HELIX Environmental Planning

Tavern Road Gas Station Project

Air Quality Technical Report

February 2020 | ZAA-01

Prepared for:

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ACRONYMS AND ABBREVIATIONS

$\mu g/m^3$	micrograms per cubic meter
AQIA	Air Quality Impact Assessment
ATC	authority to construct
BMPs	best management practices
CAA	Clean Air Act (Federal)
CAAQS	California Ambient Air Quality Standard
CalEEMod	California Emission Estimator Model
CalEPA	California Environmental Protection Agency
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEQA	California Environmental Quality Act
CO	carbon monoxide
County	County of San Diego
DPM	diesel particulate matter
ºF	Fahrenheit
EVR	Enhanced Vapor Recovery
g/L	grams per liter
H_2S	hydrogen sulfide
lbs	pounds
LOS	level of service
mph	miles per hour
NAAQS	National Ambient Air Quality Standard
NO	nitrogen oxide
NO_X	oxides of nitrogen
NO_2	nitrogen dioxide
O_3	Ozone

ACRONYMS AND ABBREVIATIONS (cont.)

Pb	lead
PM_{10}	respirable particulate matter (particulate matter with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$	fine particulate matter (particulate matter with an aerodynamic diameter of 2.5 microns or less
ppb	parts per billion
ppm	parts per million
PTO	permit to operate
PVC	polyvinyl chloride
RAQS	Regional Air Quality Strategy
SANDAG	San Diego Association of Governments
SCAQMD	South Coast Air Quality Management District
SDAB	San Diego Air Basin
SDAPCD	San Diego County Air Pollution Control District
SIP	State Implementation Plan
SO_X	oxides of sulfur
SO_2	sulfur dioxide
TACs	Toxic Air Contaminants
T-BACT	Toxics Best Available Control Technology
TIS	Traffic Impact Study
VOCs	volatile organic compounds
WRCC	Western Regional Climate Center
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey

EXECUTIVE SUMMARY

This report presents an assessment of potential air quality impacts associated with the proposed Tavern Road Gas Station Project (Project). The evaluation addresses the potential for air pollutant emissions during construction and after full buildout of the Project.

The Project would result in emissions of air pollutants during the construction phase and operational phase of the Project. Construction best management practices (BMPs) would be implemented by the Project, including measures to minimize fugitive dust control emissions, such as watering twice per day during grading and stabilization of storage piles. With the inclusion of these BMPs, emissions of all criteria pollutants would be below the daily thresholds during construction, and short-term construction impacts would be less than significant.

Operational emissions associated with the Project would include vehicular traffic and area sources such as energy use, landscaping, and the use of consumer products. The Project would incorporate energy-efficiency features that would meet 2016 California Title 24 Energy Efficiency Standards if construction begins before January 1, 2020. If construction begins after January 1, 2020, the Project would be required to meet the more energy efficient 2019 Title 24 standards. Criteria pollutant emissions would not exceed the daily screening level thresholds during Project operation.

Development of the Project would be consistent with the San Diego Air Pollution Control District (SDAPCD) Regional Air Quality Strategy (RAQS) and would not result in any cumulatively considerable emissions of nonattainment air pollutants that would exceed the screening level thresholds.

The Project would not result in the exposure of sensitive receptors to substantial emissions of pollutants, toxic air contaminants, or odors. The Project would not result in the degradation of roadway intersections such that emissions of carbon monoxide (CO) would exceed state or federal standards that would result in a CO hotspot. An evaluation of potential odors from construction activities and Project operation indicated that the Project would not expose substantial numbers of people to objectionable odors.

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1.0 INTRODUCTION AND PROJECT DESCRIPTION

1.1 PURPOSE OF THE REPORT

This report analyzes potential air quality impacts associated with the proposed Tavern Road Gas Station Project (Project), which includes an evaluation of existing conditions in the Project vicinity, an assessment of potential impacts associated with Project construction, and an evaluation of Project operational impacts. The analysis of impacts and report is prepared in accordance with the County of San Diego (County) Guidelines for Determining Significance and Report Content and Format Requirement for Air Quality (County 2007).

1.2 PROJECT LOCATION AND DESCRIPTION

The approximately 2.24-acre Project site is located within the unincorporated community of Alpine within the south-central portion of the County of San Diego (Figure 1, *Regional Location*). The site is located to the west of Victoria Park Terrace, south of Tavern Road, and immediately north of the westbound Interstate (I-) 8 on-ramp (Figure 2, *Aerial Photograph*).

The site is partly developed with an existing gas station, convenience store, drive-thru restaurant, 12 parking spaces, and a drive-thru coffee kiosk located within the eastern section of the Project site (Figure 2). The western portion of the Project site is undeveloped with an area that has been previously disturbed by grading activities.

The Proposed Project would demolish the existing 2,040 square-foot (SF) structure containing a convenience store and drive-thru restaurant. A new 7,180 SF building would be constructed that would provide 2,740 SF for the relocated drive-thru restaurant, 2,040 SF for the relocated convenience store, and a 2,400 SF of additional sit-down restaurant space. The Project would also add additional parking spaces and install a trash enclosure and landscaping. The existing gas station pump canopy and 318 SF drive-thru coffee kiosk would remain.

The Project would require import of 19,000 cubic yards of soil over approximately six weeks. Total proposed parking capacity would be 61 spaces for automobiles and four bicycle spaces (Figure 3, *Site Plan*). Two bioswales would be constructed as part of the Project, one would be located west of the proposed structures and one would be located along the southern boundary. Landscaping would be incorporated throughout the Project site and along the northern and western perimeters and would include approximately 23 trees. A retaining wall would border the majority of the western perimeter boundary. Egress and ingress would be provided via three driveways along Tavern Road.

1.3 BEST MANAGEMENT PRACTICES

1.3.1 Regulatory Requirements

1.3.1.1 Construction Measures

The Project would incorporate best management practices (BMPs) during construction to reduce emissions of fugitive dust. San Diego County Air Pollution Control District (SDAPCD) Rule 55 – Fugitive Dust Control states that no airborne dust shall be visible beyond the property line for more than three minutes in any 60-minute period. SDAPCD Rule 55 requires the following:

1. **Airborne Dust Beyond the Property Line:** No person shall engage in construction or demolition activity subject to this rule in a manner that discharges visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60-minute period.

2. **Track-Out/Carry-Out:** Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out shall:

   (i) be minimized by the use of any of the following or equally effective track-out/ carry-out and erosion control measures that apply to the Project or operation:

      (a) track-out grates or gravel beds at each egress point;

      (b) wheel-washing at each egress during muddy conditions, soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; and for outbound transport trucks;

      (c) using secured tarps or cargo covering, watering, or treating of transported material; and

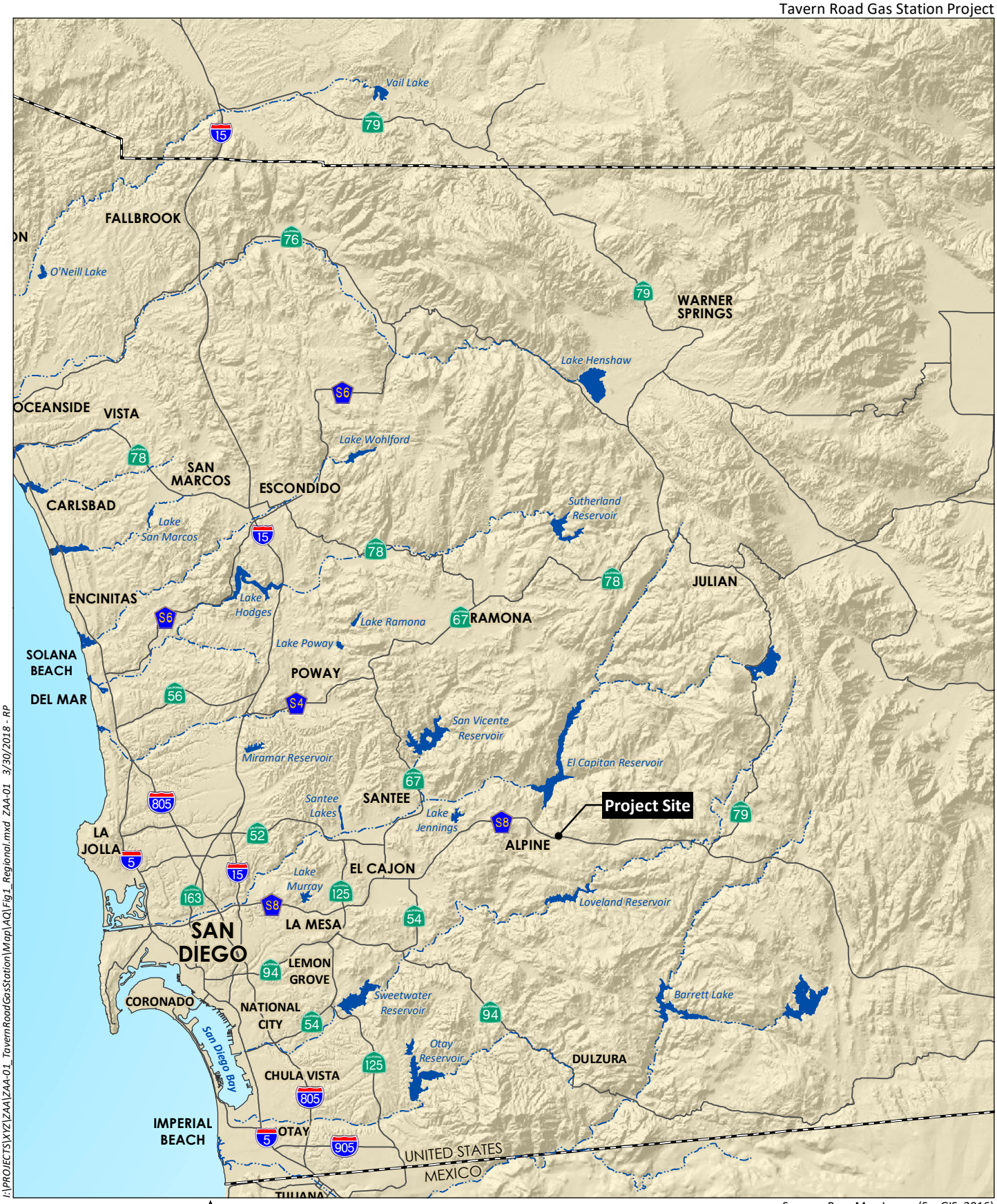
   (ii) be removed at the conclusion of each work day when active operations cease, or every 24 hours for continuous operations. If a street sweeper is used to remove any track-out/carry-out, only respirable particulate matter (PM_{10}) -efficient street sweepers certified to meet the most current South Coast Air Quality Management District (SCAQMD) Rule 1186 requirements shall be used. The use of blowers for removal of track-out/carry-out is prohibited under any circumstances.

1.3.1.2 Area Source Reductions

- Use of low-volatile organic compound (VOC) coatings in accordance with, or exceeding, SDAPCD Rule 67.
    - Non-residential interior/exterior coatings are to be less than or equal to 250 g/L. However, for a conservative project analysis, a VOC content of 50 g/L for all interior and exterior coatings was used in emissions modeling.

1.3.1.3 Energy Efficiencies

- The Project will be designed to meet 2016 Title 24 energy efficiency standards assuming construction begins before January 1, 2020. If constructed after January 1, 2020, the project would be required to meet the more energy efficient 2019 Title 24 standards



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Source: Base Map Layers (SanGIS, 2016)

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Regional Location

Figure 1

I:\PROJECTS\XYZ\ZAA\ZAA-01_TavernRoadGasStation\Map\AQ\Fig2_Project_Vicinity.mxd ZAA-01 3/30/2018 -RP

0 200 Feet

Source: Aerial (SanGIS, 2017)

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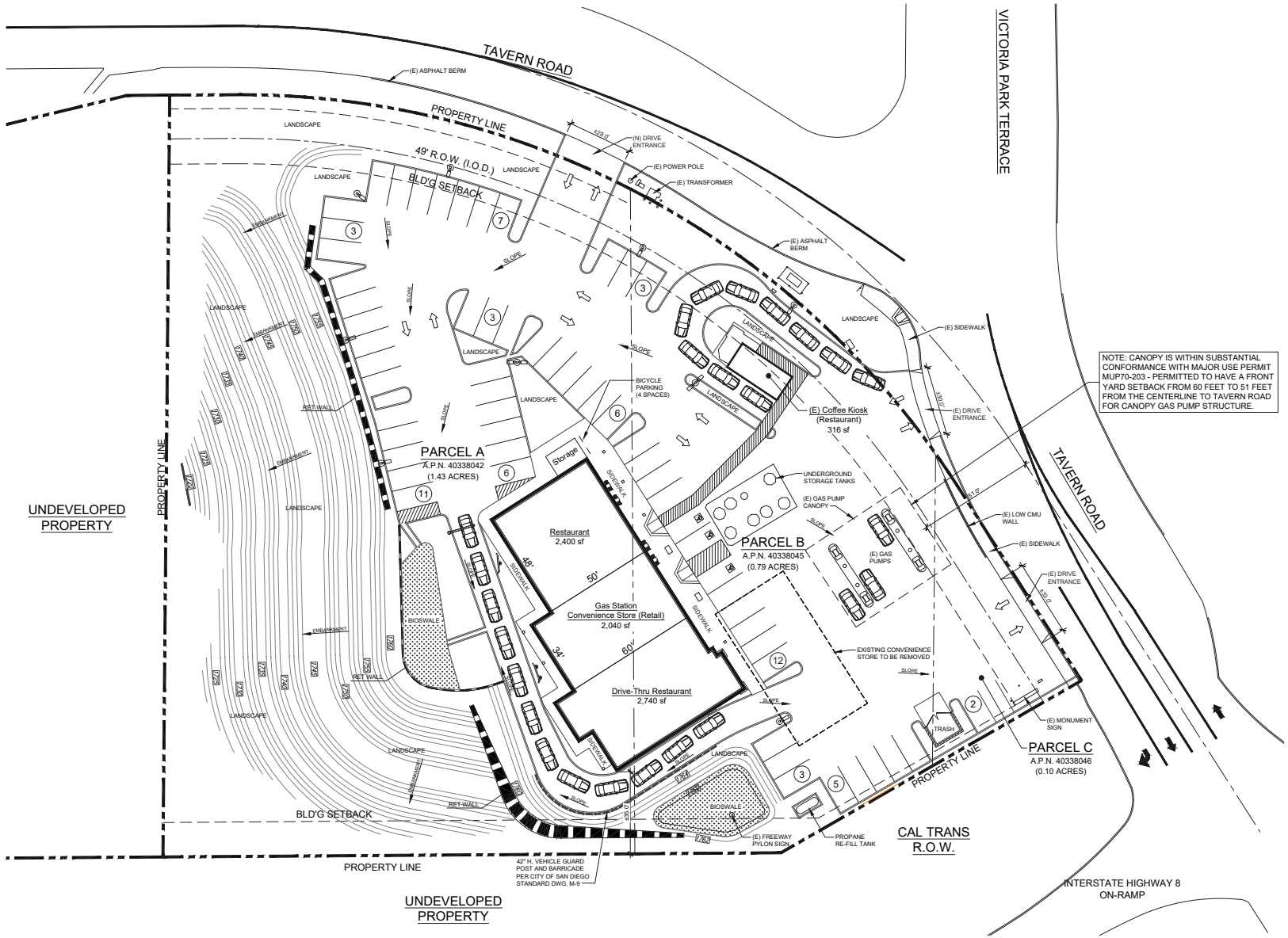
Project Vicinity

Figure 3



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Source: Ziebarth Associates, Architecture, and Planning, March 5, 2018

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Site Plan

Figure 4

1.3.1.4 Water and Waste Reduction

- In accordance with Part 11 of Title 24, California Green Building Code (CALGreen) criteria and state and local laws, at least 50 percent of operational waste would be diverted from landfills through reuse and recycling.
- Provide areas for storage and collection of recyclables and yard waste in accordance with 2016 CALGreen.
- The Project would provide 20 percent water reduction from the statewide average in accordance with 2016 CALGreen

1.3.2 Construction Best Management Practices

The Project would implement the BMP control measures listed below:

- The Project applicant will require the contractor(s) to implement paving, chip sealing, or chemical stabilization of internal roadways after completion of grading.
- Dirt storage piles will be stabilized by chemical binders, tarps, fencing or other erosion control.
- A 15-mile per hour (mph) speed limit will be enforced on unpaved surfaces.
- On dry days, dirt and debris spilled onto paved surfaces shall be swept up immediately to reduce resuspension of particulate matter caused by vehicle movement. Approach routes to construction sites shall be cleaned daily of construction-related dirt in dry weather.
- Haul trucks hauling dirt, sand, soil, or other loose materials will be covered or two feet of freeboard will be maintained.
- Disturbed areas shall be hydroseeded, landscaped, or developed as quickly as possible and as directed by the County and/or SDAPCD to reduce dust generation.
- Grading will be terminated if winds exceed 25 mph.
- Water will be applied a minimum of twice daily during grading activities.
- Use of low-VOC coatings with a VOC content less than 50 g/L for all interior and exterior coatings.

2.0 EXISTING CONDITIONS

2.1 EXISTING SETTING

The Project site is currently developed with a gas station and drive-thru restaurant convenience store. Surrounding uses include a gas station and convenience store directly east and opposite Tavern Road; an undeveloped graded area and the SDG&E Cleveland National Forest project office directly west of the

Project site; a landscape materials store located north of the Project site; and the Kumeyaay Highway (Interstate 8) located adjacent to the southern boundary of the Project.

Sensitive receptors are people that have an increased sensitivity to air quality contaminants, and sensitive receptor locations include schools, parks, hospitals, and residential areas. The closest existing sensitive receptors include residential uses located approximately 800 feet northeast of the Project and Alpine Family Medicine located approximately 0.2 miles to the south, across Interstate 8.

2.2 CLIMATE / METEOROLOGY AND TEMPERATURE INVERSIONS

The climate in southern California, including the San Diego Air Basin (SDAB), is controlled largely by the strength and position of the subtropical high-pressure cell over the Pacific Ocean. Areas within 30 miles of the coast, including the Project site, experience moderate temperatures and comfortable humidity.

The annual average maximum temperature in the Project area is approximately 75 degrees Fahrenheit (ºF), and the average minimum temperature is approximately 54ºF. Total precipitation in the Project area averaged approximately 18.8 inches over the last three years (2015 to 2017). Precipitation occurs mostly during the winter and relatively infrequently during the summer (Western Regional Climate Center [WRCC] 2016).

Due to its climate, the SDAB experiences frequent temperature inversions (temperature increases as altitude increases, which is the opposite of general patterns). Temperature inversions prevent air close to the ground from mixing with the air above it. As a result, air pollutants are trapped near the ground. During the summer, air quality problems are created due to the interaction between the ocean surface and the lower layer of the atmosphere, creating a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and nitrogen dioxide (NO_2) react under strong sunlight, creating smog. Light, daytime winds, predominantly from the west, further aggravate the condition by driving the air pollutants inland, toward the foothills. During the fall and winter, air quality problems are created due to carbon monoxide (CO) and NO_2 emissions. High NO_2 levels usually occur during autumn or winter, on days with summer-like conditions (SDAPCD 2016).

2.3 AIR POLLUTANTS OF CONCERN

2.3.1 Criteria Air Pollutants

Federal and state laws regulate air pollutants emitted into the ambient air by stationary and mobile sources. These regulated air pollutants are known as “criteria air pollutants” and are categorized as primary and secondary standards. Primary standards are a set of limits based on human health. Another set of limits intended to prevent environmental and property damage is called secondary standards. Criteria pollutants are defined by state and federal law as a risk to the health and welfare of the general public.

The following specific descriptions of health effects for each air pollutant associated with Project construction and operation are based on United States Environmental Protection Agency (USEPA; USEPA 2017) and California Air Resources Board (CARB; CARB 2009).

Ozone. Ozone (O_3) is considered a photochemical oxidant, which is a chemical that is formed when VOCs and oxides of nitrogen (NO_X), both by-products of fuel combustion, react in the presence of ultraviolet light. Ozone is considered a respiratory irritant and prolonged exposure can reduce lung function, aggravate asthma, and increase susceptibility to respiratory infections. Children and those with existing respiratory diseases are at greatest risk from exposure to ozone.

Carbon Monoxide. CO is a product of fuel combustion, and the main source of CO in the SDAB is from motor vehicle exhaust. CO is an odorless, colorless gas. CO affects red blood cells in the body by binding to hemoglobin and reducing the amount of oxygen that can be carried to the body's organs and tissues. CO can cause health effects to those with cardiovascular disease and can also affect mental alertness and vision.

Nitrogen Dioxide. NO_2 is also a by-product of fuel combustion and is formed both directly as a product of combustion and in the atmosphere through the reaction of nitric oxide (NO) with oxygen. NO_2 is a respiratory irritant and may affect those with existing respiratory illness, including asthma. NO_2 can also increase the risk of respiratory illness.

Respirable Particulate Matter and Fine Particulate Matter. Respirable particulate matter, or PM_{10}, refers to particulate matter with an aerodynamic diameter of 10 microns or less. Fine particulate matter, or $PM_{2.5}$, refers to particulate matter with an aerodynamic diameter of 2.5 microns or less. Particulate matter in these size ranges have been determined to have the potential to lodge in the lungs and contribute to respiratory problems. PM_{10} and $PM_{2.5}$ arise from a variety of sources, including road dust, diesel exhaust, fuel combustion, tire and brake wear, construction operations and windblown dust. PM_{10} and $PM_{2.5}$ can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases such as asthma and chronic bronchitis. $PM_{2.5}$ is considered to have the potential to lodge deeper in the lungs.

Sulfur dioxide. Sulfur dioxide (SO_2) is a colorless, reactive gas that is produced from the burning of sulfur-containing fuels such as coal and oil, and by other industrial processes. Generally, the highest concentrations of SO_2 are found near large industrial sources. SO_2 is a respiratory irritant that can cause narrowing of the airways leading to wheezing and shortness of breath. Long-term exposure to SO_2 can cause respiratory illness and aggravate existing cardiovascular disease.

Lead. Lead (Pb) in the atmosphere occurs as particulate matter. Lead has historically been emitted from vehicles combusting leaded gasoline, as well as from industrial sources. With the phase-out of leaded gasoline, large manufacturing facilities are the sources of the largest amounts of lead emissions. Lead has the potential to cause gastrointestinal, central nervous system, kidney and blood diseases upon prolonged exposure. Lead is also classified as a probable human carcinogen.

Sulfates. Sulfates are the fully oxidized ionic form of sulfur. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features. CARB's sulfates standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate

exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and due to fact that they are usually acidic, can harm ecosystems and damage materials and property.

Hydrogen Sulfide. Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation. Breathing H_2S at levels above the standard would result in exposure to a very disagreeable odor. In 1984, a CARB committee concluded that the ambient standard for H_2S is adequate to protect public health and to significantly reduce odor annoyance.

Vinyl Chloride. Vinyl chloride, a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure to vinyl chloride through inhalation and oral exposure causes liver damage. Cancer is a major concern from exposure to vinyl chloride via inhalation. Vinyl chloride exposure has been shown to increase the risk of angiosarcoma, a rare form of liver cancer, in humans.

Visibility-Reducing Particles. Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt. These particles in the atmosphere would obstruct the range of visibility. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze.

2.3.2 Toxic Air Contaminants

The Health and Safety Code (§39655, subd. (a).) defines a toxic air contaminant (TAC) as “an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health.” A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the Federal Clean Air Act (CAA) (42 United States Code Section 7412[b]) is a TAC. Under State law, the California Environmental Protection Agency (CalEPA), acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health.

Diesel engines emit a complex mixture of air pollutants, composed of gaseous and solid material. The solid emissions in diesel exhaust are known as diesel particulate matter (DPM). In 1998, California identified DPM as a TAC based on its potential to cause cancer, premature death, and other health problems (e.g., asthma attacks and other respiratory symptoms). Those most vulnerable are children whose lungs are still developing and the elderly who may have other serious health problems. Overall, diesel engine emissions are responsible for the majority of California’s known cancer risk from outdoor air pollutants. Diesel engines also contribute to California’s $PM_{2.5}$ air quality problems. In addition, diesel soot causes visibility reduction (CARB 2011).

2.4 REGULATORY SETTING

Air quality is defined by ambient air concentrations of specific pollutants identified by the USEPA to be of concern with respect to health and welfare of the general public. The USEPA is responsible for enforcing the Federal CAA of 1970 and its 1977 and 1990 Amendments. The CAA required the USEPA to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established both primary and secondary standards for several pollutants (called "criteria" pollutants, specifically, ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, and lead). Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and the public welfare from air pollutants in the atmosphere. The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. CARB has established the California Ambient Air Quality Standards (CAAQS) for the six criteria pollutants through the California Clean Air Act of 1988 (CCAA), and has established CAAQS for additional pollutants, including sulfates, H_2S, vinyl chloride, and visibility-reducing particles. Table 1, *California and National Ambient Air Quality Standards*, shows the federal and state ambient air quality standards.

Areas that do not meet the NAAQS or the CAAQS for a particular pollutant are considered to be "nonattainment areas" for that pollutant. On April 30, 2012, the SDAB was classified as a marginal nonattainment area for the 8-hour NAAQS for ozone. The SDAB is currently classified as a nonattainment area under the CAAQS for ozone, PM_{10}, and $PM_{2.5}$. The SDAB is an attainment area for the NAAQS and CAAQS for all other criteria pollutants (SDAPCD 2019).

CARB is the state regulatory agency with authority to enforce regulations to both achieve and maintain the NAAQS and CAAQS. The local air district has the primary responsibility for the development and implementation of rules and regulations designed to attain the NAAQS and CAAQS, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. The SDAPCD is the local agency responsible for the administration and enforcement of air quality regulations for the County.

The SDAPCD and San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The San Diego County Regional Air Quality Strategy (RAQS) was initially adopted in 1991, and is updated on a triennial basis. The most recent version of the RAQS was adopted by the SDAPCD in 2016. The local RAQS, in combination with those from all other California nonattainment areas with serious (or worse) air quality problems, is submitted to the CARB, which develops the California State Implementation Plan (SIP).

The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in the County, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and by the County as part of the development of the County's General Plan.

The SIP relies on the same information from SANDAG to develop emission inventories and emission reduction strategies that are included in the attainment demonstration for the air basin.

Table 1
CALIFORNIA AND NATIONAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary[a]	Secondary[b]
O_3	1 Hour	0.09 ppm (180 µg/m^3)	–	–
	8 Hour	0.070 ppm (137 µg/m^3)	0.070 ppm (147 µg/m^3)	Same as Primary
PM10	24 Hour	50 µg/m^3	150 µg/m^3	Same as Primary
	AAM	20 µg/m^3	–	Same as Primary
PM2.5	24 Hour	–	35 µg/m^3	Same as Primary
	AAM	12 µg/m^3	12.0 µg/m^3	Same as Primary
CO	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	–
	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	–
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)	–	–
NO_2	AAM	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary
	1 Hour	0.18 ppm (339 µg/m^3)	0.100 ppm (188 µg/m^3)	–
SO_2	24 Hour	0.04 ppm (105 µg/m^3)	–	–
	3 Hour	–	–	0.5 ppm (1,300 µg/m^3)
	1 Hour	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)	–
Lead	30-day Avg.	1.5 µg/m^3	–	–
	Calendar Quarter	–	1.5 µg/m^3	Same as Primary
	Rolling 3-month Avg.	–	0.15 µg/m^3	
Visibility Reducing Particles	8 hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	**No Federal Standards**	
Sulfates	24 Hour	25 µg/m^3		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)		

Source: CARB 2016
Note: More detailed information in the data presented in this table can be found at the CARB website (www.arb.ca.gov).
O_3: ozone; ppm: parts per million; µg/m^3: micrograms per cubic meter; PM_{10}: large particulate matter;
AAM: Annual Arithmetic Mean; $PM_{2.5}$: fine particulate matter; CO: carbon monoxide;
mg/m^3: milligrams per cubic meter; NO_2 nitrogen dioxide; SO_2: sulfur dioxide; km: kilometer; –: No Standard.

[a] National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

[b] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

The current federal and state attainment status (Table 2, *Federal and State Air Quality Designation*) for the County is as follows:

Table 2
FEDERAL AND STATE AIR QUALITY DESIGNATION

Criteria Pollutant	Federal Designation	State Designation
Ozone (1-hour)	Attainment[1]	Nonattainment
Ozone (8-hour)	Nonattainment	Nonattainment
CO	Attainment	Attainment
PM_{10}	Unclassifiable[2]	Nonattainment
$PM_{2.5}$	Attainment	Nonattainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	(No federal standard)	Attainment
Hydrogen Sulfide	(No federal standard)	Unclassifiable
Visibility	(No federal standard)	Unclassifiable

Source: SDAPCD 2019

[1] The federal 1-hour standard of 12 pphm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.

[2] At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

2.5 BACKGROUND AIR QUALITY

The SDAPCD operates a network of ambient air monitoring stations throughout the County. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the CAAQS and the NAAQS. The nearest ambient monitoring station to the Project site is the Alpine-Victoria Drive Monitoring Station located at 2505 W. Victoria Dr. in Alpine. This station is located approximately 0.8 miles east of the Project site and approximately 0.25 miles north of Interstate 8. The Alpine Station monitors ozone and NO_2. The El Cajon – Lexington Elementary School Monitoring Station, located 10 miles southwest of the Project Site, was used for particulate matter. Air quality data for the monitoring stations is shown on Table 3, *Air Quality Monitoring Data.*

Monitoring data at Alpine-Victoria Drive Monitoring Station have had acceptable levels of NO_2 for the years 2015 to 2017. Violations of the state 1-hour standard for ozone occurred multiple times in all three years. Violations occurred frequently for the state and federal 8-hour standards for ozone in the past three years. Data from the El Cajon Monitoring Station showed no exceedances or insufficient data for max daily PM_{10} and $PM_{2.5}$. The annual average for state PM_{10} was exceeded in 2015 and 2016.

Table 3
AIR QUALITY MONITORING DATA

Air Pollutant	2015	2016	2017
Ozone (O_3) – Alpine Monitoring Station			
Max 1-hour (ppm)	0.097	0.104	0.109
Days > CAAQS (0.09 ppm)	2	6	11
Max 8-hour (ppm)	0.085	0.091	0.095
Days > NAAQS (0.070 ppm)	30	29	48
Days > CAAQS (0.070 ppm)	31	30	51
Particulate Matter (PM_{10}) – El Cajon Monitoring Station			
Max Daily (µg/m^3)	*	44.1	49.4
Days > NAAQS (150 µg/m^3)	*	*	0
Days > CAAQS (50 µg/m^3)	*	*	0
Annual Average (µg/m^3)	23.2	21.6	17.5
Exceed CAAQS (20 µg/m^3)	Yes	Yes	No
Particulate Matter ($PM_{2.5}$) – El Cajon Monitoring Station			
Max Daily (µg/m^3)	*	23.9	31.8
Days > NAAQS (35 µg/m^3)	*	*	0
Annual Average (µg/m^3)	*	*	9.5
Exceed NAAQS (15 µg/m^3)	-	-	No
Exceed CAAQS (12 µg/m^3)	-	-	No
Nitrogen Dioxide (NO_2) – Alpine Monitoring Station			
Max 1-hour (ppm)	0.048	0.033	0.028
Days > NAAQS (0.10 ppm)	0	0	0
Days > CAAQS (0.18 ppm)	0	0	0

Sources: CARB 2018
Notes: > = exceeding; ppm = parts per million; µg/m^3 = micrograms per cubic meter;
* = Insufficient data available to determine the value.

3.0 SIGNIFICANCE CRITERIA AND ANALYSIS METHODOLOGIES

3.1 SIGNIFICANCE CRITERIA

The County (2007) has approved guidelines for determining significance (County Guidelines) based on Appendix G.III of the State California Environmental Quality Act (CEQA) Guidelines, which provide guidance that a project would have a significant environmental impact if it would:

1. Conflict with or obstruct the implementation of the San Diego RAQS or applicable portions of the SIP;

2. Result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation;

3. Result in a cumulatively considerable net increase for which the SDAB is in non-attainment of NAAQS or CAAQS;

4. Expose sensitive receptors (including, but not limited to, residences, schools, hospitals, resident care facilities, or day-care centers) to substantial pollutant concentrations; and/or

5. Create objectionable odors affecting a substantial number of people.

To determine whether a project would (a) result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation, or (b) result in a cumulatively considerable net increase of PM_{10} or exceed quantitative thresholds for ozone precursors, NO_X and VOCs, project emissions may be evaluated based on the quantitative emission thresholds established by the SDAPCD. As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 for the preparation of Air Quality Impact Assessments (AQIAs). The County has also adopted the SCAQMD's screening threshold of 55 pounds (lbs) per day or 10 tons per year as a significance threshold for $PM_{2.5}$.

For CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality. The screening thresholds are included in Table 4, *Screening-Level Thresholds for Air Quality Impact Analysis*.

Table 4
SCREENING-LEVEL THRESHOLDS FOR AIR QUALITY IMPACT ANALYSIS

Pollutant	Total Emissions		
Construction Emissions (Pounds per Day)			
Respirable Particulate Matter (PM_{10})	100		
Fine Particulate Matter ($PM_{2.5}$)	55		
Oxides of Nitrogen (NO_X)	250		
Oxides of Sulfur (SO_X)	250		
Carbon Monoxide (CO)	550		
Volatile Organic Compounds (VOCs)	75		
Operational Emissions			
	Pounds per Hour	**Pounds per Day**	**Tons per Year**
Respirable Particulate Matter (PM_{10})	---	100	15
Fine Particulate Matter ($PM_{2.5}$)	---	55	10
Oxides of Nitrogen (NO_X)	25	250	40
Oxides of Sulfur (SO_X)	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6
Toxic Air Contaminant Emissions			
Excess Cancer Risk	1 in 1 million 10 in 1 million with T-BACT		
Non-Cancer Hazard	1.0		

Source: SDACPD Rule 20.2 and Rule 1210
T-BACT = Toxics Best Available Control Technology

3.2 METHODOLOGY

The air quality impact analysis contained in this report was prepared in accordance with the methodologies provided by the County as included in the *Guidelines for Determining Significance and Report Format and Content Requirements for Air Quality* (County 2007).

Criteria pollutant and ozone precursor emissions from Project construction and operation are assessed using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. CalEEMod is a computer model developed by SCAQMD with the input of several air quality management and pollution control districts to estimate criteria air pollutant emissions from various urban land uses. CalEEMod has the ability to calculate both mobile (i.e., vehicular) and area source or stationary source emissions. CalEEMod allows land use selections that include project land use types and sizes.

3.2.1 Construction Emissions

CalEEMod incorporates CARB's EMFAC2014 model for on-road vehicle emissions and the OFFROAD2011 model for off-road vehicle emissions. CalEEMod is designed to model construction emissions for land development projects and allows for the input of project-specific information, such as the number of equipment, hours of operations, duration of construction activities, and selection of emission control measures. The analysis assessed maximum daily emissions from individual construction activities, including site preparation, demolition, grading, underground infrastructure, building construction, paving, and architectural coating.

Construction would require heavy equipment during site preparation, demolition, grading, installation of underground infrastructure, building construction, and paving. Construction equipment estimates are based on default values in CalEEMod, Version 2016.3.2 model and input from the Project Applicant. Table 5, *Construction Equipment Assumptions*, presents a summary of the assumed equipment that would be involved in each stage of construction.

Table 5
CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Phase	Equipment	Number
Site Preparation	Graders	1
	Tractors/Loaders/Backhoes	1
	Skid Steer Loaders	1
Grading	Concrete/Industrial Saws	1
	Rubber Tired Dozers	1
	Tractors/Loaders/Backhoes	2
Demolition	Concrete/Industrial Saws	1
	Rubber Tired Dozers	1
	Tractors/Loaders/Backhoes	2
	Skid Steer Loaders	1
Underground Utilities	Excavators	2
	Tractors/Loaders/Backhoes	1
Paving	Cement and Mortar Mixers	4
	Pavers	1
	Rollers	1
	Tractors/Loaders/Backhoes	1
Building Construction	Cranes	1
	Forklifts	2
	Tractors/Loaders/Backhoes	2
	Rough Terrain Forklifts	1
Architectural Coating	Air Compressors	1

Source: CalEEMod (output data, including equipment horsepower, is provided in Appendix A).

The construction schedule was determined by using CalEEMod defaults, input from the Project Applicant, and standard assumptions for similarly sized projects, taking into consideration the size of the Project in order to estimate necessary construction activities and length of days per construction activity. As shown in Table 6, *Anticipated Construction Schedule*, Project development was assumed to start in June 2019 and is projected to end December 2019.

Construction would begin in June 2019 with approximately three weeks of site preparation and eight weeks of grading. During grading, approximately 19,000 cubic yards of soil would be imported over six weeks. Demolition would commence in July 2019, for approximately three weeks, and would demolish the existing 2,454-square foot convenience store and 23,642-square feet of hardscape. Underground utilities installation would commence concurrently with demolition and would be completed in one month. Building construction was modeled to begin in August 2019 and is expected to last five months. The paving and architectural coating phases would occur consecutively immediately follow building construction and was modeled to be complete in December 2019.

The quantity, duration, and the intensity of construction activity have an effect on the amount of construction emissions and their related pollutant concentrations that occur at any one time. As such, the emission forecasts provided herein reflect a specific set of conservative assumptions based on the expected construction scenario wherein a relatively large amount of construction is occurring in a relatively intensive manner. Because of this conservative assumption, actual emissions could be less than those forecasted. If construction is delayed or occurs over a longer time period, emissions could be reduced because of (1) a more modern and cleaner-burning construction equipment fleet mix than incorporated in the CalEEMod, and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval). A complete listing of the assumptions used in the analysis and model output is provided in Appendix A of this report.

Table 6
ANTICIPATED CONSTRUCTION SCHEDULE

Construction Activity	Construction Period		
	Start	End	Number of Working Days
Site Preparation	6/1/2019	6/21/2019	15
Grading	6/1/2019	7/26/2019	40
Demolition	7/1/2019	7/19/2019	15
Underground Utilities	7/1/2019	7/26/2019	20
Building Construction	8/1/2019	12/18/2019	100
Paving	12/19/2019	12/24/2019	4
Architectural Coating	12/25/2019	12/31/2019	5

Source: CalEEMod (output data is provided in Appendix A).

Although it was assumed that all of the dust control measures listed in Section 1.3 of this report would be implemented, to model the most conservative construction estimates, only application of water and limiting vehicle speed to 15 mph during construction activities were taken into consideration. Based on CalEEMod, the fugitive PM_{10} and $PM_{2.5}$ control efficiency for watering two times per day is 55 percent.

The Project would have to conform to the VOC limits included in SDAPCD Rule 67. According to Rule 67, non-residential exterior and interior coatings must have a content less than or equal to 250 g/L. For modeling the Project's emissions in CalEEMod, the Project was assumed to use coatings with a VOC

content less than 50 g/L for all interior and exterior coatings. The quantities of coatings that would be applied to the interior and exterior of the new buildings were estimated according to CalEEMod default assumptions. A complete listing of the assumptions used in the analysis and model output is provided in Appendix A of this report.

3.2.2 Operational Emissions

Operational emissions were modeled for the earliest feasible construction completion year, 2019. The model estimates Project-generated, long-term regional area-source and mobile-source emissions of criteria air pollutants and ozone precursors. Operational emissions from area sources include the combustion of natural gas for heating, cooking, and hot water, engine emissions from landscape maintenance equipment, and VOC emissions from repainting of buildings.

CalEEMod default motor vehicle emission rates are based on CARB's EMFAC state-wide emission factors for the County region which are incorporated into CalEEMod. Default vehicle speeds, trip lengths, trip purpose, and trip type percentages for the drive-thru restaurant, sit-down restaurant, and convenience store with gas pumps were used. Trip generation for each land use was based on the Traffic Impact Study (TIS) prepared for the Project (LOS Engineering 2018). As detailed in the TIS, the Project would result in an increase of 951 average daily trips (ADT) above the existing 930 ADT generated by the existing uses, resulting in a total of 1,881 ADT. Model output data sheets are included in Appendix A.

3.2.3 Impacts to Sensitive Receptors

The CARB describes sensitive receptors as residences, schools, day-care centers, playgrounds, medical facilities, or other facilities that may house individuals with health conditions (medical patients or elderly persons/athletes/students/children) that may be adversely affected by changes in air quality. The two primary pollutants of concern regarding health effects for residential development are CO and DPM. DPM is a subset of particulate matter general less than one micrometer in diameter. DPM generated by Project construction equipment is conservatively estimated based on PM_{10} exhaust emissions.

As described above, the closest existing sensitive receptors include residential uses located approximately 800 feet northeast of the Project site and Alpine Family Medicine located approximately 0.2 miles to the south of the Project site across Interstate 8.

4.0 PROJECT IMPACT ANALYSIS

4.1 CONFORMANCE TO THE REGIONAL AIR QUALITY STRATEGY

4.1.1 Guidelines for the Determination of Significance

Would the project conflict with or obstruct the implementation of the San Diego RAQS or applicable portions of the SIP?

The RAQS outlines SDAPCD's plans and control measures designed to attain the CAAQS for ozone. In addition, the SDAPCD relies on the SIP, which includes the SDAPCD's plans and control measures for attaining the ozone NAAQS. These plans accommodate emissions from all sources, including natural sources, through implementation of control measures, where feasible, on stationary sources to attain

the standards. Mobile sources are regulated by the USEPA and CARB, and the emissions and reduction strategies related to mobile sources are considered in the RAQS and SIP.

The RAQS relies on information from CARB and SANDAG, including projected growth in the County, mobile, area and all other source emissions in order to project future emissions and determine from that the strategies necessary for the reduction of stationary source emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and by the County. As such, projects that propose development that is consistent with the growth anticipated by the general plans would be consistent with the RAQS. In the event that a project proposes development which is less dense than anticipated within the General Plan, the project would likewise be consistent with the RAQS. If a project proposes development that is greater than that anticipated in the County General Plan and SANDAG's growth projections upon which the RAQS is based, the project would be in conflict with the RAQS and SIP, and might have a potentially significant impact on air quality. This situation would warrant further analysis to determine if the project and the surrounding projects exceed the growth projections used in the RAQS for the specific subregional area.

4.1.2 Significance of Impacts Prior to Mitigation

The 2016 RAQS are based on projections for residential, commercial, industrial and recreational land uses contained in the current General Plan, adopted in 2011. The General Plan designates the Project site as General Commercial within the Compatible Regional Category 'Village'. The site is zoned C44, Freeway Commercial. The Project, which is demolishing an existing gas station and convenience store and developing a new gas station, convenience store and sit-down restaurant, would be consistent with the General Plan land use designation. Therefore, because the Project is proposing development consistent with the General Plan, it is correspondingly consistent with the RAQS.

Furthermore, as detailed in Section 4.2, below, the Project would not result in a significant air quality impact with regards to construction- and operational-related emissions of ozone precursors or criteria air pollutants. Therefore, it is unlikely that the Project would interfere with the SDAPCD's goals for improving air quality in the SDAB. Because the Project is proposing development consistent with the RAQS and County guidelines, impacts associated with conformance to regional air quality plans would be less than significant.

4.1.3 Mitigation Measures and Design Considerations

Impacts would be less than significant and no mitigation is required.

4.1.4 Conclusions

The Project would conform to the RAQS and SIP and would result in a less than significant impact.

4.2 CONFORMANCE TO FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

4.2.1 Construction Impacts

4.2.1.1 Guidelines for the Determination of Significance

Would the project construction result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation?

To determine whether a project would result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation, project emissions may be evaluated based on the quantitative emission thresholds established by the SDAPCD (as shown in Table 4).

4.2.1.2 Significance of Impacts Prior to Mitigation

General Construction Activities

Emissions related to the construction of the Project would be temporary. Table 7, *Estimated Construction Emissions,* provides a summary of the worst-case daily construction emission estimates by activity. As noted above, it was assumed that dust control measures (watering a minimum of two times daily) would be employed to reduce emissions of fugitive dust during site grading. Where construction activities were assumed to occur simultaneously, the resultant emissions from each activity were summed and compared to the daily emission thresholds to determine significance.

Table 7
ESTIMATED CONSTRUCTION EMISSIONS

Construction Activity	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
	lbs/day					
Site Preparation	1	10	6	<0.5	1	<0.5
Grading	2	29	13	<0.5	2	1
Demolition	1	11	10	<0.5	4	1
Underground Utilities	1	8	9	<0.5	<0.5	<0.5
Building Construction	1	12	10	<0.5	1	1
Paving	1	8	8	<0.5	1	<0.5
Architectural Coating	8	2	2	<0.5	<0.5	<0.5
MAXIMUM DAILY EMISSIONS[1]	**8**	**47**	**31**	**<0.5**	**7**	**3**
Screening-Level Thresholds	*75*	*250*	*550*	*250*	*100*	*55*
Exceedance?	***No***	***No***	***No***	***No***	***No***	***No***

Note: The total presented is the sum of the unrounded values; as such, totals may not add up exactly due to rounding. The CalEEMod model outputs are presented in Appendix A.
Fugitive dust measures (watering twice daily) were applied to control PM_{10} and $PM_{2.5}$ dust emissions.

[1] Maximum daily emissions of VOC occur when during Architectural Coating activities; maximum daily emissions of all other pollutants occur when Demolition, Grading, and Underground Utilities activities overlap.

As shown in Table 7, with implementation of construction BMPs, emissions of all criteria pollutants, including PM_{10} and $PM_{2.5}$, would be below the daily thresholds during construction. The Project's general

construction activities would therefore not conflict with the NAAQS or CAAQS, and would have less than significant impacts.

4.2.1.3 Mitigation Measures and Design Considerations

As discussed in Section 1.3, the Project would incorporate construction BMPs to reduce Project-related emissions. With implementation of those measures, the Project's general construction activities would not exceed the significance thresholds established by the County; therefore, impacts from these activities would be less than significant and no mitigation is required.

4.2.1.4 Conclusions

With implementation of BMPs described in Section 1.3, the Project would result in less than significant construction related emissions and impacts would be less than significant.

4.2.2 Operational Impacts

4.2.2.1 Guidelines for the Determination of Significance

Based on the County Guidelines (2007), operational impacts would be potentially significant if they exceed the quantitative screening-level thresholds for criteria pollutants as listed under Section 4.2.1.1.

4.2.2.2 Significance of Impacts Prior to Mitigation

Main operational emissions include area sources, such as landscaping equipment and consumer products, mobile emissions associated with traffic, and energy emissions from on-site energy use. The Project would remove the existing convenience store and drive-thru restaurant and therefore, modeling considers these existing operational emissions as negative emissions contributing to the Project. Operational emission calculations and model outputs are provided in Appendix A. Table 8, Estimated Daily *Operational Emissions*, presents the summary of operational emissions for the Project.

As shown in Table 8, the Project's net emissions of all criteria pollutants during operation would be below the daily thresholds. Therefore, the Project's operational emissions would result in less than significant impacts.

Table 8
ESTIMATED DAILY OPERATIONAL EMISSIONS

Category	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
	lbs/day					
Project						
Area	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Energy	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mobile	3	9	23	<0.5	4	1
PROJECT TOTAL	**3**	**10**	**23**	**<0.5**	**4**	**1**
Existing Operations To Be Removed						
Area	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Energy	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mobile	1	5	11	<0.5	2	1
EXISTING OPERATIONS TOTAL	**1**	**5**	**11**	**<0.5**	**2**	**1**
Net Operations						
NET OPERATIONAL TOTAL	**2**	**5**	**12**	**<0.5**	**2**	**1**
Screening-Level Thresholds	*75*	*250*	*550*	*250*	*100*	*55*
Exceedance?	***No***	***No***	***No***	***No***	***No***	***No***

Note: The total presented is the sum of the unrounded values; as such, totals may not add up exactly due to rounding. The CalEEMod model outputs are presented in Appendix A.

4.2.2.3 Mitigation Measures and Design Considerations

As listed in Section 1.3, a wide range of current regulatory codes, Project design features, and other measures would be incorporated into the Project. The Project would incorporate energy-efficiency features that would meet the 2016 California Title 24 Energy Efficiency Standards. Given the result of a less than significant impact, no additional mitigation measures would be required.

4.2.2.4 Conclusions

Operational emissions of criteria pollutants for the Project buildout would be below the significance thresholds and, therefore, would be less than significant under CEQA.

4.3 CUMULATIVELY CONSIDERABLE NET INCREASE OF CRITERIA POLLUTANTS

4.3.1 Construction Impacts

Based on the County Guidelines (2007), a project would result in a cumulatively significant impact if the project results in a significant contribution to the cumulative increase in pollutants for which the SDAB is listed as nonattainment for the CAAQS and NAAQS. As discussed in Section 2.0, the SDAB is designated as a nonattainment area for the NAAQS for ozone and the CAAQS for ozone, PM_{10}, and $PM_{2.5}$.

Cumulatively considerable net increases during the construction phase would typically happen if two or more projects near each other are simultaneously constructing projects. A project that has a significant direct impact on air quality with regard to emissions of PM_{10}, $PM_{2.5}$, NO_X, or VOCs during construction would also have a significant cumulatively considerable net increase. In the event direct impacts from a proposed project are less than significant, a project may still have a cumulatively considerable impact on air quality if the emissions of concern from the proposed project, in combination with the emissions of

concern from other proposed or reasonably foreseeable future projects within a proximity relevant to the pollutants of concern, are in excess of the guidelines identified in Section 3.0.

4.3.1.1 Guidelines for the Determination of Significance

The following thresholds are used for the assessment of cumulative construction impacts:

Would the project result in emissions that exceed 250 lbs per day of NO_X or 75 lbs per day of VOCs?

Would the project result in emissions of $PM_{2.5}$ that exceed 55 lbs per day?

Would the project result in emissions of PM_{10} that exceed 100 lbs per day and increase the ambient PM_{10} concentration by 5.0 micrograms per cubic meter ($\mu g/m^3$) or greater at the maximum exposed individual?

4.3.1.2 Significance of Impacts Prior to Mitigation

Short-term emissions associated with construction generally result in localized impacts. As shown in the Section 4.2.1, the emissions of NO_X, VOCs, PM_{10}, and $PM_{2.5}$ would be below significance levels. Short-term cumulative impacts related to air quality could occur if construction of the Project and other projects in the surrounding area were to occur simultaneously. In particular, with respect to local impacts, the consideration of cumulative construction particulate matter (PM_{10} and $PM_{2.5}$) impacts is limited to cases when projects constructed simultaneously are within a few hundred yards of each other because of (1) the combination of the short range (distance) of particulate matter dispersion (especially when compared to gaseous pollutants) and (2) the SDAPCD's required dust control measures which further limit particulate matter dispersion from a project site. There are no known projects in the vicinity of the Project where major construction involving demolition activities, cut-and-fill operations, or soil import/export, would occur concurrently with the Project. Therefore, Project construction is not anticipated to result in a cumulatively significant impact on air quality.

Section 4.2 concludes that the Project would not result in a direct impact to air quality during construction; and as discussed in Section 4.4 below, the Project would not have significant impacts to sensitive receptors during construction. Therefore, construction of the Project would not result in a cumulatively considerable contribution to a significant air quality impact pertaining to NO_X, VOCs, PM_{10}, and $PM_{2.5}$.

4.3.1.3 Mitigation Measures and Design Considerations

Control measures for construction are discussed in Section 1.3. As discussed in that section, implementation of construction BMPs controlling fugitive dust emissions would minimize the Project's contribution to cumulative air quality impacts from construction activities. All projects that could contribute to cumulative air quality conditions would also need to comply with SDAPCD Rules for dust control and construction equipment. No other mitigation measures would be required.

4.3.1.4 Conclusions

Cumulative impacts associated with Project construction would be less than cumulatively considerable and therefore less than significant.

4.3.2 Operational Impacts

As discussed above, based on the County Guidelines (2007), a project would result in a cumulatively significant impact if the project results in a significant contribution to the cumulative increase in NO_X, VOCs, PM_{10}, and $PM_{2.5}$. In accordance with the guidelines, a project that does not conform to the RAQS and/or has a significant direct impact on air quality with regard to operational emissions of nonattainment pollutants would also have a cumulatively considerable net increase. Also, projects that cause road intersections to operate at or below a level of service (LOS) E and create a CO hotspot create a cumulatively considerable net increase of CO.

4.3.2.1 Guidelines for the Determination of Significance

The following thresholds are used for the assessment of cumulatively considerable net increases in air pollutants during the operational phase:

Would the project conform to the RAQS and/or have a significant direct impact on air quality with regard to operational emissions of PM_{10}, $PM_{2.5}$, NO_X, and/or VOCs, which would also have a significant cumulatively considerable net increase in these emissions?

Would the project cause road intersections or roadway segments to operate at or below LOS E and create a CO hotspot that would result in a cumulatively considerable net increase of CO?

4.3.2.2 Significance of Impacts Prior to Mitigation

As described in Sections 4.1 and 4.2, the Project would be consistent with the RAQS, and would not exceed the County's screening-level thresholds. As discussed in Section 4.4.2, the Project would not create a CO hotspot that would result in a cumulatively considerable net increase of CO. Therefore, the Project would not create a cumulatively considerable net increase in criteria pollutants associated with operation and impacts would be less than significant.

4.3.2.3 Mitigation Measures and Design Considerations

The Project would incorporate the regulations described in Section 1.3. No further mitigation would be required.

4.3.2.4 Conclusions

Cumulative impacts associated with Project operation would be less than significant.

4.4 IMPACTS TO SENSITIVE RECEPTORS

4.4.1 Guidelines for the Determination of Significance

Would the project expose sensitive receptors to substantial pollutant concentrations?

The guidelines of significance listed below are used by the County to address the above question:

Would the project place sensitive receptors near CO hotspots or creates CO hotspots near sensitive receptors?

Would project implementation result in exposure to TACs resulting in a maximum incremental cancer risk greater than 1 in 1 million without application of Toxics-Best Available Control Technology or a health hazard index greater than 1 and, thus, be deemed as having a potentially significant impact?

4.4.2 Significance of Impacts Prior to Mitigation

4.4.2.1 CO Concentrations (CO Hotspot Analysis)

CO hotspots are most likely to occur at heavily congested intersections where idling vehicles increase localized CO concentrations. The County guidelines call for a CO hotspot analysis if the Project would:

- place sensitive receptors within 500 feet of a signalized intersection with a LOS of E or F, with peak-hour trips exceeding 3,000 vehicles; or
- cause intersections to operate at LOS E or F, with peak-hour trips exceeding 3,000 vehicles.

The Project would generate approximately 1,881 ADT during operation, including pass-by, diverted, and primary trips (LOS Engineering 2018). All intersections and segments evaluated in the TIS would continue to operate at LOS D or better. As such, the addition of Project-generated traffic is not expected to result in a change in operating conditions from acceptable levels to deficient level at any intersection locations. As a result, Project implementation would not result in the formation of CO hotspots. Impacts to sensitive receptors by CO hotspots would be less than significant.

4.4.2.2 Construction-related Diesel Health Risk

Diesel engines emit a complex mixture of air pollutants, including gaseous material and DPMs. DPM emissions would be released from the on-site construction equipment associated with the Project. CARB has declared that DPM from diesel engine exhaust is a TAC. Additionally, Office of Environmental Health Hazard Assessment has determined that chronic exposure to DPM can cause carcinogenic and non-carcinogenic health effects. For this reason, although other pollutants would be generated, DPM would be the primary pollutant of concern.

The dose to which receptors are exposed is the primary factor used to determine health risk related to DPM. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher level of health risk for any exposed receptor.

Construction activities associated with the Project would be sporadic, transitory, and short term in nature (i.e., less than one year). The assessment of cancer risk is typically based on a 30-year exposure period. Because exposure to diesel exhaust during this short-term construction period would be well below the 30-year exposure period, construction of the Project is not anticipated to result in an elevated cancer risk to exposed persons. As shown in Table 7, the highest daily emissions of diesel exhaust PM_{10} during construction would be approximately 4 lbs/day during the demolition phase. Emissions of PM_{10} (which includes equipment emissions of DPM) would be well below 100 lbs/day significance level threshold. Additionally, all construction activities would occur during daytime hours, when many residents typically are not home, thus limiting exposure from construction-related emissions to these receptors. As such, considering the relatively low mass of DPM emissions that would be generated by construction activities, the relatively short duration construction activities, and the highly dispersive

properties of DPM, Project-related TAC emission impacts during construction would be less than significant and no mitigation is required.

4.4.2.3 Operation-related Health Risk

Similar to the existing facility, the new fuel facility would require authority to construct (ATC) and permit to operate (PTO) approval from the SDAPCD, which will review the facility design and location for compliance with SDAPCD standards for criteria pollutants and air quality. All tanks and dispensers would be equipped with certified vapor recovery systems per SDAPCD Rules 61.3 and 61.4. Rules 61.3 and 61.4 require Phase I and Phase II Enhanced Vapor Recovery (EVR) air pollution control equipment technology to allow transfer of fuel (containing VOCs) into stationary storage tanks or into vehicle fuel tanks. The Phase I EVR equipment controls the vapors in the return path from the tanks back to the tanker truck during offloading filling operations. Phase I EVR systems are 98 percent effective in controlling fugitive emissions from escaping into the environment. The Phase II EVR equipment, which also includes "in-station diagnostics," controls and monitors the vapors in the return path from the vehicles back to the tanks. Phase II EVR systems are 95 percent effective in controlling fugitive emissions from escaping into the environment.

Exposure to TACs generated by fuel dispensing facilities is a concern identified in the CARB Air Quality and Land Use Handbook (CARB 2005). The CARB guidelines indicate that siting sensitive land uses (such as residential uses) within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater) or 50 feet of a typical gas station should be avoided to reduce exposure to TACs such as benzene. As described previously, the nearest sensitive receptors include residential uses located approximately 800 feet northeast of the Project and are outside of the avoidance guidelines.

While there would be other toxic substances, such as cleaning agents in use on site, compliance with State and federal handling regulations would ensure that emissions remain below a level of significance. The use of such substances such as cleaning agents is regulated by the 1990 Federal Clean Air Act Amendments as well as California-adopted regulations for the chemical composition of consumer products. As such, Project-related TAC emission impacts during operation would be less than significant and no mitigation is required.

4.4.3 Mitigation Measures and Design Considerations

Impacts are less than significant; therefore, no mitigation measures are required.

4.4.4 Conclusions

Impacts to sensitive receptors would be less than significant.

4.5 ODOR IMPACTS

4.5.1 Guidelines for the Determination of Significance

Based on the County Guidelines (2007), a project would have a significant impact if it would generate objectionable odors or place sensitive receptors next to existing objectionable odors that would affect a considerable number of persons or the public.

SDAPCD Rule 51 (Public Nuisance) and California Health & Safety Code, Division 26, Part 4, Chapter 3, Section 541700, prohibit the emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of the public. Projects required to obtain permits from SDAPCD, typically industrial and some commercial projects, are evaluated by SDAPCD staff for potential odor nuisance and conditions may be applied (or control equipment required), where necessary, to prevent occurrence of public nuisance.

4.5.2 Significance of Impacts Prior to Mitigation

Project construction could result in minor amounts of odor compounds associated with diesel heavy equipment exhaust. Diesel exhaust and VOCs from application of asphalt and architectural coatings would be emitted during construction of the Project. The odor of these emissions is objectionable to some; however, emissions would disperse rapidly from the Project site and therefore, should not be at a level that would affect a substantial number of people. Further, construction operations would be temporary. As a result, impacts associated with odors during construction are not considered significant.

According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations. The Project, involving a fueling station, convenience store, and restaurants, would not include any of these uses. The fueling station would emit odors during operation in the form of exhaust from vehicles and operation of the fueling pumps. As described previously, all tanks and dispensers would be equipped with certified vapor recovery systems per SDAPCD Rules 61.3 and 61.4; requiring Phase I and Phase II EVR air pollution control equipment which is 98 and 95 percent effective in controlling fugitive emissions from escaping into the environment, respectively. Any increase in odor emission would be minimal, as vehicle exhaust is already prevalent in the area due to its proximity to Interstate 8, and the existing use of the site as a fueling station. Odors related to food preparation from the Project's restaurant would not be substantial enough to be considered a nuisance due to the dilution of the odors over the distance to nearby sensitive receptors. Solid waste generated by the proposed on-site uses would be collected by a contracted waste hauler, ensuring that any odors resulting from on-site waste would be managed and collected in a manner to prevent the proliferation of odors. Operational odor impacts would be less than significant.

4.5.3 Mitigation Measures and Design Considerations

Because the Project would not generate objectionable odors or place sensitive receptors near existing odor sources that would affect a considerable number of persons or the public. As described previously, all tanks and dispensers would be equipped with certified vapor recovery systems per SDAPCD Rule 61.3 and 61.4; requiring Phase I and Phase II EVR air pollution control equipment which is 98 and 95 percent effective in controlling fugitive emissions from escaping into the environment, respectively. No mitigation measures or additional design considerations are required.

4.5.4 Conclusions

Due to the nature of the development, there are no significant odorous air emissions anticipated from construction or operation; therefore, impacts are anticipated to be less than significant.

5.0 SUMMARY OF RECOMMENDED PROJECT DESIGN FEATURES, IMPACTS, AND MITIGATION

5.1 PROJECT DESIGN FEATURES

As described in Section 1.3, the Project would incorporate measures to minimize fugitive dust emissions, including watering twice per day during grading and stabilization of storage piles. The Project would comply with Rule 55, which requires that no visible dust is emitted beyond the property line for a period or periods aggregating more than 3 minutes in any 60-minute period, and would incorporate measures to minimize the track-out/carry-out of visible roadway dust.

A wide range of current regulatory codes, Project design features, and other measures would be incorporated into the Project. The Project would incorporate energy-efficiency features that would meet 2016 California Title 24 Energy Efficiency Standards. Low VOC coatings will be used during construction and maintenance in accordance with SDAPCD Rule 67 requirements.

5.2 PROJECT IMPACTS

As described in Section 4.1, the Project would be consistent with the RAQS.

The control measures listed above constitute BMPs for dust control. With the implementation of construction BMPs, air pollutant emissions impacts associated with Project construction would be less than significant.

Operational emissions would be associated with vehicle trips generated by the development, along with area sources such as energy use and landscaping. Based on the evaluation of air emissions, the Project emissions would be below the screening-level thresholds for all criteria pollutants and would be less than significant for air quality.

The Project would not result in any cumulatively considerable emissions of nonattainment air pollutants that would exceed the screening level thresholds.

Impacts associated with exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

An evaluation of odors from general Project construction and operation of the Project indicated that odor impacts would be less than significant.

5.3 PROJECT MITIGATION

Because the Project would not result in significant impacts, no mitigation is required.

6.0 REFERENCES

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7.0 LIST OF PREPARERS

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Appendix A

CalEEMod Output

Tavern Road Gas Station - Proposed Project

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Convenience Market With Gas Pumps	2.04	1000sqft	0.05	2,040.00	0
Fast Food Restaurant with Drive Thru	2.74	1000sqft	0.06	2,740.00	0
High Turnover (Sit Down Restaurant)	2.40	1000sqft	0.06	2,400.00	0
Parking Lot	61.00	Space	0.55	24,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2019
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Demo: 3 weeks
Site Prep: 3 weeks
Grading: 8 weeks
Buildling: 5 months
Paving: 4 days
Trenching: 4 weeks

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Site Prep: Skid steer
Demo: Skid steer
Trenching: Backhoe, excavator, mini excavator
Building: Petty Bone

Grading -

Demolition - Demolish 2,454 sf existing building and 23,642 sf of asphalt
(113 T building demo + 4,569 T asphalt demo)

Trips and VMT - Demo: 20 truck loads
Site Prep: 10 truck loads
Grading: 1,000 truck trips and 30 mile trip length

Architectural Coating - Low VOC coating

Vehicle Trips - Per LOS Engineering, Inc. 2018

Area Coating - Low VOC coating

Sequestration - Per ZAAP Site Plan dated 5.4.18

Construction Off-road Equipment Mitigation -

Water Mitigation - Per CalGreen

Waste Mitigation - Per AB-341

Tavern Road Gas Station - Proposed Project - San Diego County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	40.00
tblConstructionPhase	NumDays	5.00	4.00
tblConstructionPhase	NumDays	1.00	15.00
tblConstructionPhase	PhaseEndDate	11/20/2019	12/31/2019
tblConstructionPhase	PhaseEndDate	11/6/2019	12/18/2019
tblConstructionPhase	PhaseEndDate	6/14/2019	7/19/2019
tblConstructionPhase	PhaseEndDate	6/19/2019	7/26/2019
tblConstructionPhase	PhaseEndDate	11/13/2019	12/24/2019
tblConstructionPhase	PhaseEndDate	6/17/2019	6/21/2019
tblConstructionPhase	PhaseStartDate	11/14/2019	12/25/2019
tblConstructionPhase	PhaseStartDate	6/20/2019	8/1/2019
tblConstructionPhase	PhaseStartDate	6/1/2019	7/1/2019
tblConstructionPhase	PhaseStartDate	6/18/2019	6/1/2019
tblConstructionPhase	PhaseStartDate	11/7/2019	12/19/2019
tblConstructionPhase	PhaseStartDate	6/15/2019	6/1/2019
tblGrading	MaterialExported	0.00	190.00
tblGrading	MaterialImported	0.00	19,000.00

tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblSequestration	NumberOfNewTrees	0.00	23.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripNumber	463.00	40.00
tblTripsAndVMT	HaulingTripNumber	24.00	20.00
tblTripsAndVMT	HaulingTripNumber	2,375.00	2,000.00
tblVehicleTrips	ST_TR	1,448.33	64.71
tblVehicleTrips	ST_TR	722.03	498.18
tblVehicleTrips	ST_TR	158.37	160.00
tblVehicleTrips	SU_TR	1,182.08	64.71
tblVehicleTrips	SU_TR	542.72	498.18
tblVehicleTrips	SU_TR	131.84	160.00
tblVehicleTrips	WD_TR	845.60	64.71
tblVehicleTrips	WD_TR	496.12	498.18
tblVehicleTrips	WD_TR	127.15	160.00

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					
2019	0.1349	1.4561	0.9994	2.6600e-003	0.1080	0.0601	0.1681	0.0267	0.0559	0.0825	0.0000	249.0838	249.0838	0.0446	0.0000	250.1984
Maximum	**0.1349**	**1.4561**	**0.9994**	**2.6600e-003**	**0.1080**	**0.0601**	**0.1681**	**0.0267**	**0.0559**	**0.0825**	**0.0000**	**249.0838**	**249.0838**	**0.0446**	**0.0000**	**250.1984**

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					
2019	0.1349	1.4561	0.9994	2.6600e-003	0.0689	0.0601	0.1290	0.0175	0.0559	0.0734	0.0000	249.0837	249.0837	0.0446	0.0000	250.1982
Maximum	**0.1349**	**1.4561**	**0.9994**	**2.6600e-003**	**0.0689**	**0.0601**	**0.1290**	**0.0175**	**0.0559**	**0.0734**	**0.0000**	**249.0837**	**249.0837**	**0.0446**	**0.0000**	**250.1982**

	ROG	NOx	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**	**36.21**	**0.00**	**23.27**	**34.23**	**0.00**	**11.06**	**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	6-1-2019	8-31-2019	0.9977	0.9977
2	9-1-2019	9-30-2019	0.1448	0.1448
		Highest	0.9977	0.9977

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	0.0315	1.0000e-005	6.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2200e-003	1.2200e-003	0.0000	0.0000	1.3000e-003
Energy	4.8600e-003	0.0442	0.0371	2.6000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003	0.0000	124.2462	124.2462	3.9900e-003	1.5200e-003	124.7975
Mobile	0.4815	1.7243	3.9815	9.2500e-003	0.6754	0.0112	0.6865	0.1809	0.0105	0.1914	0.0000	851.5868	851.5868	0.0608	0.0000	853.1065
Waste						0.0000	0.0000		0.0000	0.0000	13.4482	0.0000	13.4482	0.7948	0.0000	33.3172
Water						0.0000	0.0000		0.0000	0.0000	0.5429	7.9800	8.5229	0.0561	1.3800e-003	10.3371
Total	**0.5179**	**1.7684**	**4.0192**	**9.5100e-003**	**0.6754**	**0.0145**	**0.6899**	**0.1809**	**0.0139**	**0.1947**	**13.9911**	**983.8141**	**997.8052**	**0.9156**	**2.9000e-003**	**1,021.5597**

2.2 Overall Operational

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	0.0315	1.0000e-005	6.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2200e-003	1.2200e-003	0.0000	0.0000	1.3000e-003
Energy	4.8600e-003	0.0442	0.0371	2.6000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003	0.0000	124.2462	124.2462	3.9900e-003	1.5200e-003	124.7975
Mobile	0.4815	1.7243	3.9815	9.2500e-003	0.6754	0.0112	0.6865	0.1809	0.0105	0.1914	0.0000	851.5868	851.5868	0.0608	0.0000	853.1065
Waste						0.0000	0.0000		0.0000	0.0000	10.0861	0.0000	10.0861	0.5961	0.0000	24.9879
Water						0.0000	0.0000		0.0000	0.0000	0.4343	6.3840	6.8183	0.0449	1.1100e-003	8.2697
Total	**0.5179**	**1.7684**	**4.0192**	**9.5100e-003**	**0.6754**	**0.0145**	**0.6899**	**0.1809**	**0.0139**	**0.1947**	**10.5204**	**982.2181**	**992.7386**	**0.7057**	**2.6300e-003**	**1,011.1630**

	ROG	NOx	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**	**24.81**	**0.16**	**0.51**	**22.92**	**9.31**	**1.02**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	16.2840
Total	**16.2840**

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	7/1/2019	7/19/2019	5	15	
2	Site Preparation	Site Preparation	6/1/2019	6/21/2019	5	15	
3	Grading	Grading	6/1/2019	7/26/2019	5	40	
4	Building Construction	Building Construction	8/1/2019	12/18/2019	5	100	
5	Paving	Paving	12/19/2019	12/24/2019	5	4	
6	Architectural Coating	Architectural Coating	12/25/2019	12/31/2019	5	5	
7	Underground Infrastructure / Utilities	Trenching	7/1/2019	7/26/2019	5	20	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.55

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,770; Non-Residential Outdoor: 3,590; Striped Parking Area: 1,464 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition	Skid Steer Loaders	1	8.00	65	0.37
Site Preparation	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Rough Terrain Forklifts	1	8.00	100	0.40
Underground Infrastructure / Utilities	Excavators	2	8.00	158	0.38
Underground Infrastructure / Utilities	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	40.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	20.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,000.00	10.80	7.30	30.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	13.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Underground Infrastructure / Utilities	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

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					0.0507	0.0000	0.0507	7.6800e-003	0.0000	7.6800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7800e-003	0.0729	0.0681	1.1000e-004		4.4100e-003	4.4100e-003		4.2000e-003	4.2000e-003	0.0000	9.2767	9.2767	1.9400e-003	0.0000	9.3253
Total	**7.7800e-003**	**0.0729**	**0.0681**	**1.1000e-004**	**0.0507**	**4.4100e-003**	**0.0551**	**7.6800e-003**	**4.2000e-003**	**0.0119**	**0.0000**	**9.2767**	**9.2767**	**1.9400e-003**	**0.0000**	**9.3253**

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	1.8000e-004	6.1300e-003	1.3400e-003	2.0000e-005	3.4000e-004	2.0000e-005	3.7000e-004	9.0000e-005	2.0000e-005	1.2000e-004	0.0000	1.5592	1.5592	1.4000e-004	0.0000	1.5627
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.9000e-004	2.8500e-003	1.0000e-005	7.8000e-004	1.0000e-005	7.9000e-004	2.1000e-004	1.0000e-005	2.1000e-004	0.0000	0.7298	0.7298	2.0000e-005	0.0000	0.7304
Total	**5.6000e-004**	**6.4200e-003**	**4.1900e-003**	**3.0000e-005**	**1.1200e-003**	**3.0000e-005**	**1.1600e-003**	**3.0000e-004**	**3.0000e-005**	**3.3000e-004**	**0.0000**	**2.2890**	**2.2890**	**1.6000e-004**	**0.0000**	**2.2931**

3.2 Demolition - 2019

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					0.0228	0.0000	0.0228	3.4600e-003	0.0000	3.4600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7800e-003	0.0729	0.0681	1.1000e-004		4.4100e-003	4.4100e-003		4.2000e-003	4.2000e-003	0.0000	9.2767	9.2767	1.9400e-003	0.0000	9.3253
Total	**7.7800e-003**	**0.0729**	**0.0681**	**1.1000e-004**	**0.0228**	**4.4100e-003**	**0.0272**	**3.4600e-003**	**4.2000e-003**	**7.6600e-003**	**0.0000**	**9.2767**	**9.2767**	**1.9400e-003**	**0.0000**	**9.3253**

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	1.8000e-004	6.1300e-003	1.3400e-003	2.0000e-005	3.4000e-004	2.0000e-005	3.7000e-004	9.0000e-005	2.0000e-005	1.2000e-004	0.0000	1.5592	1.5592	1.4000e-004	0.0000	1.5627
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.9000e-004	2.8500e-003	1.0000e-005	7.8000e-004	1.0000e-005	7.9000e-004	2.1000e-004	1.0000e-005	2.1000e-004	0.0000	0.7298	0.7298	2.0000e-005	0.0000	0.7304
Total	**5.6000e-004**	**6.4200e-003**	**4.1900e-003**	**3.0000e-005**	**1.1200e-003**	**3.0000e-005**	**1.1600e-003**	**3.0000e-004**	**3.0000e-005**	**3.3000e-004**	**0.0000**	**2.2890**	**2.2890**	**1.6000e-004**	**0.0000**	**2.2931**

3.3 Site Preparation - 2019

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					3.9900e-003	0.0000	3.9900e-003	4.3000e-004	0.0000	4.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0300e-003	0.0753	0.0414	9.0000e-005		3.1400e-003	3.1400e-003		2.8900e-003	2.8900e-003	0.0000	7.9534	7.9534	2.5200e-003	0.0000	8.0163
Total	**6.0300e-003**	**0.0753**	**0.0414**	**9.0000e-005**	**3.9900e-003**	**3.1400e-003**	**7.1300e-003**	**4.3000e-004**	**2.8900e-003**	**3.3200e-003**	**0.0000**	**7.9534**	**7.9534**	**2.5200e-003**	**0.0000**	**8.0163**

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	9.0000e-005	3.0600e-003	6.7000e-004	1.0000e-005	1.7000e-004	1.0000e-005	1.8000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7796	0.7796	7.0000e-005	0.0000	0.7814
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.8000e-004	1.7600e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4491	0.4491	1.0000e-005	0.0000	0.4495
Total	**3.3000e-004**	**3.2400e-003**	**2.4300e-003**	**1.0000e-005**	**6.5000e-004**	**1.0000e-005**	**6.6000e-004**	**1.8000e-004**	**1.0000e-005**	**1.9000e-004**	**0.0000**	**1.2287**	**1.2287**	**8.0000e-005**	**0.0000**	**1.2308**

3.3 Site Preparation - 2019

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					1.8000e-003	0.0000	1.8000e-003	1.9000e-004	0.0000	1.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0300e-003	0.0753	0.0414	9.0000e-005		3.1400e-003	3.1400e-003		2.8900e-003	2.8900e-003	0.0000	7.9534	7.9534	2.5200e-003	0.0000	8.0163
Total	**6.0300e-003**	**0.0753**	**0.0414**	**9.0000e-005**	**1.8000e-003**	**3.1400e-003**	**4.9400e-003**	**1.9000e-004**	**2.8900e-003**	**3.0800e-003**	**0.0000**	**7.9534**	**7.9534**	**2.5200e-003**	**0.0000**	**8.0163**

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	9.0000e-005	3.0600e-003	6.7000e-004	1.0000e-005	1.7000e-004	1.0000e-005	1.8000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7796	0.7796	7.0000e-005	0.0000	0.7814
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.8000e-004	1.7600e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4491	0.4491	1.0000e-005	0.0000	0.4495
Total	**3.3000e-004**	**3.2400e-003**	**2.4300e-003**	**1.0000e-005**	**6.5000e-004**	**1.0000e-005**	**6.6000e-004**	**1.8000e-004**	**1.0000e-005**	**1.9000e-004**	**0.0000**	**1.2287**	**1.2287**	**8.0000e-005**	**0.0000**	**1.2308**

3.4 Grading - 2019

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					0.0164	0.0000	0.0164	8.4800e-003	0.0000	8.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0191	0.1721	0.1538	2.4000e-004		0.0107	0.0107		0.0103	0.0103	0.0000	21.0405	21.0405	4.0100e-003	0.0000	21.1408
Total	**0.0191**	**0.1721**	**0.1538**	**2.4000e-004**	**0.0164**	**0.0107**	**0.0271**	**8.4800e-003**	**0.0103**	**0.0187**	**0.0000**	**21.0405**	**21.0405**	**4.0100e-003**	**0.0000**	**21.1408**

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	0.0122	0.4104	0.0925	1.1300e-003	0.0257	1.6700e-003	0.0273	7.0500e-003	1.6000e-003	8.6500e-003	0.0000	112.0220	112.0220	9.5600e-003	0.0000	112.2611
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9000e-004	6.1000e-004	5.8500e-003	2.0000e-005	1.6000e-003	1.0000e-005	1.6200e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.4970	1.4970	5.0000e-005	0.0000	1.4982
Total	**0.0129**	**0.4110**	**0.0983**	**1.1500e-003**	**0.0273**	**1.6800e-003**	**0.0290**	**7.4800e-003**	**1.6100e-003**	**9.0900e-003**	**0.0000**	**113.5190**	**113.5190**	**9.6100e-003**	**0.0000**	**113.7593**

3.4 Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.3800e-003	0.0000	7.3800e-003	3.8100e-003	0.0000	3.8100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0191	0.1721	0.1538	2.4000e-004		0.0107	0.0107		0.0103	0.0103	0.0000	21.0404	21.0404	4.0100e-003	0.0000	21.1407
Total	**0.0191**	**0.1721**	**0.1538**	**2.4000e-004**	**7.3800e-003**	**0.0107**	**0.0181**	**3.8100e-003**	**0.0103**	**0.0141**	**0.0000**	**21.0404**	**21.0404**	**4.0100e-003**	**0.0000**	**21.1407**

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	0.0122	0.4104	0.0925	1.1300e-003	0.0257	1.6700e-003	0.0273	7.0500e-003	1.6000e-003	8.6500e-003	0.0000	112.0220	112.0220	9.5600e-003	0.0000	112.2611
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9000e-004	6.1000e-004	5.8500e-003	2.0000e-005	1.6000e-003	1.0000e-005	1.6200e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.4970	1.4970	5.0000e-005	0.0000	1.4982
Total	**0.0129**	**0.4110**	**0.0983**	**1.1500e-003**	**0.0273**	**1.6800e-003**	**0.0290**	**7.4800e-003**	**1.6100e-003**	**9.0900e-003**	**0.0000**	**113.5190**	**113.5190**	**9.6100e-003**	**0.0000**	**113.7593**

3.5 Building Construction - 2019

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	0.0550	0.5840	0.4927	7.4000e-004		0.0344	0.0344		0.0317	0.0317	0.0000	66.6935	66.6935	0.0211	0.0000	67.2210
Total	**0.0550**	**0.5840**	**0.4927**	**7.4000e-004**		**0.0344**	**0.0344**		**0.0317**	**0.0317**	**0.0000**	**66.6935**	**66.6935**	**0.0211**	**0.0000**	**67.2210**

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	1.1700e-003	0.0314	8.4300e-003	7.0000e-005	1.6600e-003	2.2000e-004	1.8800e-003	4.8000e-004	2.1000e-004	6.9000e-004	0.0000	6.6420	6.6420	5.3000e-004	0.0000	6.6553
Worker	2.5600e-003	1.9700e-003	0.0190	5.0000e-005	5.2100e-003	4.0000e-005	5.2500e-003	1.3900e-003	4.0000e-005	1.4200e-003	0.0000	4.8652	4.8652	1.6000e-004	0.0000	4.8691
Total	**3.7300e-003**	**0.0334**	**0.0275**	**1.2000e-004**	**6.8700e-003**	**2.6000e-004**	**7.1300e-003**	**1.8700e-003**	**2.5000e-004**	**2.1100e-003**	**0.0000**	**11.5072**	**11.5072**	**6.9000e-004**	**0.0000**	**11.5244**

3.5 Building Construction - 2019

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	0.0550	0.5840	0.4927	7.4000e-004		0.0344	0.0344		0.0317	0.0317	0.0000	66.6934	66.6934	0.0211	0.0000	67.2210
Total	**0.0550**	**0.5840**	**0.4927**	**7.4000e-004**		**0.0344**	**0.0344**		**0.0317**	**0.0317**	**0.0000**	**66.6934**	**66.6934**	**0.0211**	**0.0000**	**67.2210**

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	1.1700e-003	0.0314	8.4300e-003	7.0000e-005	1.6600e-003	2.2000e-004	1.8800e-003	4.8000e-004	2.1000e-004	6.9000e-004	0.0000	6.6420	6.6420	5.3000e-004	0.0000	6.6553
Worker	2.5600e-003	1.9700e-003	0.0190	5.0000e-005	5.2100e-003	4.0000e-005	5.2500e-003	1.3900e-003	4.0000e-005	1.4200e-003	0.0000	4.8652	4.8652	1.6000e-004	0.0000	4.8691
Total	**3.7300e-003**	**0.0334**	**0.0275**	**1.2000e-004**	**6.8700e-003**	**2.6000e-004**	**7.1300e-003**	**1.8700e-003**	**2.5000e-004**	**2.1100e-003**	**0.0000**	**11.5072**	**11.5072**	**6.9000e-004**	**0.0000**	**11.5244**

3.6 Paving - 2019

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	1.6600e-003	0.0157	0.0143	2.0000e-005		8.9000e-004	8.9000e-004		8.2000e-004	8.2000e-004	0.0000	1.9145	1.9145	5.5000e-004	0.0000	1.9282
Paving	7.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.3800e-003**	**0.0157**	**0.0143**	**2.0000e-005**		**8.9000e-004**	**8.9000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**1.9145**	**1.9145**	**5.5000e-004**	**0.0000**	**1.9282**

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	1.4000e-004	1.1000e-004	1.0500e-003	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2695	0.2695	1.0000e-005	0.0000	0.2697
Total	**1.4000e-004**	**1.1000e-004**	**1.0500e-003**	**0.0000**	**2.9000e-004**	**0.0000**	**2.9000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2695**	**0.2695**	**1.0000e-005**	**0.0000**	**0.2697**

3.6 Paving - 2019

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	1.6600e-003	0.0157	0.0143	2.0000e-005		8.9000e-004	8.9000e-004		8.2000e-004	8.2000e-004	0.0000	1.9145	1.9145	5.5000e-004	0.0000	1.9282
Paving	7.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.3800e-003**	**0.0157**	**0.0143**	**2.0000e-005**		**8.9000e-004**	**8.9000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**1.9145**	**1.9145**	**5.5000e-004**	**0.0000**	**1.9282**

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	1.4000e-004	1.1000e-004	1.0500e-003	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2695	0.2695	1.0000e-005	0.0000	0.2697
Total	**1.4000e-004**	**1.1000e-004**	**1.0500e-003**	**0.0000**	**2.9000e-004**	**0.0000**	**2.9000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2695**	**0.2695**	**1.0000e-005**	**0.0000**	**0.2697**

3.7 Architectural Coating - 2019

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	0.0183					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7000e-004	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397
Total	**0.0190**	**4.5900e-003**	**4.6000e-003**	**1.0000e-005**		**3.2000e-004**	**3.2000e-004**		**3.2000e-004**	**3.2000e-004**	**0.0000**	**0.6383**	**0.6383**	**5.0000e-005**	**0.0000**	**0.6397**

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	2.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0561	0.0561	0.0000	0.0000	0.0562
Total	**3.0000e-005**	**2.0000e-005**	**2.2000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0561**	**0.0561**	**0.0000**	**0.0000**	**0.0562**

3.7 Architectural Coating - 2019

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	0.0183					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7000e-004	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397
Total	**0.0190**	**4.5900e-003**	**4.6000e-003**	**1.0000e-005**		**3.2000e-004**	**3.2000e-004**		**3.2000e-004**	**3.2000e-004**	**0.0000**	**0.6383**	**0.6383**	**5.0000e-005**	**0.0000**	**0.6397**

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	2.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0561	0.0561	0.0000	0.0000	0.0562
Total	**3.0000e-005**	**2.0000e-005**	**2.2000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0561**	**0.0561**	**0.0000**	**0.0000**	**0.0562**

3.8 Underground Infrastructure / Utilities - 2019

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	7.5600e-003	0.0772	0.0885	1.3000e-004		4.1500e-003	4.1500e-003		3.8200e-003	3.8200e-003	0.0000	12.0987	12.0987	3.8300e-003	0.0000	12.1944
Total	**7.5600e-003**	**0.0772**	**0.0885**	**1.3000e-004**		**4.1500e-003**	**4.1500e-003**		**3.8200e-003**	**3.8200e-003**	**0.0000**	**12.0987**	**12.0987**	**3.8300e-003**	**0.0000**	**12.1944**

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	3.2000e-004	2.4000e-004	2.3400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5988	0.5988	2.0000e-005	0.0000	0.5993
Total	**3.2000e-004**	**2.4000e-004**	**2.3400e-003**	**1.0000e-005**	**6.4000e-004**	**0.0000**	**6.5000e-004**	**1.7000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.5988**	**0.5988**	**2.0000e-005**	**0.0000**	**0.5993**

3.8 Underground Infrastructure / Utilities - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.5600e-003	0.0772	0.0885	1.3000e-004		4.1500e-003	4.1500e-003		3.8200e-003	3.8200e-003	0.0000	12.0987	12.0987	3.8300e-003	0.0000	12.1944
Total	**7.5600e-003**	**0.0772**	**0.0885**	**1.3000e-004**		**4.1500e-003**	**4.1500e-003**		**3.8200e-003**	**3.8200e-003**	**0.0000**	**12.0987**	**12.0987**	**3.8300e-003**	**0.0000**	**12.1944**

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	3.2000e-004	2.4000e-004	2.3400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5988	0.5988	2.0000e-005	0.0000	0.5993
Total	**3.2000e-004**	**2.4000e-004**	**2.3400e-003**	**1.0000e-005**	**6.4000e-004**	**0.0000**	**6.5000e-004**	**1.7000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.5988**	**0.5988**	**2.0000e-005**	**0.0000**	**0.5993**

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	0.4815	1.7243	3.9815	9.2500e-003	0.6754	0.0112	0.6865	0.1809	0.0105	0.1914	0.0000	851.5868	851.5868	0.0608	0.0000	853.1065
Unmitigated	0.4815	1.7243	3.9815	9.2500e-003	0.6754	0.0112	0.6865	0.1809	0.0105	0.1914	0.0000	851.5868	851.5868	0.0608	0.0000	853.1065

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	132.01	132.01	132.01	70,810	70,810
Fast Food Restaurant with Drive Thru	1,365.01	1,365.01	1365.01	1,275,366	1,275,366
High Turnover (Sit Down Restaurant)	384.00	384.00	384.00	445,542	445,542
Parking Lot	0.00	0.00	0.00		
Total	1,881.02	1,881.02	1,881.02	1,791,717	1,791,717

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	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
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
Convenience Market With Gas Pumps	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
Fast Food Restaurant with Drive Thru	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
High Turnover (Sit Down Restaurant)	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
Parking Lot	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357

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	76.1727	76.1727	3.0700e-003	6.3000e-004	76.4384
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	76.1727	76.1727	3.0700e-003	6.3000e-004	76.4384
NaturalGas Mitigated	4.8600e-003	0.0442	0.0371	2.6000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003	0.0000	48.0735	48.0735	9.2000e-004	8.8000e-004	48.3591
NaturalGas Unmitigated	4.8600e-003	0.0442	0.0371	2.6000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003	0.0000	48.0735	48.0735	9.2000e-004	8.8000e-004	48.3591

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	4549.2	2.0000e-005	2.2000e-004	1.9000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2428	0.2428	0.0000	0.0000	0.2442
Fast Food Restaurant with Drive Thru	477801	2.5800e-003	0.0234	0.0197	1.4000e-004		1.7800e-003	1.7800e-003		1.7800e-003	1.7800e-003	0.0000	25.4973	25.4973	4.9000e-004	4.7000e-004	25.6488
High Turnover (Sit Down Restaurant)	418512	2.2600e-003	0.0205	0.0172	1.2000e-004		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	22.3334	22.3334	4.3000e-004	4.1000e-004	22.4661
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		**4.8600e-003**	**0.0442**	**0.0371**	**2.6000e-004**		**3.3600e-003**	**3.3600e-003**		**3.3600e-003**	**3.3600e-003**	**0.0000**	**48.0734**	**48.0734**	**9.2000e-004**	**8.8000e-004**	**48.3591**

5.2 Energy by Land Use - NaturalGas

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	4549.2	2.0000e-005	2.2000e-004	1.9000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2428	0.2428	0.0000	0.0000	0.2442
Fast Food Restaurant with Drive Thru	477801	2.5800e-003	0.0234	0.0197	1.4000e-004		1.7800e-003	1.7800e-003		1.7800e-003	1.7800e-003	0.0000	25.4973	25.4973	4.9000e-004	4.7000e-004	25.6488
High Turnover (Sit Down Restaurant)	418512	2.2600e-003	0.0205	0.0172	1.2000e-004		1.5600e-003	1.5600e-003		1.5600e-003	1.5600e-003	0.0000	22.3334	22.3334	4.3000e-004	4.1000e-004	22.4661
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		**4.8600e-003**	**0.0442**	**0.0371**	**2.6000e-004**		**3.3600e-003**	**3.3600e-003**		**3.3600e-003**	**3.3600e-003**	**0.0000**	**48.0734**	**48.0734**	**9.2000e-004**	**8.8000e-004**	**48.3591**

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	25622.4	8.3736	3.4000e-004	7.0000e-005	8.4028
Fast Food Restaurant with Drive Thru	106038	34.6542	1.3900e-003	2.9000e-004	34.7750
High Turnover (Sit Down Restaurant)	92880	30.3540	1.2200e-003	2.5000e-004	30.4599
Parking Lot	8540	2.7910	1.1000e-004	2.0000e-005	2.8007
Total		**76.1727**	**3.0600e-003**	**6.3000e-004**	**76.4384**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	25622.4	8.3736	3.4000e-004	7.0000e-005	8.4028
Fast Food Restaurant with Drive Thru	106038	34.6542	1.3900e-003	2.9000e-004	34.7750
High Turnover (Sit Down Restaurant)	92880	30.3540	1.2200e-003	2.5000e-004	30.4599
Parking Lot	8540	2.7910	1.1000e-004	2.0000e-005	2.8007
Total		**76.1727**	**3.0600e-003**	**6.3000e-004**	**76.4384**

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	0.0315	1.0000e-005	6.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2200e-003	1.2200e-003	0.0000	0.0000	1.3000e-003
Unmitigated	0.0315	1.0000e-005	6.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2200e-003	1.2200e-003	0.0000	0.0000	1.3000e-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	1.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0296					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e-005	1.0000e-005	6.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2200e-003	1.2200e-003	0.0000	0.0000	1.3000e-003
Total	**0.0315**	**1.0000e-005**	**6.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.2200e-003**	**1.2200e-003**	**0.0000**	**0.0000**	**1.3000e-003**

6.2 Area by SubCategory

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	1.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0296					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e-005	1.0000e-005	6.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2200e-003	1.2200e-003	0.0000	0.0000	1.3000e-003
Total	**0.0315**	**1.0000e-005**	**6.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.2200e-003**	**1.2200e-003**	**0.0000**	**0.0000**	**1.3000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.8183	0.0449	1.1100e-003	8.2697
Unmitigated	8.5229	0.0561	1.3800e-003	10.3371

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	0.151108 / 0.0926146	1.0272	4.9600e-003	1.2000e-004	1.1884
Fast Food Restaurant with Drive Thru	0.831682 / 0.0530861	3.9957	0.0273	6.7000e-004	4.8769
High Turnover (Sit Down Restaurant)	0.728481 / 0.0464988	3.4999	0.0239	5.9000e-004	4.2718
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**8.5229**	**0.0561**	**1.3800e-003**	**10.3371**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.120886 / 0.0740916	0.8218	3.9700e-003	1.0000e-004	0.9507
Fast Food Restaurant with Drive Thru	0.665346 / 0.0424689	3.1966	0.0218	5.4000e-004	3.9016
High Turnover (Sit Down Restaurant)	0.582785 / 0.037199	2.7999	0.0191	4.7000e-004	3.4174
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**6.8183**	**0.0449**	**1.1100e-003**	**8.2697**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.0861	0.5961	0.0000	24.9879
Unmitigated	13.4482	0.7948	0.0000	33.3172

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	6.13	1.2443	0.0735	0.0000	3.0828
Fast Food Restaurant with Drive Thru	31.56	6.4064	0.3786	0.0000	15.8716
High Turnover (Sit Down Restaurant)	28.56	5.7974	0.3426	0.0000	14.3629
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**13.4481**	**0.7948**	**0.0000**	**33.3172**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	4.5975	0.9333	0.0552	0.0000	2.3121
Fast Food Restaurant with Drive Thru	23.67	4.8048	0.2840	0.0000	11.9037
High Turnover (Sit Down Restaurant)	21.42	4.3481	0.2570	0.0000	10.7722
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**10.0861**	**0.5961**	**0.0000**	**24.9879**

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

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	16.2840	0.0000	0.0000	16.2840

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	23	16.2840	0.0000	0.0000	16.2840
Total		**16.2840**	**0.0000**	**0.0000**	**16.2840**

Tavern Road Gas Station - Proposed Project

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Convenience Market With Gas Pumps	2.04	1000sqft	0.05	2,040.00	0
Fast Food Restaurant with Drive Thru	2.74	1000sqft	0.06	2,740.00	0
High Turnover (Sit Down Restaurant)	2.40	1000sqft	0.06	2,400.00	0
Parking Lot	61.00	Space	0.55	24,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2019
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Demo: 3 weeks
Site Prep: 3 weeks
Grading: 8 weeks
Buildling: 5 months
Paving: 4 days
Trenching: 4 weeks

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Site Prep: Skid steer
Demo: Skid steer
Trenching: Backhoe, excavator, mini excavator
Building: Petty Bone

Grading -

Demolition - Demolish 2,454 sf existing building and 23,642 sf of asphalt
(113 T building demo + 4,569 T asphalt demo)

Trips and VMT - Demo: 20 truck loads
Site Prep: 10 truck loads
Grading: 1,000 truck trips and 30 mile trip length

Architectural Coating - Low VOC coating

Vehicle Trips - Per LOS Engineering, Inc. 2018

Area Coating - Low VOC coating

Sequestration - Per ZAAP Site Plan dated 5.4.18

Construction Off-road Equipment Mitigation -

Water Mitigation - Per CalGreen

Waste Mitigation - Per AB-341

Tavern Road Gas Station - Proposed Project - San Diego County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	40.00
tblConstructionPhase	NumDays	5.00	4.00
tblConstructionPhase	NumDays	1.00	15.00
tblConstructionPhase	PhaseEndDate	11/20/2019	12/31/2019
tblConstructionPhase	PhaseEndDate	11/6/2019	12/18/2019
tblConstructionPhase	PhaseEndDate	6/14/2019	7/19/2019
tblConstructionPhase	PhaseEndDate	6/19/2019	7/26/2019
tblConstructionPhase	PhaseEndDate	11/13/2019	12/24/2019
tblConstructionPhase	PhaseEndDate	6/17/2019	6/21/2019
tblConstructionPhase	PhaseStartDate	11/14/2019	12/25/2019
tblConstructionPhase	PhaseStartDate	6/20/2019	8/1/2019
tblConstructionPhase	PhaseStartDate	6/1/2019	7/1/2019
tblConstructionPhase	PhaseStartDate	6/18/2019	6/1/2019
tblConstructionPhase	PhaseStartDate	11/7/2019	12/19/2019
tblConstructionPhase	PhaseStartDate	6/15/2019	6/1/2019
tblGrading	MaterialExported	0.00	190.00
tblGrading	MaterialImported	0.00	19,000.00

tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblSequestration	NumberOfNewTrees	0.00	23.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripNumber	463.00	40.00
tblTripsAndVMT	HaulingTripNumber	24.00	20.00
tblTripsAndVMT	HaulingTripNumber	2,375.00	2,000.00
tblVehicleTrips	ST_TR	1,448.33	64.71
tblVehicleTrips	ST_TR	722.03	498.18
tblVehicleTrips	ST_TR	158.37	160.00
tblVehicleTrips	SU_TR	1,182.08	64.71
tblVehicleTrips	SU_TR	542.72	498.18
tblVehicleTrips	SU_TR	131.84	160.00
tblVehicleTrips	WD_TR	845.60	64.71
tblVehicleTrips	WD_TR	496.12	498.18
tblVehicleTrips	WD_TR	127.15	160.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	7.6142	47.3049	31.4635	0.1003	9.1935	1.6303	10.8237	1.8873	1.5398	3.4270	0.0000	10,468.8278	10,468.8278	1.4929	0.0000	10,506.1489
Maximum	**7.6142**	**47.3049**	**31.4635**	**0.1003**	**9.1935**	**1.6303**	**10.8237**	**1.8873**	**1.5398**	**3.4270**	**0.0000**	**10,468.8278**	**10,468.8278**	**1.4929**	**0.0000**	**10,506.1489**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	7.6142	47.3049	31.4635	0.1003	5.0233	1.6303	6.6535	1.0909	1.5398	2.6306	0.0000	10,468.8278	10,468.8278	1.4929	0.0000	10,506.1489
Maximum	**7.6142**	**47.3049**	**31.4635**	**0.1003**	**5.0233**	**1.6303**	**6.6535**	**1.0909**	**1.5398**	**2.6306**	**0.0000**	**10,468.8278**	**10,468.8278**	**1.4929**	**0.0000**	**10,506.1489**

	ROG	NOx	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**	**45.36**	**0.00**	**38.53**	**42.20**	**0.00**	**23.24**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1730	7.0000e-005	7.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0159
Energy	0.0266	0.2420	0.2033	1.4500e-003		0.0184	0.0184		0.0184	0.0184		290.3666	290.3666	5.5700e-003	5.3200e-003	292.0921
Mobile	2.7437	9.4129	22.5964	0.0502	3.8000	0.0621	3.8621	1.0158	0.0584	1.0742		5,091.5393	5,091.5393	0.3775		5,100.9757
Total	**2.9434**	**9.6549**	**22.8067**	**0.0517**	**3.8000**	**0.0805**	**3.8805**	**1.0158**	**0.0768**	**1.0926**		**5,381.9209**	**5,381.9209**	**0.3831**	**5.3200e-003**	**5,393.0837**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1730	7.0000e-005	7.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0159
Energy	0.0266	0.2420	0.2033	1.4500e-003		0.0184	0.0184		0.0184	0.0184		290.3666	290.3666	5.5700e-003	5.3200e-003	292.0921
Mobile	2.7437	9.4129	22.5964	0.0502	3.8000	0.0621	3.8621	1.0158	0.0584	1.0742		5,091.5393	5,091.5393	0.3775		5,100.9757
Total	**2.9434**	**9.6549**	**22.8067**	**0.0517**	**3.8000**	**0.0805**	**3.8805**	**1.0158**	**0.0768**	**1.0926**		**5,381.9209**	**5,381.9209**	**0.3831**	**5.3200e-003**	**5,393.0837**

	ROG	NOx	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	7/1/2019	7/19/2019	5	15	
2	Site Preparation	Site Preparation	6/1/2019	6/21/2019	5	15	
3	Grading	Grading	6/1/2019	7/26/2019	5	40	
4	Building Construction	Building Construction	8/1/2019	12/18/2019	5	100	
5	Paving	Paving	12/19/2019	12/24/2019	5	4	
6	Architectural Coating	Architectural Coating	12/25/2019	12/31/2019	5	5	
7	Underground Infrastructure / Utilities	Trenching	7/1/2019	7/26/2019	5	20	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.55

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,770; Non-Residential Outdoor: 3,590; Striped Parking Area: 1,464 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition	Skid Steer Loaders	1	8.00	65	0.37
Site Preparation	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Rough Terrain Forklifts	1	8.00	100	0.40
Underground Infrastructure / Utilities	Excavators	2	8.00	158	0.38
Underground Infrastructure / Utilities	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	40.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	20.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,000.00	10.80	7.30	30.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	13.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Underground Infrastructure / Utilities	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.7627	0.0000	6.7627	1.0241	0.0000	1.0241			0.0000			0.0000
Off-Road	1.0373	9.7259	9.0763	0.0140		0.5885	0.5885		0.5598	0.5598		1,363.4402	1,363.4402	0.2856		1,370.5797
Total	**1.0373**	**9.7259**	**9.0763**	**0.0140**	**6.7627**	**0.5885**	**7.3512**	**1.0241**	**0.5598**	**1.5839**		**1,363.4402**	**1,363.4402**	**0.2856**		**1,370.5797**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0238	0.8092	0.1853	2.0800e-003	0.0466	3.0900e-003	0.0497	0.0128	2.9600e-003	0.0157		226.9090	226.9090	0.0212		227.4381
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0577	0.0400	0.3801	1.0700e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		106.1988	106.1988	3.4300e-003		106.2845
Total	**0.0815**	**0.8492**	**0.5654**	**3.1500e-003**	**0.1534**	**3.8500e-003**	**0.1572**	**0.0411**	**3.6600e-003**	**0.0448**		**333.1078**	**333.1078**	**0.0246**		**333.7226**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.0432	0.0000	3.0432	0.4609	0.0000	0.4609			0.0000			0.0000
Off-Road	1.0373	9.7259	9.0763	0.0140		0.5885	0.5885		0.5598	0.5598	0.0000	1,363.4402	1,363.4402	0.2856		1,370.5797
Total	**1.0373**	**9.7259**	**9.0763**	**0.0140**	**3.0432**	**0.5885**	**3.6317**	**0.4609**	**0.5598**	**1.0206**	**0.0000**	**1,363.4402**	**1,363.4402**	**0.2856**		**1,370.5797**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0238	0.8092	0.1853	2.0800e-003	0.0466	3.0900e-003	0.0497	0.0128	2.9600e-003	0.0157		226.9090	226.9090	0.0212		227.4381
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0577	0.0400	0.3801	1.0700e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		106.1988	106.1988	3.4300e-003		106.2845
Total	**0.0815**	**0.8492**	**0.5654**	**3.1500e-003**	**0.1534**	**3.8500e-003**	**0.1572**	**0.0411**	**3.6600e-003**	**0.0448**		**333.1078**	**333.1078**	**0.0246**		**333.7226**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5320	0.0000	0.5320	0.0575	0.0000	0.0575			0.0000			0.0000
Off-Road	0.8038	10.0389	5.5252	0.0118		0.4186	0.4186		0.3851	0.3851		1,168.9522	1,168.9522	0.3698		1,178.1983
Total	**0.8038**	**10.0389**	**5.5252**	**0.0118**	**0.5320**	**0.4186**	**0.9506**	**0.0575**	**0.3851**	**0.4426**		**1,168.9522**	**1,168.9522**	**0.3698**		**1,178.1983**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0119	0.4046	0.0927	1.0400e-003	0.0233	1.5500e-003	0.0249	6.3900e-003	1.4800e-003	7.8600e-003		113.4545	113.4545	0.0106		113.7191
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0355	0.0246	0.2339	6.6000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		65.3531	65.3531	2.1100e-003		65.4058
Total	**0.0474**	**0.4292**	**0.3266**	**1.7000e-003**	**0.0890**	**2.0200e-003**	**0.0910**	**0.0238**	**1.9100e-003**	**0.0257**		**178.8076**	**178.8076**	**0.0127**		**179.1249**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2394	0.0000	0.2394	0.0259	0.0000	0.0259			0.0000			0.0000
Off-Road	0.8038	10.0389	5.5252	0.0118		0.4186	0.4186		0.3851	0.3851	0.0000	1,168.9522	1,168.9522	0.3698		1,178.1983
Total	**0.8038**	**10.0389**	**5.5252**	**0.0118**	**0.2394**	**0.4186**	**0.6580**	**0.0259**	**0.3851**	**0.4110**	**0.0000**	**1,168.9522**	**1,168.9522**	**0.3698**		**1,178.1983**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0119	0.4046	0.0927	1.0400e-003	0.0233	1.5500e-003	0.0249	6.3900e-003	1.4800e-003	7.8600e-003		113.4545	113.4545	0.0106		113.7191
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0355	0.0246	0.2339	6.6000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		65.3531	65.3531	2.1100e-003		65.4058
Total	**0.0474**	**0.4292**	**0.3266**	**1.7000e-003**	**0.0890**	**2.0200e-003**	**0.0910**	**0.0238**	**1.9100e-003**	**0.0257**		**178.8076**	**178.8076**	**0.0127**		**179.1249**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.8195	0.0000	0.8195	0.4239	0.0000	0.4239			0.0000			0.0000
Off-Road	0.9530	8.6039	7.6917	0.0120		0.5371	0.5371		0.5125	0.5125		1,159.6570	1,159.6570	0.2211		1,165.1847
Total	**0.9530**	**8.6039**	**7.6917**	**0.0120**	**0.8195**	**0.5371**	**1.3566**	**0.4239**	**0.5125**	**0.9364**		**1,159.6570**	**1,159.6570**	**0.2211**		**1,165.1847**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6145	20.3521	4.7514	0.0562	1.3100	0.0844	1.3944	0.3590	0.0808	0.4397		6,131.9208	6,131.9208	0.5349		6,145.2926
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	**0.6589**	**20.3829**	**5.0438**	**0.0570**	**1.3922**	**0.0850**	**1.4772**	**0.3808**	**0.0813**	**0.4621**		**6,213.6122**	**6,213.6122**	**0.5375**		**6,227.0498**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3688	0.0000	0.3688	0.1908	0.0000	0.1908			0.0000			0.0000
Off-Road	0.9530	8.6039	7.6917	0.0120		0.5371	0.5371		0.5125	0.5125	0.0000	1,159.6570	1,159.6570	0.2211		1,165.1847
Total	**0.9530**	**8.6039**	**7.6917**	**0.0120**	**0.3688**	**0.5371**	**0.9059**	**0.1908**	**0.5125**	**0.7032**	**0.0000**	**1,159.6570**	**1,159.6570**	**0.2211**		**1,165.1847**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6145	20.3521	4.7514	0.0562	1.3100	0.0844	1.3944	0.3590	0.0808	0.4397		6,131.9208	6,131.9208	0.5349		6,145.2926
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	**0.6589**	**20.3829**	**5.0438**	**0.0570**	**1.3922**	**0.0850**	**1.4772**	**0.3808**	**0.0813**	**0.4621**		**6,213.6122**	**6,213.6122**	**0.5375**		**6,227.0498**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1007	11.6799	9.8535	0.0149		0.6882	0.6882		0.6332	0.6332		1,470.3399	1,470.3399	0.4652		1,481.9699
Total	**1.1007**	**11.6799**	**9.8535**	**0.0149**		**0.6882**	**0.6882**		**0.6332**	**0.6332**		**1,470.3399**	**1,470.3399**	**0.4652**		**1,481.9699**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0240	0.6204	0.1775	1.3500e-003	0.0339	4.3900e-003	0.0382	9.7400e-003	4.2000e-003	0.0139		144.2501	144.2501	0.0122		144.5540
Worker	0.0577	0.0400	0.3801	1.0700e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		106.1988	106.1988	3.4300e-003		106.2845
Total	**0.0817**	**0.6605**	**0.5576**	**2.4200e-003**	**0.1406**	**5.1500e-003**	**0.1458**	**0.0381**	**4.9000e-003**	**0.0430**		**250.4489**	**250.4489**	**0.0156**		**250.8385**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1007	11.6799	9.8535	0.0149		0.6882	0.6882		0.6332	0.6332	0.0000	1,470.3399	1,470.3399	0.4652		1,481.9699
Total	**1.1007**	**11.6799**	**9.8535**	**0.0149**		**0.6882**	**0.6882**		**0.6332**	**0.6332**	**0.0000**	**1,470.3399**	**1,470.3399**	**0.4652**		**1,481.9699**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0240	0.6204	0.1775	1.3500e-003	0.0339	4.3900e-003	0.0382	9.7400e-003	4.2000e-003	0.0139		144.2501	144.2501	0.0122		144.5540
Worker	0.0577	0.0400	0.3801	1.0700e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		106.1988	106.1988	3.4300e-003		106.2845
Total	**0.0817**	**0.6605**	**0.5576**	**2.4200e-003**	**0.1406**	**5.1500e-003**	**0.1458**	**0.0381**	**4.9000e-003**	**0.0430**		**250.4489**	**250.4489**	**0.0156**		**250.8385**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106		1,055.1823	1,055.1823	0.3016		1,062.7231
Paving	0.3603					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1902**	**7.8446**	**7.1478**	**0.0113**		**0.4425**	**0.4425**		**0.4106**	**0.4106**		**1,055.1823**	**1,055.1823**	**0.3016**		**1,062.7231**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0799	0.0554	0.5263	1.4800e-003	0.1479	1.0500e-003	0.1489	0.0392	9.7000e-004	0.0402		147.0445	147.0445	4.7400e-003		147.1631
Total	**0.0799**	**0.0554**	**0.5263**	**1.4800e-003**	**0.1479**	**1.0500e-003**	**0.1489**	**0.0392**	**9.7000e-004**	**0.0402**		**147.0445**	**147.0445**	**4.7400e-003**		**147.1631**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106	0.0000	1,055.1823	1,055.1823	0.3016		1,062.7231
Paving	0.3603					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1902**	**7.8446**	**7.1478**	**0.0113**		**0.4425**	**0.4425**		**0.4106**	**0.4106**	**0.0000**	**1,055.1823**	**1,055.1823**	**0.3016**		**1,062.7231**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0799	0.0554	0.5263	1.4800e-003	0.1479	1.0500e-003	0.1489	0.0392	9.7000e-004	0.0402		147.0445	147.0445	4.7400e-003		147.1631
Total	**0.0799**	**0.0554**	**0.5263**	**1.4800e-003**	**0.1479**	**1.0500e-003**	**0.1489**	**0.0392**	**9.7000e-004**	**0.0402**		**147.0445**	**147.0445**	**4.7400e-003**		**147.1631**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.3344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	**7.6009**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0133	9.2300e-003	0.0877	2.5000e-004	0.0246	1.8000e-004	0.0248	6.5400e-003	1.6000e-004	6.7000e-003		24.5074	24.5074	7.9000e-004		24.5272
Total	**0.0133**	**9.2300e-003**	**0.0877**	**2.5000e-004**	**0.0246**	**1.8000e-004**	**0.0248**	**6.5400e-003**	**1.6000e-004**	**6.7000e-003**		**24.5074**	**24.5074**	**7.9000e-004**		**24.5272**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.3344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**7.6009**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0133	9.2300e-003	0.0877	2.5000e-004	0.0246	1.8000e-004	0.0248	6.5400e-003	1.6000e-004	6.7000e-003		24.5074	24.5074	7.9000e-004		24.5272
Total	**0.0133**	**9.2300e-003**	**0.0877**	**2.5000e-004**	**0.0246**	**1.8000e-004**	**0.0248**	**6.5400e-003**	**1.6000e-004**	**6.7000e-003**		**24.5074**	**24.5074**	**7.9000e-004**		**24.5272**

3.8 Underground Infrastructure / Utilities - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7559	7.7185	8.8524	0.0135		0.4154	0.4154		0.3821	0.3821		1,333.6575	1,333.6575	0.4220		1,344.2064
Total	**0.7559**	**7.7185**	**8.8524**	**0.0135**		**0.4154**	**0.4154**		**0.3821**	**0.3821**		**1,333.6575**	**1,333.6575**	**0.4220**		**1,344.2064**

3.8 Underground Infrastructure / Utilities - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0355	0.0246	0.2339	6.6000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		65.3531	65.3531	2.1100e-003		65.4058
Total	**0.0355**	**0.0246**	**0.2339**	**6.6000e-004**	**0.0657**	**4.7000e-004**	**0.0662**	**0.0174**	**4.3000e-004**	**0.0179**		**65.3531**	**65.3531**	**2.1100e-003**		**65.4058**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7559	7.7185	8.8524	0.0135		0.4154	0.4154		0.3821	0.3821	0.0000	1,333.6575	1,333.6575	0.4220		1,344.2064
Total	**0.7559**	**7.7185**	**8.8524**	**0.0135**		**0.4154**	**0.4154**		**0.3821**	**0.3821**	**0.0000**	**1,333.6575**	**1,333.6575**	**0.4220**		**1,344.2064**

3.8 Underground Infrastructure / Utilities - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0355	0.0246	0.2339	6.6000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		65.3531	65.3531	2.1100e-003		65.4058
Total	**0.0355**	**0.0246**	**0.2339**	**6.6000e-004**	**0.0657**	**4.7000e-004**	**0.0662**	**0.0174**	**4.3000e-004**	**0.0179**		**65.3531**	**65.3531**	**2.1100e-003**		**65.4058**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7437	9.4129	22.5964	0.0502	3.8000	0.0621	3.8621	1.0158	0.0584	1.0742		5,091.5393	5,091.5393	0.3775		5,100.9757
Unmitigated	2.7437	9.4129	22.5964	0.0502	3.8000	0.0621	3.8621	1.0158	0.0584	1.0742		5,091.5393	5,091.5393	0.3775		5,100.9757

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	132.01	132.01	132.01	70,810	70,810
Fast Food Restaurant with Drive Thru	1,365.01	1,365.01	1365.01	1,275,366	1,275,366
High Turnover (Sit Down Restaurant)	384.00	384.00	384.00	445,542	445,542
Parking Lot	0.00	0.00	0.00		
Total	1,881.02	1,881.02	1,881.02	1,791,717	1,791,717

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	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
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
Convenience Market With Gas Pumps	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
Fast Food Restaurant with Drive Thru	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
High Turnover (Sit Down Restaurant)	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
Parking Lot	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0266	0.2420	0.2033	1.4500e-003		0.0184	0.0184		0.0184	0.0184		290.3666	290.3666	5.5700e-003	5.3200e-003	292.0921
NaturalGas Unmitigated	0.0266	0.2420	0.2033	1.4500e-003		0.0184	0.0184		0.0184	0.0184		290.3666	290.3666	5.5700e-003	5.3200e-003	292.0921

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Convenience Market With Gas Pumps	12.4636	1.3000e-004	1.2200e-003	1.0300e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		1.4663	1.4663	3.0000e-005	3.0000e-005	1.4750
Fast Food Restaurant with Drive Thru	1309.04	0.0141	0.1283	0.1078	7.7000e-004		9.7500e-003	9.7500e-003		9.7500e-003	9.7500e-003		154.0052	154.0052	2.9500e-003	2.8200e-003	154.9204
High Turnover (Sit Down Restaurant)	1146.61	0.0124	0.1124	0.0944	6.7000e-004		8.5400e-003	8.5400e-003		8.5400e-003	8.5400e-003		134.8951	134.8951	2.5900e-003	2.4700e-003	135.6967
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
Total		**0.0266**	**0.2420**	**0.2033**	**1.4500e-003**		**0.0184**	**0.0184**		**0.0184**	**0.0184**		**290.3666**	**290.3666**	**5.5700e-003**	**5.3200e-003**	**292.0921**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Convenience Market With Gas Pumps	0.0124636	1.3000e-004	1.2200e-003	1.0300e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		1.4663	1.4663	3.0000e-005	3.0000e-005	1.4750
Fast Food Restaurant with Drive Thru	1.30904	0.0141	0.1283	0.1078	7.7000e-004		9.7500e-003	9.7500e-003		9.7500e-003	9.7500e-003		154.0052	154.0052	2.9500e-003	2.8200e-003	154.9204
High Turnover (Sit Down Restaurant)	1.14661	0.0124	0.1124	0.0944	6.7000e-004		8.5400e-003	8.5400e-003		8.5400e-003	8.5400e-003		134.8951	134.8951	2.5900e-003	2.4700e-003	135.6967
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
Total		**0.0266**	**0.2420**	**0.2033**	**1.4500e-003**		**0.0184**	**0.0184**		**0.0184**	**0.0184**		**290.3666**	**290.3666**	**5.5700e-003**	**5.3200e-003**	**292.0921**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1730	7.0000e-005	7.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0159
Unmitigated	0.1730	7.0000e-005	7.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0159

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0101					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1623					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.7000e-004	7.0000e-005	7.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0159
Total	**0.1730**	**7.0000e-005**	**7.0300e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0149**	**0.0149**	**4.0000e-005**		**0.0159**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0101					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1623					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.7000e-004	7.0000e-005	7.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0159
Total	**0.1730**	**7.0000e-005**	**7.0300e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0149**	**0.0149**	**4.0000e-005**		**0.0159**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Tavern Road Gas Station - Existing Operations

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Convenience Market With Gas Pumps	1.85	1000sqft	0.04	1,850.00	0
Fast Food Restaurant with Drive Thru	0.64	1000sqft	0.01	640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2019
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**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 operations (to be demolished)

Construction Phase - *Operation emissions only

Trips and VMT - *Operation emissions only

Vehicle Trips - Per LOS Engineering Inc. 2018

Energy Use - *Operational energy emissions for existing building

Area Mitigation - Low VOC coating for conservative operational emissions

Tavern Road Gas Station - Existing Operations - San Diego County, Annual

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	100
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	6/14/2019	5/31/2019
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblVehicleTrips	ST_TR	1,448.33	39.57
tblVehicleTrips	ST_TR	722.03	1,339.06
tblVehicleTrips	SU_TR	1,182.08	39.57
tblVehicleTrips	SU_TR	542.72	1,339.06
tblVehicleTrips	WD_TR	845.60	39.57
tblVehicleTrips	WD_TR	496.12	1,339.06

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					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	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					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	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)
		Highest		

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	0.0126	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	5.0000e-005
Energy	6.3000e-004	5.7600e-003	4.8400e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	24.1151	24.1151	8.4000e-004	2.6000e-004	24.2146
Mobile	0.2356	0.8359	1.9156	4.3700e-003	0.3166	5.2900e-003	0.3219	0.0848	4.9700e-003	0.0898	0.0000	402.4388	402.4388	0.0292	0.0000	403.1681
Waste						0.0000	0.0000		0.0000	0.0000	2.6247	0.0000	2.6247	0.1551	0.0000	6.5025
Water						0.0000	0.0000		0.0000	0.0000	0.1051	1.7598	1.8649	0.0109	2.7000e-004	2.2168
Total	**0.2488**	**0.8417**	**1.9204**	**4.4000e-003**	**0.3166**	**5.7300e-003**	**0.3224**	**0.0848**	**5.4100e-003**	**0.0902**	**2.7298**	**428.3136**	**431.0434**	**0.1960**	**5.3000e-004**	**436.1020**

2.2 Overall Operational

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	0.0109	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	5.0000e-005
Energy	6.3000e-004	5.7600e-003	4.8400e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	24.1151	24.1151	8.4000e-004	2.6000e-004	24.2146
Mobile	0.2356	0.8359	1.9156	4.3700e-003	0.3166	5.2900e-003	0.3219	0.0848	4.9700e-003	0.0898	0.0000	402.4388	402.4388	0.0292	0.0000	403.1681
Waste						0.0000	0.0000		0.0000	0.0000	2.6247	0.0000	2.6247	0.1551	0.0000	6.5025
Water						0.0000	0.0000		0.0000	0.0000	0.1051	1.7598	1.8649	0.0109	2.7000e-004	2.2168
Total	**0.2471**	**0.8417**	**1.9204**	**4.4000e-003**	**0.3166**	**5.7300e-003**	**0.3224**	**0.0848**	**5.4100e-003**	**0.0902**	**2.7298**	**428.3136**	**431.0434**	**0.1960**	**5.3000e-004**	**436.1020**

	ROG	NOx	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	**0.70**	**0.00**	**0.00**	**0.00**	**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	6/1/2019	5/31/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

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	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	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	4	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

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

Unmitigated Construction Off-Site

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

3.2 Demolition - 2019

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

Mitigated Construction Off-Site

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

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	0.2356	0.8359	1.9156	4.3700e-003	0.3166	5.2900e-003	0.3219	0.0848	4.9700e-003	0.0898	0.0000	402.4388	402.4388	0.0292	0.0000	403.1681
Unmitigated	0.2356	0.8359	1.9156	4.3700e-003	0.3166	5.2900e-003	0.3219	0.0848	4.9700e-003	0.0898	0.0000	402.4388	402.4388	0.0292	0.0000	403.1681

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	73.20	73.20	73.20	39,267	39,267
Fast Food Restaurant with Drive Thru	857.00	857.00	857.00	800,715	800,715
Total	930.20	930.20	930.20	839,982	839,982

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	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
Fast Food Restaurant with Drive Thru	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357

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	17.8416	17.8416	7.2000e-004	1.5000e-004	17.9039
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	17.8416	17.8416	7.2000e-004	1.5000e-004	17.9039
NaturalGas Mitigated	6.3000e-004	5.7600e-003	4.8400e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	6.2734	6.2734	1.2000e-004	1.2000e-004	6.3107
NaturalGas Unmitigated	6.3000e-004	5.7600e-003	4.8400e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	6.2734	6.2734	1.2000e-004	1.2000e-004	6.3107

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	4458.5	2.0000e-005	2.2000e-004	1.8000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2379	0.2379	0.0000	0.0000	0.2393
Fast Food Restaurant with Drive Thru	113101	6.1000e-004	5.5400e-003	4.6600e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	6.0355	6.0355	1.2000e-004	1.1000e-004	6.0714
Total		**6.3000e-004**	**5.7600e-003**	**4.8400e-003**	**3.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**	**0.0000**	**6.2734**	**6.2734**	**1.2000e-004**	**1.1000e-004**	**6.3107**

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	4458.5	2.0000e-005	2.2000e-004	1.8000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2379	0.2379	0.0000	0.0000	0.2393
Fast Food Restaurant with Drive Thru	113101	6.1000e-004	5.5400e-003	4.6600e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	6.0355	6.0355	1.2000e-004	1.1000e-004	6.0714
Total		**6.3000e-004**	**5.7600e-003**	**4.8400e-003**	**3.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**	**0.0000**	**6.2734**	**6.2734**	**1.2000e-004**	**1.1000e-004**	**6.3107**

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	27361.5	8.9420	3.6000e-004	7.0000e-005	8.9732
Fast Food Restaurant with Drive Thru	27232	8.8997	3.6000e-004	7.0000e-005	8.9307
Total		**17.8416**	**7.2000e-004**	**1.4000e-004**	**17.9039**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	27361.5	8.9420	3.6000e-004	7.0000e-005	8.9732
Fast Food Restaurant with Drive Thru	27232	8.8997	3.6000e-004	7.0000e-005	8.9307
Total		**17.8416**	**7.2000e-004**	**1.4000e-004**	**17.9039**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0109	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	5.0000e-005
Unmitigated	0.0126	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	5.0000e-005

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	2.8900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	5.0000e-005
Total	**0.0126**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**5.0000e-005**

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	1.1500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	5.0000e-005
Total	**0.0109**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**5.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.8649	0.0109	2.7000e-004	2.2168
Unmitigated	1.8649	0.0109	2.7000e-004	2.2168

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	0.137034 / 0.0839887	0.9316	4.5000e-003	1.1000e-004	1.0777
Fast Food Restaurant with Drive Thru	0.194262 / 0.0123997	0.9333	6.3700e-003	1.6000e-004	1.1391
Total		**1.8649**	**0.0109**	**2.7000e-004**	**2.2169**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.137034 / 0.0839887	0.9316	4.5000e-003	1.1000e-004	1.0777
Fast Food Restaurant with Drive Thru	0.194262 / 0.0123997	0.9333	6.3700e-003	1.6000e-004	1.1391
Total		**1.8649**	**0.0109**	**2.7000e-004**	**2.2169**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.6247	0.1551	0.0000	6.5025
Unmitigated	2.6247	0.1551	0.0000	6.5025

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	5.56	1.1286	0.0667	0.0000	2.7961
Fast Food Restaurant with Drive Thru	7.37	1.4960	0.0884	0.0000	3.7064
Total		**2.6247**	**0.1551**	**0.0000**	**6.5025**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	5.56	1.1286	0.0667	0.0000	2.7961
Fast Food Restaurant with Drive Thru	7.37	1.4960	0.0884	0.0000	3.7064
Total		**2.6247**	**0.1551**	**0.0000**	**6.5025**

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

Tavern Road Gas Station - Existing Operations

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Convenience Market With Gas Pumps	1.85	1000sqft	0.04	1,850.00	0
Fast Food Restaurant with Drive Thru	0.64	1000sqft	0.01	640.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2019
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**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 operations (to be demolished)

Construction Phase - *Operation emissions only

Trips and VMT - *Operation emissions only

Vehicle Trips - Per LOS Engineering Inc. 2018

Energy Use - *Operational energy emissions for existing building

Area Mitigation - Low VOC coating for conservative operational emissions

Tavern Road Gas Station - Existing Operations - San Diego County, Winter

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	100
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	6/14/2019	5/31/2019
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblVehicleTrips	ST_TR	1,448.33	39.57
tblVehicleTrips	ST_TR	722.03	1,339.06
tblVehicleTrips	SU_TR	1,182.08	39.57
tblVehicleTrips	SU_TR	542.72	1,339.06
tblVehicleTrips	WD_TR	845.60	39.57
tblVehicleTrips	WD_TR	496.12	1,339.06

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.5371	0.0000	0.0000	0.5125	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.5371**	**0.0000**	**0.0000**	**0.5125**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.5371	0.0000	0.0000	0.5125	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.5371**	**0.0000**	**0.0000**	**0.5125**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	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**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0691	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.8000e-004
Energy	3.4700e-003	0.0316	0.0265	1.9000e-004		2.4000e-003	2.4000e-003		2.4000e-003	2.4000e-003		37.8918	37.8918	7.3000e-004	6.9000e-004	38.1170
Mobile	1.3430	4.5625	10.8838	0.0237	1.7815	0.0295	1.8110	0.4762	0.0277	0.5039		2,405.4569	2,405.4569	0.1813		2,409.9889
Total	**1.4156**	**4.5941**	**10.9106**	**0.0239**	**1.7815**	**0.0319**	**1.8134**	**0.4762**	**0.0301**	**0.5063**		**2,443.3493**	**2,443.3493**	**0.1820**	**6.9000e-004**	**2,448.1065**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0596	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.8000e-004
Energy	3.4700e-003	0.0316	0.0265	1.9000e-004		2.4000e-003	2.4000e-003		2.4000e-003	2.4000e-003		37.8918	37.8918	7.3000e-004	6.9000e-004	38.1170
Mobile	1.3430	4.5625	10.8838	0.0237	1.7815	0.0295	1.8110	0.4762	0.0277	0.5039		2,405.4569	2,405.4569	0.1813		2,409.9889
Total	**1.4061**	**4.5941**	**10.9106**	**0.0239**	**1.7815**	**0.0319**	**1.8134**	**0.4762**	**0.0301**	**0.5063**		**2,443.3493**	**2,443.3493**	**0.1820**	**6.9000e-004**	**2,448.1065**

	ROG	NOx	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	**0.67**	**0.00**	**0.00**	**0.00**	**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	6/1/2019	5/31/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

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	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	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	4	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

3.2 Demolition - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3430	4.5625	10.8838	0.0237	1.7815	0.0295	1.8110	0.4762	0.0277	0.5039		2,405.4569	2,405.4569	0.1813		2,409.9889
Unmitigated	1.3430	4.5625	10.8838	0.0237	1.7815	0.0295	1.8110	0.4762	0.0277	0.5039		2,405.4569	2,405.4569	0.1813		2,409.9889

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	73.20	73.20	73.20	39,267	39,267
Fast Food Restaurant with Drive Thru	857.00	857.00	857.00	800,715	800,715
Total	930.20	930.20	930.20	839,982	839,982

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	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
Fast Food Restaurant with Drive Thru	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357

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	lb/day										lb/day					
NaturalGas Mitigated	3.4700e-003	0.0316	0.0265	1.9000e-004		2.4000e-003	2.4000e-003		2.4000e-003	2.4000e-003		37.8918	37.8918	7.3000e-004	6.9000e-004	38.1170
NaturalGas Unmitigated	3.4700e-003	0.0316	0.0265	1.9000e-004		2.4000e-003	2.4000e-003		2.4000e-003	2.4000e-003		37.8918	37.8918	7.3000e-004	6.9000e-004	38.1170

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Convenience Market With Gas Pumps	12.2151	1.3000e-004	1.2000e-003	1.0100e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		1.4371	1.4371	3.0000e-005	3.0000e-005	1.4456
Fast Food Restaurant with Drive Thru	309.865	3.3400e-003	0.0304	0.0255	1.8000e-004		2.3100e-003	2.3100e-003		2.3100e-003	2.3100e-003		36.4547	36.4547	7.0000e-004	6.7000e-004	36.6714
Total		**3.4700e-003**	**0.0316**	**0.0265**	**1.9000e-004**		**2.4000e-003**	**2.4000e-003**		**2.4000e-003**	**2.4000e-003**		**37.8918**	**37.8918**	**7.3000e-004**	**7.0000e-004**	**38.1170**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Convenience Market With Gas Pumps	0.0122151	1.3000e-004	1.2000e-003	1.0100e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		1.4371	1.4371	3.0000e-005	3.0000e-005	1.4456
Fast Food Restaurant with Drive Thru	0.309865	3.3400e-003	0.0304	0.0255	1.8000e-004		2.3100e-003	2.3100e-003		2.3100e-003	2.3100e-003		36.4547	36.4547	7.0000e-004	6.7000e-004	36.6714
Total		**3.4700e-003**	**0.0316**	**0.0265**	**1.9000e-004**		**2.4000e-003**	**2.4000e-003**		**2.4000e-003**	**2.4000e-003**		**37.8918**	**37.8918**	**7.3000e-004**	**7.0000e-004**	**38.1170**

6.0 Area Detail

6.1 Mitigation Measures Area

Tavern Road Gas Station - Existing Operations - San Diego County, Winter

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0596	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.8000e-004
Unmitigated	0.0691	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.8000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0533					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.8000e-004
Total	**0.0691**	**0.0000**	**2.6000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**5.4000e-004**	**5.4000e-004**	**0.0000**		**5.8000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.3200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0533					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		5.4000e-004	5.4000e-004	0.0000		5.8000e-004
Total	**0.0596**	**0.0000**	**2.6000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**5.4000e-004**	**5.4000e-004**	**0.0000**		**5.8000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

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