, Market, Fast Food - Santa Clara County, Annual

645 Horning Street, San Jose - Gas, Market, Fast Food - Construction

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	27.00	Space	0.00	10,800.00	0
Fast Food Restaurant with Drive Thru	2.49	1000sqft	0.06	2,494.00	0
Convenience Market With Gas Pumps	12.00	Pump	1.30	9,025.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2020 CO2 rate = 290

Land Use - From the Site Plan and Trip Generation Study

Construction Phase - Default Constrcution Schedule used

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - default construction equip & hours

Off-road Equipment - Default Constrcution Schedule equip&hours

Off-road Equipment -

Off-road Equipment -

Trips and VMT - 1 mile nearby TACs

Demolition - Existing Land Use : Auto Repair (52,634 sf)

Grading -

Vehicle Trips - From the trip generation rate document, 3 mile customer trip length

Energy Use -

Water And Wastewater - WTP treatment 100% aerobic

Construction Off-road Equipment Mitigation - BMPs, Tier 3 DPF 3 Mitigation, Electric cranes

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblLandUse	LandUseSquareFeet	2,490.00	2,494.00
tblLandUse	LandUseSquareFeet	1,694.10	9,025.00
tblLandUse	LotAcreage	0.24	0.00
tblLandUse	LotAcreage	0.04	1.30
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00

tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblVehicleTrips	CC_TL	7.30	3.00
tblVehicleTrips	CC_TL	7.30	3.00
tblVehicleTrips	CC_TL	7.30	3.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2017	1.6027	1.4305	2.4800e-003	0.0427	0.0789	0.1216	0.0123	0.0757	0.0880	0.0000	206.5125	206.5125	0.0386	0.0000	207.4772
2022	0.0718	0.0792	0.0920	1.5000e-004	8.0000e-005	3.9100e-003	4.0000e-003	2.0000e-005	3.7200e-003	3.7400e-003	0.0000	12.7783	12.7783	2.9100e-003	0.0000	12.8510
Maximum	**0.2017**	**1.6027**	**1.4305**	**2.4800e-003**	**0.0427**	**0.0789**	**0.1216**	**0.0123**	**0.0757**	**0.0880**	**0.0000**	**206.5125**	**206.5125**	**0.0386**	**0.0000**	**207.4772**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0604	1.1522	1.2782	2.4800e-003	0.0198	0.0108	0.0306	3.0000e-003	0.0108	0.0138	0.0000	169.6369	169.6369	0.0267	0.0000	170.3034
2022	0.0659	0.0708	0.0927	1.5000e-004	8.0000e-005	6.6000e-004	7.4000e-004	2.0000e-005	6.6000e-004	6.8000e-004	0.0000	11.6376	11.6376	2.5400e-003	0.0000	11.7011
Maximum	**0.0659**	**1.1522**	**1.2782**	**2.4800e-003**	**0.0198**	**0.0108**	**0.0306**	**3.0000e-003**	**0.0108**	**0.0138**	**0.0000**	**169.6369**	**169.6369**	**0.0267**	**0.0000**	**170.3034**

	ROG	NOx	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	**53.81**	**27.28**	**9.96**	**0.00**	**53.43**	**86.18**	**75.02**	**75.39**	**85.61**	**84.23**	**0.00**	**17.34**	**17.34**	**29.64**	**0.00**	**17.39**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2021	5-31-2021	0.5877	0.3736
2	6-1-2021	8-31-2021	0.5166	0.3559
3	9-1-2021	11-30-2021	0.5109	0.3519
4	12-1-2021	2-28-2022	0.3333	0.2628

		Highest	0.5877	0.3736

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	3/1/2021	3/26/2021	5	20	
2	Site Preparation	Site Preparation	3/27/2021	3/30/2021	5	2	
3	Grading	Grading	3/31/2021	4/5/2021	5	4	
4	Building Construction	Building Construction	4/6/2021	1/10/2022	5	200	
5	Architectural Coating	Architectural Coating	1/11/2022	1/24/2022	5	10	
6	Paving	Paving	1/25/2022	2/7/2022	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 17,279; Non-Residential Outdoor: 5,760; Striped Parking Area:

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	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29

Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	239.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	8.00	4.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0259	0.0000	0.0259	3.9200e-003	0.0000	3.9200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104		9.7100e-003	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	**0.0199**	**0.1970**	**0.1449**	**2.4000e-004**	**0.0259**	**0.0104**	**0.0363**	**3.9200e-003**	**9.7100e-003**	**0.0136**	**0.0000**	**21.0713**	**21.0713**	**5.3900e-003**	**0.0000**	**21.2060**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4000e-004	0.0119	1.9400e-003	2.0000e-005	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	1.5357	1.5357	1.6000e-004	0.0000	1.5397
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	6.0000e-005	7.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1021	0.1021	0.0000	0.0000	0.1022
Total	**3.7000e-004**	**0.0119**	**2.7100e-003**	**2.0000e-005**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**6.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**1.6379**	**1.6379**	**1.6000e-004**	**0.0000**	**1.6419**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0117	0.0000	0.0117	8.8000e-004	0.0000	8.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6200e-003	0.1210	0.1542	2.4000e-004		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	**5.6200e-003**	**0.1210**	**0.1542**	**2.4000e-004**	**0.0117**	**1.0800e-003**	**0.0127**	**8.8000e-004**	**1.0800e-003**	**1.9600e-003**	**0.0000**	**21.0713**	**21.0713**	**5.3900e-003**	**0.0000**	**21.2060**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4000e-004	0.0119	1.9400e-003	2.0000e-005	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	1.5357	1.5357	1.6000e-004	0.0000	1.5397
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	6.0000e-005	7.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1021	0.1021	0.0000	0.0000	0.1022
Total	**3.7000e-004**	**0.0119**	**2.7100e-003**	**2.0000e-005**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**6.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**1.6379**	**1.6379**	**1.6000e-004**	**0.0000**	**1.6419**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	1.5600e-003	0.0174	7.5600e-003	2.0000e-005		7.7000e-004	7.7000e-004		7.0000e-004	7.0000e-004	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241
Total	**1.5600e-003**	**0.0174**	**7.5600e-003**	**2.0000e-005**	**5.8000e-003**	**7.7000e-004**	**6.5700e-003**	**2.9500e-003**	**7.0000e-004**	**3.6500e-003**	**0.0000**	**1.5118**	**1.5118**	**4.9000e-004**	**0.0000**	**1.5241**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	6.2800e-003	6.2800e-003	0.0000	0.0000	6.2900e-003
Total	**1.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**6.2800e-003**	**6.2800e-003**	**0.0000**	**0.0000**	**6.2900e-003**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6100e-003	0.0000	2.6100e-003	6.6000e-004	0.0000	6.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2000e-004	8.4100e-003	9.8200e-003	2.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241
Total	**4.2000e-004**	**8.4100e-003**	**9.8200e-003**	**2.0000e-005**	**2.6100e-003**	**6.0000e-005**	**2.6700e-003**	**6.6000e-004**	**6.0000e-005**	**7.2000e-004**	**0.0000**	**1.5118**	**1.5118**	**4.9000e-004**	**0.0000**	**1.5241**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	6.2800e-003	6.2800e-003	0.0000	0.0000	6.2900e-003
Total	**1.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**6.2800e-003**	**6.2800e-003**	**0.0000**	**0.0000**	**6.2900e-003**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5800e-003	0.0287	0.0127	3.0000e-005		1.2800e-003	1.2800e-003		1.1700e-003	1.1700e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968
Total	**2.5800e-003**	**0.0287**	**0.0127**	**3.0000e-005**	**9.8300e-003**	**1.2800e-003**	**0.0111**	**5.0500e-003**	**1.1700e-003**	**6.2200e-003**	**0.0000**	**2.4767**	**2.4767**	**8.0000e-004**	**0.0000**	**2.4968**

Unmitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0126	0.0126	0.0000	0.0000	0.0126
Total	**2.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0126**	**0.0126**	**0.0000**	**0.0000**	**0.0126**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.4200e-003	0.0000	4.4200e-003	1.1400e-003	0.0000	1.1400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9000e-004	0.0138	0.0162	3.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968
Total	**6.9000e-004**	**0.0138**	**0.0162**	**3.0000e-005**	**4.4200e-003**	**9.0000e-005**	**4.5100e-003**	**1.1400e-003**	**9.0000e-005**	**1.2300e-003**	**0.0000**	**2.4767**	**2.4767**	**8.0000e-004**	**0.0000**	**2.4968**

Mitigated Construction Off-Site

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

Worker	2.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0126	0.0126	0.0000	0.0000	0.0126
Total	**2.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0126**	**0.0126**	**0.0000**	**0.0000**	**0.0126**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1758	1.3227	1.2512	2.1400e-003		0.0664	0.0664		0.0641	0.0641	0.0000	176.1012	176.1012	0.0314	0.0000	176.8872
Total	**0.1758**	**1.3227**	**1.2512**	**2.1400e-003**		**0.0664**	**0.0664**		**0.0641**	**0.0641**	**0.0000**	**176.1012**	**176.1012**	**0.0314**	**0.0000**	**176.8872**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5000e-004	0.0247	6.6400e-003	3.0000e-005	3.6000e-004	2.0000e-005	3.8000e-004	1.0000e-004	2.0000e-005	1.2000e-004	0.0000	3.0851	3.0851	2.9000e-004	0.0000	3.0922
Worker	7.9000e-004	3.5000e-004	4.5900e-003	1.0000e-005	5.8000e-004	1.0000e-005	5.8000e-004	1.5000e-004	1.0000e-005	1.6000e-004	0.0000	0.6096	0.6096	2.0000e-005	0.0000	0.6102
Total	**1.4400e-003**	**0.0250**	**0.0112**	**4.0000e-005**	**9.4000e-004**	**3.0000e-005**	**9.6000e-004**	**2.5000e-004**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**3.6947**	**3.6947**	**3.1000e-004**	**0.0000**	**3.7025**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0518	0.9720	1.0839	2.1400e-003		9.5100e-003	9.5100e-003		9.5100e-003	9.5100e-003	0.0000	139.2256	139.2256	0.0195	0.0000	139.7134
Total	**0.0518**	**0.9720**	**1.0839**	**2.1400e-003**		**9.5100e-003**	**9.5100e-003**		**9.5100e-003**	**9.5100e-003**	**0.0000**	**139.2256**	**139.2256**	**0.0195**	**0.0000**	**139.7134**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5000e-004	0.0247	6.6400e-003	3.0000e-005	3.6000e-004	2.0000e-005	3.8000e-004	1.0000e-004	2.0000e-005	1.2000e-004	0.0000	3.0851	3.0851	2.9000e-004	0.0000	3.0922
Worker	7.9000e-004	3.5000e-004	4.5900e-003	1.0000e-005	5.8000e-004	1.0000e-005	5.8000e-004	1.5000e-004	1.0000e-005	1.6000e-004	0.0000	0.6096	0.6096	2.0000e-005	0.0000	0.6102
Total	**1.4400e-003**	**0.0250**	**0.0112**	**4.0000e-005**	**9.4000e-004**	**3.0000e-005**	**9.6000e-004**	**2.5000e-004**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**3.6947**	**3.6947**	**3.1000e-004**	**0.0000**	**3.7025**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

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

Category	tons/yr										MT/yr					
Off-Road	4.9500e-003	0.0375	0.0382	7.0000e-005		1.7700e-003	1.7700e-003		1.7100e-003	1.7100e-003	0.0000	5.4473	5.4473	9.5000e-004	0.0000	5.4710
Total	**4.9500e-003**	**0.0375**	**0.0382**	**7.0000e-005**		**1.7700e-003**	**1.7700e-003**		**1.7100e-003**	**1.7100e-003**	**0.0000**	**5.4473**	**5.4473**	**9.5000e-004**	**0.0000**	**5.4710**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	7.4000e-004	1.9000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0946	0.0946	1.0000e-005	0.0000	0.0948
Worker	2.0000e-005	1.0000e-005	1.3000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0182	0.0182	0.0000	0.0000	0.0182
Total	**4.0000e-005**	**7.5000e-004**	**3.2000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.1127**	**0.1127**	**1.0000e-005**	**0.0000**	**0.1130**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6000e-003	0.0301	0.0335	7.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.3066	4.3066	5.8000e-004	0.0000	4.3211
Total	**1.6000e-003**	**0.0301**	**0.0335**	**7.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**	**0.0000**	**4.3066**	**4.3066**	**5.8000e-004**	**0.0000**	**4.3211**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	7.4000e-004	1.9000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0946	0.0946	1.0000e-005	0.0000	0.0948
Worker	2.0000e-005	1.0000e-005	1.3000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0182	0.0182	0.0000	0.0000	0.0182
Total	**4.0000e-005**	**7.5000e-004**	**3.2000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.1127**	**0.1127**	**1.0000e-005**	**0.0000**	**0.1130**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0623					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.0633**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	7.5800e-003	7.5800e-003	0.0000	0.0000	7.5800e-003
Total	**1.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**7.5800e-003**	**7.5800e-003**	**0.0000**	**0.0000**	**7.5800e-003**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0623					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0000e-004	6.7800e-003	9.1600e-003	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.0626**	**6.7800e-003**	**9.1600e-003**	**1.0000e-005**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	7.5800e-003	7.5800e-003	0.0000	0.0000	7.5800e-003
Total	**1.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**7.5800e-003**	**7.5800e-003**	**0.0000**	**0.0000**	**7.5800e-003**

3.7 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4400e-003	0.0339	0.0440	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	5.8848	5.8848	1.8700e-003	0.0000	5.9315
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.4400e-003**	**0.0339**	**0.0440**	**7.0000e-005**		**1.7400e-003**	**1.7400e-003**		**1.6000e-003**	**1.6000e-003**	**0.0000**	**5.8848**	**5.8848**	**1.8700e-003**	**0.0000**	**5.9315**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	3.0000e-005	3.5000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0492	0.0492	0.0000	0.0000	0.0493

Total	**6.0000e-005**	**3.0000e-005**	**3.5000e-004**	**0.0000**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0492**	**0.0492**	**0.0000**	**0.0000**	**0.0493**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6000e-003	0.0332	0.0493	7.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	5.8848	5.8848	1.8700e-003	0.0000	5.9314
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.6000e-003**	**0.0332**	**0.0493**	**7.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**	**0.0000**	**5.8848**	**5.8848**	**1.8700e-003**	**0.0000**	**5.9314**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	3.0000e-005	3.5000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0492	0.0492	0.0000	0.0000	0.0493
Total	**6.0000e-005**	**3.0000e-005**	**3.5000e-004**	**0.0000**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0492**	**0.0492**	**0.0000**	**0.0000**	**0.0493**

Attachment 3: Community Health Risk Calculations

Construction Emissions and Health Risk Calculations

645 Horning St, San Jose, CA

DPM Emissions and Modeling Emission Rates - Unmitigated

Construction Year	Activity	DPM (ton/year)	Area Source	DPM Emissions (lb/yr)	DPM Emissions (lb/hr)	DPM Emissions (g/s)	Modeled Area (m^2)	DPM Emission Rate ($g/s/m^2$)
2021	Construction	0.0810	CON_DPM	162.0	0.04438	5.59E-03	12879.4	4.34E-07
2022	Construction	0.0043	CON_DPM	8.5	0.00233	2.93E-04	12879.4	2.28E-08
Total		***0.0853***		***170.5***	***0.0467***	***0.0059***		

Construction Hours

hr/day =	10	(7am - 5pm)
days/yr =	365	
hours/year =	3650	

645 Horning St, San Jose, CA

PM2.5 Fugitive Dust Emissions for Modeling - Unmitigated

Construction Year	Activity	Area Source	PM2.5 Emissions (ton/year)	PM2.5 Emissions (lb/yr)	PM2.5 Emissions (lb/hr)	PM2.5 Emissions (g/s)	Modeled Area (m^2)	PM2.5 Emission Rate $g/s/m^2$
2021	Construction	CON_FUG	0.0146	29.3	0.00802	1.01E-03	12,879.4	7.84E-08
2022	Construction	CON_FUG	0.0003	0.5	0.00015	1.86E-05	12,879.4	1.45E-09
Total			***0.0149***	***29.8***	***0.0082***	***0.0010***		

Construction Hours

hr/day =	10	(7am - 5pm)
days/yr =	365	
hours/year =	3650	

DPM Construction Emissions and Modeling Emission Rates - With Mitigation

Construction Year	Activity	DPM (ton/year)	Area Source	DPM Emissions (lb/yr)	DPM Emissions (lb/hr)	DPM Emissions (g/s)	Modeled Area (m^2)	DPM Emission Rate ($g/s/m^2$)
2021	Construction	0.0114	CON_DPM	22.7	0.00622	7.84E-04	12879.4	6.09E-08
2022	Construction	0.0009	CON_DPM	1.7	0.00047	5.87E-05	12879.4	4.56E-09
Total		***0.0122***		***24.4***	***0.0067***	***0.0008***		

Construction Hours

hr/day =	10	(7am - 5pm)
days/yr =	365	
hours/year =	3650	

PM2.5 Fugitive Dust Construction Emissions for Modeling - With Mitigation

Construction Year	Activity	Area Source	PM2.5 Emissions (ton/year)	PM2.5 Emissions (lb/yr)	PM2.5 Emissions (lb/hr)	PM2.5 Emissions (g/s)	Modeled Area (m^2)	PM2.5 Emission Rate $g/s/m^2$
2021	Construction	CON_FUG	0.0053	10.6	0.00291	3.67E-04	12,879.4	2.85E-08
2022	Construction	CON_FUG	0.0003	0.5	0.00015	1.86E-05	12,879.4	1.45E-09
Total			***0.0056***	***11.2***	***0.0031***	***0.0004***		

Construction Hours

hr/day =	10	(7am - 5pm)
days/yr =	365	
hours/year =	3650	

645 Horning St, San Jose, CA - Construction Health Impact Summary

Maximum Impacts at MEI Location - Without Mitigation

Emissions Year	Maximum Concentrations: Exhaust PM10/DPM ($\mu g/m^3$)	Maximum Concentrations: Fugitive PM2.5 ($\mu g/m^3$)	Cancer Risk (per million): Infant/Child	Cancer Risk (per million): Adult	Hazard Index (-)	Maximum Annual PM2.5 Concentration ($\mu g/m^3$)
2021	0.1556	0.0323	27.66	0.45	0.03	0.19
2022	0.0082	0.0006	1.34	0.02	0.002	0.01
Total	-	-	**29.0**	**0.5**	-	-
Maximum	0.1556	0.0323	**-**	**-**	**0.03**	**0.19**

Maximum Impacts at MEI Location - With Mitigation

Emissions Year	Maximum Concentrations: Exhaust PM10/DPM ($\mu g/m^3$)	Maximum Concentrations: Fugitive PM2.5 ($\mu g/m^3$)	Cancer Risk (per million): Infant/Child	Cancer Risk (per million): Adult	Hazard Index (-)	Maximum Annual PM2.5 Concentration ($\mu g/m^3$)
2021	0.0218	0.0117	3.88	0.06	0.004	0.03
2022	0.0017	0.0006	0.27	0.00	0.0003	0.002
Total	-	-	**4.2**	**0.1**	-	-
Maximum	0.0218	0.0117	**-**	**-**	**0.004**	**0.03**

- Tier 3 DPF 3 Electric Cranes Mitigation

645 Horning St, San Jose, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction Impacts at Off-Site MEI Location - 1.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

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

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

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

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information				Adult - Exposure Information				Maximum	
							Modeled					
Exposure	Exposure Duration		DPM Conc (ug/m3)		Age Sensitivity	Infant/Child Cancer Risk	DPM Conc (ug/m3)		Age Sensitivity	Adult Cancer Risk	Fugitive	Total
Year	(years)	Age	Year	Annual	Factor	(per million)	Year	Annual	Factor	(per million)	PM2.5	PM2.5
0	0.25	-0.25 - 0*	2021	0.1556	10	2.12	2021	0.1556	-	-		
1	1	0 - 1	2021	0.1556	10	25.55	2021	0.1556	1	0.45	0.0323	0.1876
2	1	1 - 2	2022	0.0082	10	1.34	2022	0.0082	1	0.02	0.0006	0.0088
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00		
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00		
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00		
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00		
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00		
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00		
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00		
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00		
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00		
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00		
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00		
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00		
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00		
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00		
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00		
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00		
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00		
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00		
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00		
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00		
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00		
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00		
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00		
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00		
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00		
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00		
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00		
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00		
Total Increased Cancer Risk						**29.0**				**0.47**		

* Third trimester of pregnancy

645 Horning St, San Jose, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction Impacts at Off-Site MEI Location - 4.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

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

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

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

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information				Adult - Exposure Information				Maximum	
							Modeled					
Exposure	Exposure Duration		DPM Conc (ug/m3)		Age Sensitivity	Infant/Child Cancer Risk	DPM Conc (ug/m3)		Age Sensitivity	Adult Cancer Risk	Fugitive	Total
Year	(years)	Age	Year	Annual	Factor	(per million)	Year	Annual	Factor	(per million)	PM2.5	PM2.5
0	0.25	-0.25 - 0*	2021	0.1402	10	1.91	2021	0.1402	-	-		
1	1	0 - 1	2021	0.1402	10	23.02	2021	0.1402	1	0.40	0.0283	0.1685
2	1	1 - 2	2022	0.0074	10	1.21	2022	0.0074	1	0.02	0.0005	0.0079
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00		
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00		
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00		
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00		
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00		
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00		
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00		
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00		
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00		
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00		
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00		
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00		
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00		
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00		
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00		
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00		
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00		
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00		
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00		
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00		
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00		
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00		
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00		
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00		
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00		
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00		
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00		
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00		
Total Increased Cancer Risk						**26.1**				**0.42**		

* Third trimester of pregnancy

645 Horning St, San Jose, CA - Construction Impacts - With Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction Impacts at Off-Site MEI Location - 1.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

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

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

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

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information				Adult - Exposure Information				Maximum	
							Modeled					
Exposure	Exposure Duration		DPM Conc (ug/m3)		Age Sensitivity	Infant/Child Cancer Risk	DPM Conc (ug/m3)		Age Sensitivity	Adult Cancer Risk	Fugitive	Total
Year	(years)	Age	Year	Annual	Factor	(per million)	Year	Annual	Factor	(per million)	PM2.5	PM2.5
0	0.25	-0.25 - 0*	2021	0.0218	10	0.30	2021	0.0218	-	-		
1	1	0 - 1	2021	0.0218	10	3.59	2021	0.0218	1	0.06	0.0117	0.0335
2	1	1 - 2	2022	0.0017	10	0.27	2022	0.0017	1	0.00	0.0006	0.0022
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00		
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00		
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00		
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00		
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00		
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00		
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00		
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00		
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00		
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00		
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00		
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00		
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00		
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00		
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00		
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00		
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00		
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00		
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00		
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00		
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00		
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00		
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00		
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00		
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00		
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00		
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00		
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00		
Total Increased Cancer Risk						**4.2**				**0.07**		

* Third trimester of pregnancy

Gas Station Operational Emissions and Health Risk Calculations

645 Horning Street

Assume 12-fueling position GFD

Estimated Annual Gasoline Throughput = 10,000,000 gallons/year

TOG Emission Factors and Annual Emissions

Emission Source	TOG[1] Emission Factor ($lb/10^3$ gallon)	TOG Annual Emissions (lb/year)		
Fueling[2]				
Non-ORVR Vehicles	0.42	840.0		
ORVR Vehicles	0.021	168.0		
Bulk Transfer Losses	0.15	1,500.0		
Pressure Driven Losses	0.024	240.0		
Fueling - Spillage	0.24	2,400.0		
Gasoline Hose Losses	0.009	90.0		
Total	**0.532**	**5,238.0**	2.619	tons

TOG = total organic gas

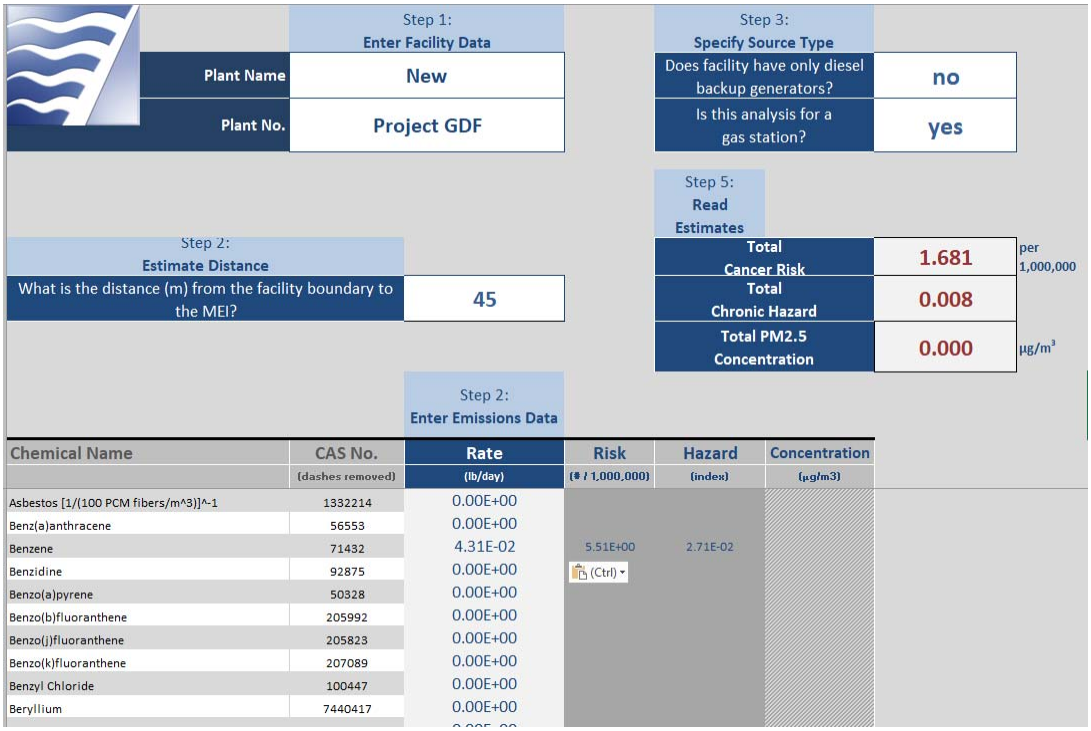
ORVR = onboard refueling vapor recovery

1. Emission factors from CARB "Revised Emissions Factors for Gasoline Marketing Operations at California Gasoline Dispensing Facilities". December 23, 2013 (CARB, 2013). Assumes use of enhanced vapor recovery systems.
2. Fueling emissions based on CARB data for 2016 of 80% of vehicles use ORVR (CARB, 2013).

TAC	Annual Gasoline Throughput (gallons/year)	Annual TOG Emissions (lb/year)	Percent[1] TAC in Vapor (%)	Operation[2] Schedule (hrs/day)	Annual Average (lb/year)	Average Hourly (lb/hr)
Benzene	10,000,000	5,238	0.3%	14	15.71	0.00308

Notes:

1. CAPCOA Air Toxics "Hot Spots" Program, Gasoline Service Station Industrywide Risk Assessment Guidelines, November 1997.
2. Daily operation hours assumed to be 6:00 AM to 8:00 PM, 365 days per year



Step 1: Enter Facility Data	
Plant Name	New
Plant No.	Project GDF
Step 3: Specify Source Type	
Does facility have only diesel backup generators?	no
Is this analysis for a gas station?	yes
Step 5: Read Estimates	
Total Cancer Risk	1.681 per 1,000,000
Total Chronic Hazard	0.008
Total PM2.5 Concentration	0.000 µg/m³
Step 2: Estimate Distance	
What is the distance (m) from the facility boundary to the MEI?	45

Step 2: Enter Emissions Data

Chemical Name	CAS No. (dashes removed)	Rate (lb/day)	Risk (# / 1,000,000)	Hazard (index)	Concentration (µg/m3)
Asbestos [1/(100 PCM fibers/m^3)]^-1	1332214	0.00E+00			
Benz(a)anthracene	56553	0.00E+00			
Benzene	71432	4.31E-02	5.51E+00	2.71E-02	
Benzidine	92875	0.00E+00			
Benzo(a)pyrene	50328	0.00E+00			
Benzo(b)fluoranthene	205992	0.00E+00			
Benzo(j)fluoranthene	205823	0.00E+00			
Benzo(k)fluoranthene	207089	0.00E+00			
Benzyl Chloride	100447	0.00E+00			
Beryllium	7440417	0.00E+00			

Attachment 4: Cumulative Community Risk Screening and Calculations

Bay Area Air Quality Management District

Roadway Screening Analysis Calculator

County specific tables containing estimates of risk and hazard impacts from roadways in the Bay Area.

INSTRUCTIONS:

Input the site-specific characteristics of your project by using the drop down menu in the "Search Parameter" box. We recommend that this analysis be used for roadways with 10,000 AADT and above.

• County: Select the County where the project is located. The calculator is only applicable for projects within the nine Bay Area counties.

• Roadway Direction: Select the orientation that best matches the roadway. If the roadway orientation is neither clearly north-south nor east-west, use the highest values predicted from either orientation.

• Side of the Roadway: Identify on which side of the roadway the project is located.

• Distance from Roadway: Enter the distance in feet from the nearest edge of the roadway to the project site. The calculator estimates values for distances greater than 10 feet and less than 1000 feet. For distances greater than 1000 feet, the user can choose to extrapolate values using a distribution curve or apply 1000 feet values for greater distances.

• Annual Average Daily Traffic (ADT): Enter the annual average daily traffic on the roadway. These data may be collected from the city or the county (if the area is unincorporated).

When the user has completed the data entries, the screening level PM2.5 annual average concentration and the cancer risk results will appear in the Results Box on the right. Please note that the roadway tool is not applicable for California State Highways and the District refers the user to the Highway Screening Analysis Tool at: http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.

Notes and References listed below the Search Boxes

Search Parameters

County	Santa Clara
Roadway Direction	North-South
Side of the Roadway	East
Distance from Roadway	30 feet
	MEIs
Annual Average Daily Traffic (ADT)	17,500

Results

Santa Clara County

NORTH-SOUTH DIRECTIONAL ROADWAY

PM2.5 annual average

0.334 ($\mu g/m^3$)

Cancer Risk

14.10 (per million)

Oakland Road

Traffic volumes from SJ General Plan EIR

Data for Santa Clara County based on meteorological data collected from San Jose Airport in 1997

Adjusted for 2015 OEHHA and EMFAC2014 for 2018

9.69

(per million)

Note that EMFAC2014 predicts DSL PM2.5 aggragate rates in 2018 that are 46% of EMFAC2011 for 2014. TOG gasoline rates are 56% of EMFAC2011 year 2014 rates. This is for light- and medium-duty vehciles traveling at 30 mph for Bay Area

Notes and References:

1. Emissions were developed using EMFAC2011 for fleet mix in 2014 assuming 10,000 AADT and includes impacts from diesel and gasoline vehicle exhaust, brake and tire wear, and resuspended dust.
2. Roadways were modeled using ~~CALINE4~~ Cal3qhcr air dispersion model assuming a source length of one kilometer. Meteorological data used to estimate the screening values are noted at the bottom of the "Results" box.
3. Cancer risks were estimated for 70 year lifetime exposure starting in 2014 that includes sensitivity values for early life exposures and OEHHA toxicity values adopted in 2013.

Bay Area Air Quality Management District

Risk & Hazard Stationary Source Inquiry Form

This form is required when users request stationary source data from BAAQMD

This form is to be used with the BAAQMD's Google Earth stationary source screening tables.

Click here for guidance on coducting risk & hazard screening, including roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart.

Click here for District's Recommended Methods for Screening and Modeling Local Risks and Hazards document.

Table A: Requester Contact Information

Date of Request	**3/9/2020**
Contact Name	Casey Divine
Affiliation	Illingworth & Rodkin, Inc.
Phone	707-794-0400 x103
Email	cdivine@illingworthrodkin.com
Project Name	645 Horning St
Address	645 Horning St
City	San Jose
County	Santa Clara
Type (residential, commercial, mixed use, industrial, etc.)	commercial
Project Size (# of units or building square feet)	12-fueling position gas station, 152ksf storage, 2.5ksf fast food
Comments:	

For Air District assistance, the following steps must be completed:

1. Complete all the contact and project information requested in Table A. Incomplete forms will not be processed. Please include a project site map.

2. Download and install the free program Google Earth, **http://www.google.com/earth/download/ge/,** and then download the county specific Google Earth stationary source application files from the District's website, **http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.** The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's Information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration.

3. Find the project site in Google Earth by inputting the site's address in the Google Earth search box.

4. Identify stationary sources within at least a 1000ft radius of project site. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm the source's address location. Please report any mapping errors to the District.

5. List the stationary source information in Table B.

6. Note that a small percentage of the stationary sources have Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the Plant Name (Map B on right). If HRSA values are presented, these values have already been modeled and cannot be adjusted further.

7. Email this completed form to District staff. District staff will provide the most recent risk, hazard, and PM2.5 data that are available for the source(s). If this information or data are not available, source emissions data will be provided. Staff will respond to inquiries within three weeks.

Note that a public records request received for the same stationary source information will cancel the processing of your SSIF request.

Submit forms, maps, and questions to Areana Flores at 415-749-4616, or aflores@baaqmd.gov

Table B: Google Earth data

Distance from Receptor (feet) or MEI[1]	Plant No.	Facility Name	Address	Cancer Risk[2]	Hazard Risk[2]	$PM_{2.5}$[2]	Source No.[3]	Type of Source[4]	Fuel Code[5]	Status/Comments	Construction MEI: Distance Adjustment Multiplier	Construction MEI: Adjusted Cancer Risk Estimate	Construction MEI: Adjusted Hazard Risk	Construction MEI: Adjusted PM2.5
800	109902	Claires LLC/Balch Land	680 Commercial St	2.909	0.013	0		GDF		2018 Dataset	0.02	0.1	0.0003	0
1000	106861	J N Abbott Distributor Inc	1090 N 10th Street	1.226	0.005	0		GDF		2018 Dataset	0.01	0.02	0.0001	0
950	108801	Salkhi Petroleum Inc	899 N 13th St	0.772	0.003	0		GDF		2018 Dataset	0.02	0.01	0.00005	0

Footnotes:

1. Maximally exposed individual
2. These Cancer Risk, Hazard Index, and PM2.5 columns represent the values in the Google Earth Plant Information Table.
3. Each plant may have multiple permits and sources.
4. Permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc.
5. Fuel codes: 98 = diesel, 189 = Natural Gas.
6. If a Health Risk Screening Assessment (HRSA) was completed for the source, the application number will be listed here.
7. The date that the HRSA was completed.
8. Engineer who completed the HRSA. For District purposes only.
9. All HRSA completed before 1/5/2010 need to be multiplied by an age sensitivity factor of 1.7.
10. The HRSA "Chronic Health" number represents the Hazard Index.
11. Further information about common sources:
    a. Sources that only include diesel internal combustion engines can be adjusted using the BAAQMD's Diesel Multiplier worksheet.
    b. The risk from natural gas boilers used for space heating when <25 MM BTU/hr would have an estimated cancer risk of one in a million or less, and a chronic hazard index
    c. BAAQMD Reg 11 Rule 16 required that all co-residential (sharing a wall, floor, ceiling or is in the same building as a residential unit) dry cleaners cease use of perc on July 1, 2010. Therefore, there is no cancer risk, hazard or PM2.5 concentrations from co-residential dry cleaning businesses in the BAAQMD.
    d. Non co-residential dry cleaners must phase out use of perc by Jan. 1, 2023. Therefore, the risk from these dry cleaners does not need to be factored in over a 70-year period, but
    e. Gas stations can be adjusted using BAAQMD's Gas Station Distance Mulitplier worksheet.
    f. Unless otherwise noted, exempt sources are considered insignificant. See BAAQMD Reg 2 Rule 1 for a list of exempt sources.
    g. This spray booth is considered to be insignificant.

Date last updated:
03/13/2018