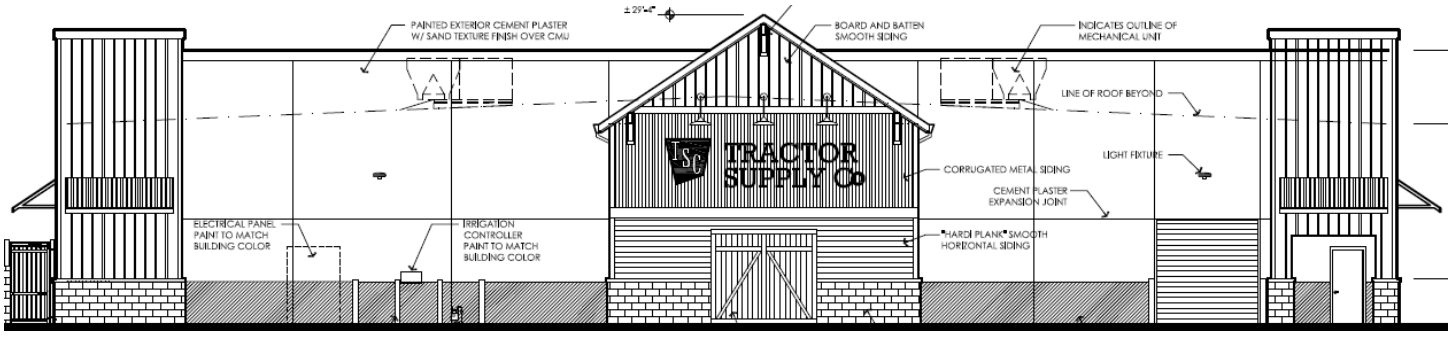
Air Quality and GHG Emissions Technical Report

Rocklin Tractor Supply Company Project
Rocklin, California



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ATTACHMENT

A - CalEEMod OUTPUT FILES

1.0 INTRODUCTION

This document presents results of an air quality and greenhouse gas (GHG) emissions analysis associated with the proposed Tractor Supply Company (the "project") in the City of Rocklin, California. This document provides an overview of the existing air quality conditions at the project site, the air quality regulatory framework, and an analysis of potential air quality impacts that would result from implementation of the project. Other issues related to air emissions covered in this document include potential health and odor impacts. Issues related to climate change and GHG emissions are also included. As noted in this air quality and GHG emissions analysis, the project would result in less than significant air quality and GHG emissions impacts. The supporting information, methodology, assumptions, and detailed results used in the analysis are provided in **Attachment A: CalEEMod Output Files**.

2.0 PROJECT OVERVIEW

The project includes the development of a 19,034 square foot retail building with a 77 space parking lot. The project also includes a 15,000 square foot paved outdoor display area west of the proposed building, 5,411 square feet of paved display area in front of the proposed building and a 1,250 square foot forage shed. The project site is approximately 2.6 acres and is currently undeveloped. The project site is located on Granite Drive; west of Sierra College Boulevard (approximately 700 feet southwest of the Granite Drive and Sierra College Boulevard Intersection).

Construction of the project is estimated to begin in November 2018 and would be completed in July 2019. Construction would commence with grading and site preparation, which would consist of land clearing and grading the project site. Grading of the project site is expected to be balanced on-site. Building construction, paving, and architectural coating would follow and construction activities are expected to be completed over approximately eight months.

3.0 ANALYSIS METHODOLGY

Intermittent (short-term construction emissions that occur from activities, such as site-grading and building construction) and long-term air quality impacts related to the operation of the project were evaluated. The analysis focuses on daily emissions from these construction and operational (mobile, area, stationary, and fugitive sources) activities. This air quality analysis is consistent with the methods described in the Placer County Air Pollution Control District (PCAPCD)'s *CEQA Air Quality Handbook* (dated November 21, 2017).[1]

[1] Placer County Air Pollution Control District, *CEQA Air Quality Handbook*, November 21, 2017. http://www.placerair.org/landuseandceqa/ceqaairqualityhandbook

The air quality analysis includes a review of criteria pollutant[2] emissions such as carbon monoxide (CO)[3], nitrogen oxides (NO_x), sulfur dioxide (SO_2), volatile organic compounds (VOC) as reactive organic gases (ROG)[4], particulate matter less than 10 micrometers (coarse or PM10), particulate matter less than 2.5 micrometers (fine or PM2.5).[5]

CalEEMod (California Emissions Estimator Model Version 2016.3.2)[6] was used to estimate air quality and GHG emissions from the project. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant and GHG emissions associated with both construction and operations of land use projects.

4.0 EXISTING CONDITIONS

The City of Rocklin is located within the Sacramento Valley Air Basin (SVAB), which includes all of Sacramento, Yolo, Yuba, Sutter, Colusa, Glenn, Butte, Tehama, and Shasta Counties and portions of Solano and Placer Counties. The SVAB is the northern half of California's Great Valley and is bordered on three sides (west, north, and east) by mountain ranges, with peaks in the eastern range above 9,000 feet. The SVAB is approximately 13,700 square miles and essentially a smooth valley floor with elevations ranging from 40 to 500 feet. The rolling valley is interrupted by the Sutter Buttes, an area of 80 square miles in northern Sutter County, which rise abruptly to more than 2,100 feet above the valley floor.

Regional Meteorology

Air quality is affected by the rate, amount, and location of pollutant emissions and the associated meteorological and geographical conditions that influence pollutant movement and dispersal. Atmospheric conditions, including wind speed, wind direction, stability, and air temperature, in combination with local surface topography (i.e., geographic features such as mountains, valleys, and large bodies of water), determine the effect of air pollutant emissions on local air quality.

The climate in the project area is considered Mediterranean, which is characterized by hot, dry summers and cool, wet winters. Within the project area, temperatures range from an average January low of approximately 36 degrees Fahrenheit (ºF) to an average July high of approximately

[2] Criteria air pollutants refer to those air pollutants for which the United States Environmental Protection Agency (USEPA) and California Air Resources Board (CARB) has established National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) under the Federal Clean Air Act (CAA).
[3] CO is a non–reactive pollutant that is a product of incomplete combustion of organic material, and is mostly associated with motor vehicle traffic, and in wintertime, with wood–burning stoves and fireplaces.
[4] VOC means any compound of carbon, excluding CO, carbon dioxide (CO_2), carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and thus, a precursor of ozone formation. ROG are any reactive compounds of carbon, excluding methane, CO, CO_2 carbonic acid, metallic carbides or carbonates, ammonium carbonate, and other exempt compounds. The terms VOC and ROG are often used interchangeably.
[5] PM_{10} and $PM_{2.5}$ consists of airborne particles that measure 10 microns or less in diameter and 2.5 microns or less in diameter, respectively. PM_{10} and $PM_{2.5}$ represent fractions of particulate matter that can be inhaled into the air passages and the lungs, causing adverse health effects.
[6] California Air Pollution Control Officers Association, *California Emissions Estimator Model User's Guide Version 2016.3.2*, November 2017. http://www.caleemod.com/

96°F. Between mid-April and mid-October, significant precipitation is unlikely and high temperatures often peak at over 100ºF with lows in the high 50s and low 60s.

Winters are fairly mild, with the most rainfall coming in January. Rainfall in the project area averages approximately 26 inches annually and occurs predominantly from October to May. During the winter, highs are typically in the 60s with lows in the 30s. "Tule fog" (thick ground fog) is often present during the autumn and winter months. The typical seasonal pattern is for North Pacific cyclonic storms to periodically move into the area from October through April and for high pressure to dominate over the area and to deflect storms from May to October.

The regional climate is dominated by the strength and location of a semi-permanent, subtropical high-pressure cell over the northeastern Pacific Ocean. The regional climate is also affected by the temperature moderating effects of the nearby Pacific Ocean. In summer, when the high-pressure cell is strongest, temperatures are very warm and humidity is low. The daily incursion of the sea breeze into the Central Valley, however, creates persistent breezes that moderate the summer heat. In winter, when the high-pressure cell is weakest, conditions are characterized by occasional rainstorms interspersed with stagnant conditions and sometimes heavy fog.

Criteria Air Pollutants

The United States Environmental Protection Agency (USEPA) has established the National Ambient Air Quality Standards (NAAQS) under the Clean Air Act (CAA) for six common air pollutants known as "criteria pollutants".[7] These air pollutants consist of CO, nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM10 and PM2.5), SO_2, and lead (Pb). An ambient air quality standard establishes the concentration above which the pollutant is known to cause adverse health effects to sensitive groups within the population such as children and the elderly. The goal is for localized project effects not to cause or contribute to an exceedance of the standards. Ambient air quality standards are classified as either "primary" or "secondary" standards. Primary standards define levels of air quality, including an adequate margin of safety, necessary to protect the public health. Secondary ambient air quality standards define levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

The CARB manages air quality, regulates mobile emissions sources, and oversees the activities of county and regional Air Pollution Control Districts and Air Quality Management Districts. CARB regulates local air quality indirectly by establishing State ambient air quality standards and vehicle emissions and fuel standards; and by conducting research, planning and coordinating activities. California has adopted ambient standards (known as California Ambient Air Quality Standards or CAAQS) that are more stringent than the federal standards for some criteria air pollutants. These ambient air standards are shown in **Table 1.**

[7] U.S. Environmental Protection Agency, *Six Common Air Pollutants*, https://www.epa.gov/criteria-air-pollutants

Table 1: State and National Criteria Air Pollutant Standards, Effects, and Sources

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone	1 Hour 8 Hour	0.09 ppm 0.07 ppm	– 0.070 ppm	High concentrations can directly affect lungs, causing irritation. Long–term exposure may cause damage to lung tissue.	Formed when reactive organic gases and nitrogen oxides react in the presence of sunlight. Major sources include on–road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.
Carbon Monoxide (CO)	1 Hour 8 Hour	20 ppm 9.0 ppm	35 ppm 9.0 ppm	Classified as a chemical asphyxiant, carbon monoxide interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline–powered motor vehicles.
Nitrogen Dioxide (NO_2)	1 Hour Annual	0.18 ppm 0.03 ppm	0.10 ppm 0.053 ppm	Irritating to eyes and respiratory tract. Colors atmosphere reddish–brown.	Motor vehicles, petroleum–refining operations, industrial sources, aircraft, ships, and railroads.
Sulfur Dioxide (SO_2)	1 Hour 3 Hour 24 Hour Annual	0.25 ppm – 0.04 ppm –	0.075 ppm 0.5 ppm 0.14 ppm 0.030 ppm	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
Respirable Particulate Matter (PM10)	24 Hour Annual	50 µg/m^3 20 µg/m^3	150 µg/m^3 –	May irritate eyes and respiratory tract, decreases in lung capacity, cancer and increased mortality. Produces haze and limits visibility.	Dust and fume–producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind–raised dust and ocean sprays).
Fine Particulate Matter (PM2.5)	24 Hour Annual	– 12 µg/m^3	35.0 µg/m^3 12.0 µg/m^3	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including nitrogen oxides, sulfur oxides, and organics.
Lead (Pb)	Month Rolling 3 Month	1.5 µg/m^3 –	– 0.15 µg/m^3	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurological dysfunction.	Present sources: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.

SOURCE: California Air Resource Board, Ambient Air Quality Standards, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf, May 4, 2016.
NOTE: (ppm = parts per million; µg/m3 = micrograms per cubic meter)

Local Air Quality

CARB maintains a network of monitoring stations within the Air Basin that monitor air quality and compliance with applicable ambient standards. The monitoring station closest to the project site is in Roseville (at 151 North Sunrise Boulevard), approximately five miles southwest of the project site; where levels of ozone, PM10, and PM2.5 are recorded. **Table 2** summarizes the most recent three years of data (2014 through 2016) from the monitoring station. The western Placer County portion of the SVAB is designated as a non-attainment area for State standards for ozone and PM10 and for federal standards for ozone and PM2.5.[8] Placer County is designated either attainment or unclassified for State and federal standards for all other criteria pollutants. Eight-hour ozone measurements show 19 exceedances of the NAAQS in 2014, six exceedances in 2015, and 20 exceedances in 2016. One-hour ozone measurements show four exceedances of the CAAQS in 2014, one exceedance in 2015, and five exceedances in 2016. PM10 measurements show one exceedance of the CAAQS in 2015 and zero in 2014 and 2016.[9] No exceedances of the PM2.5 CAAQS were recorded in 2014 through 2016.

Table 2: Air Quality Data Summary (2014 through 2016)

Pollutant	Monitoring Data by Year			
	Standard	2014	2015	2016
Ozone				
Highest 1 Hour Average (ppm)	0.090	**0.097**	**0.098**	**0.115**
Days over State Standard		4	1	5
Highest 8 Hour Average (ppm)	0.070	**0.086**	**0.084**	**0.092**
Days over National Standard		19	6	20
PM10				
Highest 24 Hour Average (µg/m^3)	50	31.8	**59.1**	39.1
Days over State Standard		0	1	0
State Annual Average (µg/m^3)	20	17.9	13.0	15.8
PM2.5				
Highest 24 Hour Average (µg/m^3)	35	22.2	29.1	21.2
Days over National Standard		0	0	0
State Annual Average (µg/m^3)	12	10.5	8.1	6.9

SOURCE: California Air Resource Board, *Air Quality Data Statistics 2014 - 2016*, http://www.arb.ca.gov/adam/welcome.html.
NOTES: Values in **bold** are in excess of at least one applicable standard. Generally, state standards and national standards are not to be exceeded more than once per year. (ppm = parts per million; µg/m^3 = micrograms per cubic meter)

5.0 AIR QUALITY IMPACT ANALYSIS

The air quality analysis includes a review of pollutant emissions such as CO, NO_x, SO_2, VOC as ROG, PM10, and PM2.5.

[8] California Air Resources Board, *Area Designation Maps/State and National*, http://www.arb.ca.gov/desig/adm/adm.htm
[9] California Air Resources Board, *Air Quality Data* Statistics, https://www.arb.ca.gov/adam/topfour/topfour1.php

Thresholds of Significance

The PCAPCD has developed thresholds of significance for criteria pollutants and GHGs for CEQA purposes. Significance thresholds are presented in the PCAPCD's *CEQA Air Quality Handbook.* The thresholds of significance applied to assess project-level air quality impacts for criteria pollutants are:

- Maximum daily construction emissions of 82 pounds per day of ROG, NO_x, or PM10; and
- Maximum daily operational emissions of 55 pounds per day of ROG or NO_x, and 82 pounds per day of PM10.

The thresholds of significance applied to assess cumulative-level air quality impacts for criteria pollutants are:

- Maximum daily operational emissions of 55 pounds per day of ROG or NO_x, and 82 pounds per day of PM10 (Same as project-level).

GHG emissions and their thresholds of significance are discussed in **Section 6**.

PCAPCD Rules and Regulations

All projects are subject to rules and regulations adopted by the PCAPCD in effect at the time of construction. Specific rules applicable to future construction resulting from the implementation of the project may include, but are not limited to:

- Rule 202 – Visible Emissions. A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated as number 1 on the Ringelmann Chart, as published by the United States Bureau of Mines.
- Rule 205 – Nuisances. A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause to have a natural tendency to cause injury or damage to business or property.
- Rule 207 – Particulate Matter. For the Sacramento Valley Air Basin and the Mountain Counties Air Basin portions of the PCAPCD, a person shall not release or discharge into the atmosphere from any source or single processing unit, exclusive of sources emitting combustion contaminants only, particulate matter emissions in excess of: 0.1 grains per cubic foot of gas at District standard conditions.
- Rule 217 – Cutback and Emulsified Asphalt Paving Materials. A person shall not manufacture for sale nor use for paving, road construction, or road maintenance any rapid cure cutback asphalt; slow cure cutback asphalt containing organic compounds which

evaporate at 500°F or lower as determined by current American Society for Testing and Materials (ASTM) Method D402; medium cure cutback asphalt except as provided in Section 1.2.; or emulsified asphalt containing organic compounds which evaporate at 500°F or lower as determined by current ASTM Method D244, in excess of 3 percent by volume.

- Rule 218 – Application of Architectural Coatings. No person shall manufacture, blend, or repackage for sale within the PCAPCD; supply, sell, or offer for sale within the PCAPCD; or solicit for application or apply within the PCAPCD, any architectural coating with a VOC content in excess of the corresponding specified manufacturer's maximum recommendation.
- Rule 225 – Woodburning Appliances. The general purpose of this rule is to limit emissions of particulate matter entering the atmosphere from the operation of a wood burning appliance. This rule applies to any person who manufactures, sells, advertises, offers for sale, supplies, or operates a permanently installed, indoor or outdoor, wood burning appliance in Placer County, and any person who installs a wood-burning appliance in any single or multiple residential development or commercial development in Placer County.
- Rule 228 – Fugitive Dust
    - Visible Emissions Not Allowed Beyond the Boundary Line: A person shall not cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area (including disturbance as a result of the raising and/or keeping of animals or by vehicle use), such that the presence of such dust remains visible in the atmosphere beyond the boundary line of the emission source.
    - Visible Emissions from Active Operations: In addition to the requirements of Rule 202, Visible Emissions, a person shall not cause or allow fugitive dust generated by active operations, an open storage pile, or a disturbed surface area, such that the fugitive dust is of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke as dark or darker in shade as that designated as number 2 on the Ringelmann Chart, as published by the United States Bureau of Mines.
    - Concentration Limit: A person shall not cause or allow PM10 levels to exceed 50 micrograms per cubic meter ($\mu g/m^3$) (24-hour average) when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other USEPA-approved equivalent method for PM10 monitoring.
    - Track-Out onto Paved Public Roadways: Visible roadway dust as a result of active operations, spillage from transport trucks, and the track-out of bulk material onto public paved roadways shall be minimized and removed.

- The track-out of bulk material onto public paved roadways as a result of operations, or erosion, shall be minimized by the use of track-out and erosion control, minimization, and preventative measures, and removed within one hour from adjacent streets such material anytime track-out extends for a cumulative distance of greater than 50 feet onto any paved public road during active operations.
- All visible roadway dust tracked out upon public paved roadways as a result of active operations shall be removed at the conclusion of each work day when active operations cease, or every 24 hours for continuous operations. Wet sweeping or a High Efficiency Particulate Air filter-equipped vacuum device shall be used for roadway dust removal.
- Any material tracked out, or carried by erosion, and cleanup water shall be prevented from entering waterways or stormwater inlets as required to comply water quality control requirements.

o Minimum Dust Control Requirements. The following dust control measures are to be initiated at the start and maintained throughout the duration of any construction or grading activity, including any construction or grading for road construction or maintenance.

- Unpaved areas subject to vehicle traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered.
- The speed of any vehicles and equipment traveling across unpaved areas must be no more than 15 miles per hour unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust exceeding Ringelmann 2 or visible emissions from crossing the project boundary line.
- Storage piles and disturbed areas not subject to vehicular traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered when material is not being added to or removed from the pile.
- Prior to any ground disturbance, including grading, excavating, and land clearing, sufficient water must be applied to the area to be disturbed to prevent emitting dust exceeding Ringelmann 2 and to minimize visible emissions from crossing the boundary line.
- Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt, from being released or tracked offsite.
- When wind speeds are high enough to result in dust emissions crossing the boundary line, despite the application of dust control measures, grading and earthmoving operations shall be suspended.

- No trucks are allowed to transport excavated material off-site unless the trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments, and loads are either covered with tarps; or wetted and loaded such that the material does not touch the front, back, or sides of the cargo compartment at any point less than six inches from the top and that no point of the load extends above the top of the cargo compartment.

o Wind-Driven Fugitive Dust Control. A person shall take action(s), such as surface stabilization, establishment of a vegetative cover, or paving, to minimize wind-driven dust from inactive disturbed surface areas.

- Rule 246 – Natural-Gas-Fired Water Heaters. The general purpose of this rule is to limit the emission of NO_x from natural-gas-fired water heaters. The provisions of this rule apply to all of Placer County, and this rule applies to any person who manufactures, distributes, offers for sale, sells, or installs any natural gas-fired water heater with a rated heat input capacity less than 75,000 British Thermal Units per hour, for use in the Air District.

Consistency with Air Quality Plan

The PCAPCD along with other local air districts in the Sacramento region are required to comply and implement the State Implementation Plan (SIP) to demonstrate how and when the region can attain the federal ozone standards. In 2013, air districts from the Sacramento planning region developed the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions Plan)*[10] to address how the region would attain the 1997 federal 8-hour ozone standard. The *2013 SIP Revisions Plan* was approved by U.S. EPA effective March 2, 2015[11]. The *2013 SIP Revisions Plan* is the applicable air quality plan for the project.

A conflict with, or obstruction of, implementation of the *2013 SIP Revisions Plan* could occur if a project generates greater emissions than what has been projected for the site in the emissions inventory of the *2013 SIP Revisions Plan*. Emissions inventories are developed based on projected increases in population, employment, regional vehicle miles traveled, and associated area sources within the region, which are based on regional projections that are, in turn, based on the City's General Plan and zoning designations for the region. The project would not change the existing general plan or zoning designation for the project site. Therefore, the project would not generate greater emissions than what has been projected for the site in the emissions inventory of the *2013 SIP Revisions Plan*.

The project would support the primary goals of the *2013 SIP Revisions Plan*, it would be consistent with all applicable *2013 SIP Revisions Plan* control measures, and would not disrupt or hinder

[10] Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions), September 26, 2013, http://www.airquality.org/ProgramCoordination/Documents/4)%202013%20SIP%20Revision%20Report%201997%20Std.pdf

[11] Federal Register/ Volume 80, No. 19/ Thursday, January 29, 2015/ Rules and Regulations http://www.airquality.org/ProgramCoordination/Documents/2013SIPFinalRule.pdf

implementation of any *2013 SIP Revisions Plan* control measures. Therefore, the project would have a less-than-significant impact.

Construction and Operational Emissions

Short-term construction emissions that occur from activities, such as site-grading and building construction and long-term air quality impacts related to the operation of the project were evaluated.

Construction

The project site is currently vacant and no demolition is required. Site preparation and grading activities were estimated to occur for seven days. Grading of the project site is expected to be balanced. Building construction, paving, and architectural coating would follow and construction activities are expected to be completed over approximately eight months. **Table 3** provides the estimated construction schedule for each phase: site preparation, grading, building construction, paving, and architectural coating.

Table 3: Estimated Project Construction Schedule

Phase	Description	Start	End	Working Days
1	Site Preparation	11/01/2018	11/03/2018	2
2	Grading	11/04/2018	11/10/2018	5
3	Building Construction	11/11/2018	6/17/2019	156
4	Paving	6/18/2019	7/01/2019	10
5	Architectural Coating	7/2/2019	7/15/2019	10

SOURCE: CalEEMod Version 2016.3.2.

Project construction would generate short-term emissions of air pollutants, including fugitive dust and equipment exhaust emissions. The PCAPCD *CEQA Air Quality Handbook* recommends quantification of construction-related emissions and comparison of those emissions to significance thresholds. The CalEEMod was used to quantify construction-related pollutant emissions. CalEEMod output worksheets are also included in **Attachment A: CalEEMod Output Files**.

Based on CalEEMod, the estimated construction equipment associated with the project along with the number of pieces of equipment, daily hours of operation, horsepower (hp), and load factor (i.e., percent of full throttle) are shown in **Table 4**.

Table 4: Estimated Project Construction Equipment Usage

Phase	Equipment	Amount	Daily Hours	HP	Load Factor
Site Preparation	Scrapers	1	8	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7	97	0.37
Site Preparation	Graders	1	8	187	0.41
Grading	Tractors/Loaders/Backhoes	2	7	97	0.37
Grading	Rubber Tired Dozers	1	8	247	0.40
Grading	Graders	1	8	187	0.41
Building Construction	Generator Sets	1	8	84	0.74
Building Construction	Cranes	1	8	231	0.29
Building Construction	Forklifts	2	7	89	0.20
Building Construction	Tractors/Loaders/Backhoes	1	6	97	0.37
Building Construction	Welders	3	8	46	0.45
Paving	Pavers	1	8	130	0.42
Paving	Rollers	2	8	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8	97	0.37
Paving	Cement and Mortar Mixers	1	8	9	0.56
Paving	Paving Equipment	1	8	132	0.36
Architectural Coating	Air Compressors	1	6	78	0.48

SOURCE: CalEEMod Version 2016.3.2.

An average daily construction crew of 24 workers would be present on-site during building construction with less workers during other construction phases. **Table 5** provides a list of the expected trips and trip lengths by construction phase of haul trucks, vendors, and construction workers.

Table 5: Estimated Construction Trips and Trip Lengths

Phase	Worker Trips	Vendor Trips	Haul Truck Trips	Worker Trip Length (mile)	Vendor Trip Length (mile)	Haul Trip Length (mile)
Site Preparation	8	0	0	10.8	7.3	20.0
Grading	10	0	0	10.8	7.3	20.0
Building Construction	48	19	0	10.8	7.3	20.0
Paving	15	0	0	10.8	7.3	20.0
Architectural Coating	10	0	0	10.8	7.3	20.0

SOURCE: CalEEMod Version 2016.3.2.

The emissions generated from these construction activities include:

- Dust (including PM10 and PM2.5) primarily from “fugitive” sources (i.e., emissions released through means other than through a stack or tailpipe) such as material handling and travel on unpaved surfaces; and

- Combustion emissions of criteria air pollutants (ROG, NO_x, CO, PM10, and PM2.5) primarily from operation of heavy off-road construction equipment, haul trucks, (primarily diesel-operated), and construction worker automobile trips (primarily gasoline-operated).
- VOC emissions from architectural coating.

Construction-related fugitive dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the weather. Poor construction practices could result in substantial emissions of fugitive dust that could become a nuisance. The PCAPCD requires construction projects to comply with District Rules & Regulations for Construction. Compliance with the PCAPCD District Rules & Regulations for construction, specifically Rule 228 – Fugitive Dust, which requires implementation of minimum dust control requirements, would prevent and control fugitive dust emissions.

Estimated maximum daily emissions of criteria pollutants emissions that would be generated by construction of the project are shown in **Table 6**. Construction emissions were estimated using CalEEMod. As shown in **Table 6**, criteria pollutant emissions from construction would be below the PCAPCD's maximum daily significance thresholds for ROG, NO_x, and PM10. There is no significance threshold for CO or PM2.5. Therefore, project construction would have a less-than-significant impact.

Table 6: Estimated Maximum Daily Construction Emissions (pounds)

Condition	ROG	NOx	PM10
2018 Max Daily Construction Emissions	3.23	24.32	7.82
2019 Max Daily Construction Emissions	20.59	21.49	1.63
Maximum Daily Emissions	**20.59**	**24.32**	**7.82**
Significance Threshold	82	82	82
Potentially Significant (Yes or No)?	No	No	No

SOURCE: CalEEMod Version 2016.3.2.

Operations

The project would generate operational criteria pollutant emissions from transportation, area sources, electricity consumption, natural gas combustion, electricity usage associated with water usage and wastewater discharge, and solid waste landfilling and transport. Operational emissions were estimated using the CalEEMod. The project land use types and size and other project-specific information were used to make the calculations. Unless otherwise noted, the CalEEMod model defaults for Placer County were used. The operational emissions estimates assume an operational year of 2020. CalEEMod output worksheets are included in **Attachment A: CalEEMod Output Files**.

CalEEMod trip rates were increased according to trip rates provided by Tractor Supply Company. The maximum daily trip rates used in the air quality analysis to determine the maximum daily emissions were 250 daily trips for weekdays and 400 daily trips for weekends.[12]

Estimated daily (summer and winter) operational criteria pollutant emissions that would be associated with the project are presented in **Table 7** and are compared to PCAPCD's thresholds of significance. As indicated in **Table 7**, the estimated project operational emissions would be below the PCAPCD's significance thresholds. Therefore, project operations would have a less-than-significant impact.

Table 7: Estimated Maximum Daily Operational Emissions (pounds)

Condition	ROG	NOx	PM10
Winter Daily Emissions	1.27	5.68	2.54
Summer Daily Emissions	1.44	5.32	2.53
Maximum Daily Emissions	**1.44**	**5.68**	**2.53**
Significance Threshold	55	55	82
Potentially Significant (Yes or No)?	No	No	No

SOURCE: CalEEMod Version 2016.3.2.

Cumulative Impacts

The PCAPCD cumulative significance thresholds are the same as the project-level significance thresholds. Therefore, a project would have a significant cumulative impact if the project exceeds the project-level significance thresholds. As disclosed in this air quality analysis, the project would not exceed project-level air quality significance thresholds, therefore, the project would not generate cumulatively considerable air emissions. Therefore, the project would have a less-than-significant impact.

Health Impacts

Land uses such as schools, children's daycare centers, hospitals, and convalescent homes are considered to be more sensitive than the general public to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress. Persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality. The CARB has identified the following people as most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and those with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive population groups.

Residential areas are considered more sensitive to air quality conditions than commercial and industrial areas, because people generally spend longer periods of time at their residences, resulting in greater exposure to ambient air quality conditions. Recreational uses are also considered

[12] Hoelscher, Tim. Memo Regarding Traffic Counts and Hours for a Typical Tractor Supply Company, August 26, 2016.

sensitive, due to the greater exposure to ambient air quality conditions and because the presence of pollution detracts from the recreational experience.

The only residential area within 1,000 feet of the project site are multifamily residential units located approximately 350 feet to the west across Granite Drive. The project site borders Target, the associated parking lot and other commercial uses to the south. There are no schools or daycare facilities within 1,000 feet of the project site.

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TAC are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for those TAC that may cause cancer, there is no concentration that does not present some risk. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards.

The project would constitute a new emission source of DPM[13] due to construction activities. Studies have demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. The project is a short-term construction activity (less than eight months) that would not generate substantial emissions. The dominate wind direction at the project site is from the southerly direction with secondary occurrence of winds from the north. Winds infrequently blow from the project site to the nearest sensitive receptor to the west. Therefore, the project would have a less-than-significant impact relative to health impacts during construction.

The additional traffic from the project is a small increase which would not expose sensitive receptors to substantial pollutant concentrations. Implementation of the project would not result in an increased exposure of sensitive receptors to localized concentrations of TAC. Therefore, the project would have a less-than-significant impact relative to health impacts.

Odor Impacts

Any project with the potential to frequently expose members of the public to objectionable odors will be deemed to have a significant impact. As a general matter, the types of development that

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[13] In August of 1998, CARB identified particulate emissions from diesel-fueled engines as a toxic air contaminant. CARB developed the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. The document represents a proposal to reduce diesel particulate emissions, with the goal to reduce emissions and the associated health risk by 75 percent in 2010 and by 85 percent in 2020. The program aims to require the use of state-of-the-art catalyzed diesel particulate filters and ultra-low sulfur diesel fuel on diesel-fueled engines.

Diesel particulate matter (DPM) is the most complex of diesel emissions. Diesel particulates, as defined by most emission standards, are sampled from diluted and cooled exhaust gases. This definition includes both solid and liquid material that condenses during the dilution process. The basic fractions of DPM are elemental carbon; heavy hydrocarbons derived from the fuel and lubricating oil and hydrated sulfuric acid derived from the fuel sulfur. DPM contains a large portion of the polycyclic aromatic hydrocarbons found in diesel exhaust. Diesel particulates include small nuclei particles of diameters below 0.04 micrometers (μm) and their agglomerates of diameters up to 1 μm.

pose potential odor problems include agriculture, food processing, dairies, rendering, refineries, chemical plants, wastewater treatment plants, landfills, composting facilities, and transfer stations. No such odiferous uses would be a part of the project. Retail stores do not typically generate odor problems. Therefore, odor impacts associated with the project would be less than significant.

6.0 GREENHOUSE GAS EMISSIONS ANALYSIS

"Global warming" and "global climate change" are the terms used to describe the increase in the average temperature of the earth's near-surface air and oceans since the mid-20th century and its projected continuation. Warming of the climate system is now considered to be unequivocal, with global surface temperature increasing approximately 1.33 degrees Fahrenheit (°F) over the last 100 years. Continued warming is projected to increase global average temperature between 2 and 11°F over the next 100 years.

Natural processes and human actions have been identified as the causes of this warming. The International Panel on Climate Change concludes that variations in natural phenomena such as solar radiation and volcanoes produced most of the warming from pre-industrial times to 1950 and had a small cooling effect afterward. After 1950, however, increasing GHG concentrations resulting from human activity such as fossil fuel burning and deforestation have been responsible for most of the observed temperature increase. These basic conclusions have been endorsed by more than 45 scientific societies and academies of science, including all of the national academies of science of the major industrialized countries. Since 2007, no scientific body of national or international standing has maintained a dissenting opinion.

Increases in GHG concentrations in the earth's atmosphere are thought to be the main cause of human-induced climate change. GHG naturally trap heat by impeding the exit of solar radiation that has hit the earth and is reflected back into space. Some GHG occur naturally and are necessary for keeping the earth's surface inhabitable. However, increases in the concentrations of these gases in the atmosphere during the last 100 years have decreased the amount of solar radiation that is reflected back into space, intensifying the natural greenhouse effect and resulting in the increase of global average temperature.

Gases that trap heat in the atmosphere are referred to as GHG because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHG has been implicated as the driving force for global climate change. The primary GHG are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), ozone, and water vapor.

While the presence of the primary GHGs in the atmosphere are naturally occurring, CO_2, CH_4, and N_2O are also emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas methane results from off-gassing associated with agricultural practices and landfills. Other GHG include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and are generated in certain industrial processes.

CO_2 is the reference gas for climate change because it is the predominant GHG emitted. The effect that each of the aforementioned gases can have on global warming is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a pound-for-pound basis, how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same mass of CO_2, CH_4, and N_2O are substantially more potent GHG than CO_2, with GWP of 25 and 310 times that of CO_2, respectively.

In emissions inventories, GHG emissions are typically reported in terms of pounds or metric tons (MT) of CO_2 equivalents (CO_2e). CO_2e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH_4 and N_2O have much higher GWP than CO_2, CO_2 is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO_2e.

Fossil fuel combustion, especially for the generation of electricity and powering of motor vehicles, has led to substantial increases in CO_2 emissions (and thus substantial increases in atmospheric concentrations of CO_2). In pre-industrial times (c. 1860), concentrations of atmospheric CO_2 were approximately 280 parts per million (ppm). By February 2018, atmospheric CO_2 concentrations had increased to 408 ppm, by over 46 percent above pre-industrial concentrations.[14] There is international scientific consensus that human-caused increases in GHG have contributed and will continue to contribute to global warming.

There is international scientific consensus that human-caused increases in GHG have and will continue to contribute to global warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.[15]

City of Rocklin General Plan

The City of Rocklin General Plan was published in October of 2012.[16] The General Plan Conservation Element addresses the conservation, development, and utilization of natural resources including air quality. The goals and policies reflect an increased emphasis on protection of valued natural resources as the community continues to develop, and provide specific direction as to how that protection should occur.

The General Plan is designed to conserve and protect natural resources (such as air quality) while permitting their managed use, consistent with City, State and Federal requirements through implementation of policies such as the following:

[14] Earth System Research Laboratory, *Recent Monthly Mean CO2 at Mauna Lora*, www.esrl.noaa.gov/gmd/ccgg/trends/
[15] California Environmental Protection Agency, *2006 Final Climate Action Team Report to the Governor and Legislature*, March 2006. http://www.climatechange.ca.gov/climate_action_team/reports/2006report/2006-04-03_FINAL_CAT_REPORT.PDF.
[16] City of Rocklin, *General Plan*, October 2012, https://www.rocklin.ca.us/post/general-plan

- Adopt and implement land use strategies that utilize existing infrastructure, reduce the need for new roads, utilities and other public works in newly developing areas, and enhance nonautomotive transportation.
- Encourage high-density, mixed-use, infill development and creative use of brownfield and under-utilized properties.
- Increase densities in core areas to support public transit.
- Add bicycle facilities to City streets and public spaces.
- Promote infill, mixed-use, higher density development and the creation of affordable housing in mixed use zones.
- Identify sites suitable for mixed-use development within existing service areas and establish appropriate site-specific standards to accommodate the mixed uses.
- Promote greater linkage between land uses and transit, as well as other modes of transportation.
- Promote development and preservation of neighborhood characteristics that encourage walking and bicycle riding in lieu of automobile-based travel.
- Encourage energy conservation in new developments.
- Encourage urban design and form that conserves land and other resources.
- Require development projects to incorporate stationary and mobile source control measures recommended by the Placer County Air Pollution Control District (PCAPCD) and approved by the City for protection of air quality during construction and subsequent operations.
- Continue to consult with the PCAPCD in the development of stationary and mobile source control measures affecting the City of Rocklin.
- Reduce the exposure of sensitive receptors to potential health risks from toxic air contaminants.

California Air Pollution Control Officers Association

The California Air Pollution Control Officers Association (CAPCOA), representing California's 35 local air districts, launched the CAPCOA *Greenhouse Gas Reduction Exchange (GHG Rx)*.[17] The *Exchange* provides a reliable, low-cost, secure platform to encourage locally generated, high quality GHG emission reduction credits that can be used to meet CEQA or other compliance requirements. The GHG Rx features locally generated and properly validated GHG emission

[17] CAPCOA *Greenhouse Gas Exchange*, http://xappprod.aqmd.gov/ghgrx.

reduction credits from voluntary projects within California and allow interaction between those who create the credits, potential buyers and funding organizations.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished by enforcing a statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires CARB to adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state reduces GHG emissions enough to meet the cap. AB 32 also includes guidance on instituting emissions reductions in an economically efficient manner, along with conditions to ensure that businesses and consumers are not unfairly affected by the reductions. Using these criteria to reduce statewide GHG emissions to 1990 levels by 2020 would represent an approximate 25 to 30 percent reduction in current emissions levels. However, CARB has discretionary authority to seek greater reductions in more significant and growing GHG sectors, such as transportation, as compared to other sectors that are not anticipated to significantly increase emissions. Under AB 32, CARB must adopt regulations to achieve reductions in GHG to meet the 1990 emissions cap by 2020.

Climate Change Scoping Plan

AB 32 required CARB to develop a Scoping Plan that describes the approach California will take to reduce GHG to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was first approved by CARB in 2008 and must be updated every five years. The initial AB 32 Scoping Plan contains the main strategies California will use to reduce the GHG that cause climate change. The initial Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 program implementation fee regulation to fund the program. In August 2011, the initial Scoping Plan was approved by CARB.

The 2013 Scoping Plan Update builds upon the initial Scoping Plan with new strategies and recommendations. The 2013 Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The 2013 Update defines CARB climate change priorities for the next five years and sets the groundwork to reach California's long-term climate goals set forth in Executive Orders S-

3-05 and B-16-2012. The 2013 Update highlights California progress toward meeting the near-term 2020 GHG emission reduction goals defined in the initial Scoping Plan. In the 2013 Update, nine key focus areas were identified (energy, transportation, agriculture, water, waste management, and natural and working lands), along with short-lived climate pollutants, green buildings, and the cap-and-trade program. On May 22, 2014, the First Update to the Climate Change Scoping Plan was approved by the Board, along with the finalized environmental documents.

Executive Order No. B-30-15

On April 29, 2015, Executive Order No. B-30-15 was issued to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. Executive Order No. B-30-15 sets a new, interim, 2030 reduction goal intended to provide a smooth transition to the existing ultimate 2050 reduction goal set by Executive Order No. S-3-05 (signed by Governor Schwarzenegger in June 2005). It is designed so State agencies do not fall behind the pace of reductions necessary to reach the existing 2050 reduction goal. Executive Order No. B-30-15 orders "All State agencies with jurisdiction over sources of GHG emissions shall implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 targets." The Executive Order also states that "CARB shall update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent." The CARB is currently moving forward with a second update to the Climate Change Scoping Plan to reflect the 2030 reduction target. The updated Scoping Plan will provide a framework for achieving the 2030 target. In September of 2016, the AB 32 was extended to achieve reductions in GHG of 40 percent below 1990 levels by 2030. The new plan, outlined in SB 32, involves increasing renewable energy use, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

California Green Building Standard Code

The effective date of the 2016 changes to the California Green Building Standards Code, Part 11, Title 24 (CALGreen) is January 1, 2017. CALGreen is a comprehensive and uniform regulatory code for all residential, commercial and school buildings.

CALGreen does not prevent a local jurisdiction from adopting a more stringent code as state law provides methods for local enhancements. CALGreen recognizes that many jurisdictions have developed existing construction and demolition ordinances, and defers to them as the ruling guidance provided they provide a minimum 50-percent diversion requirement. CALGreen also provides exemptions for areas not served by construction and demolition recycling infrastructure. State building code provides the minimum standard, which buildings need to meet in order to be certified for occupancy. Enforcement is generally through the local building official.

The development of CALGreen is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor.

In short, CALGreen is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impacts during and after construction.

CALGreen contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. CALGreen provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. CALGreen also requires building commissioning, which is a process for verifying that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency. The following provides examples of CALGreen requirements:

- Designated parking. Provide designated parking in commercial projects for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles.
- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling.
- Construction waste. A minimum 50-percent diversion of construction and demolition waste from landfills, increasing voluntarily to 65 and-75 percent for new homes and 80-percent for commercial projects. All (100 percent) of trees, stumps, rocks and associated vegetation and soils resulting from land clearing shall be reused or recycled.
- Wastewater reduction. Each building shall reduce the generation of wastewater by installation of water-conserving fixtures or using nonpotable water systems.
- Water use savings. 20-percent mandatory reduction in indoor water use with voluntary goal standards for 30, 35, and 40-percent reductions.
- Water meters. Separate water meters for buildings in excess of 50,000 square feet or buildings projected to consume more than 1,000 gallons per day.
- Irrigation efficiency. Moisture-sensing irrigation systems for larger landscaped areas.
- Materials pollution control. Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particleboard.
- Building commissioning. Mandatory inspections of energy systems (i.e. heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies.

Greenhouse Gas Emission Estimates

Worldwide emissions of GHG in 2014 were 45.7 billion tons of CO_2e per year.[18] This value includes ongoing emissions from industrial and agricultural sources, but excludes emissions from land use changes.

In 2014, the United States emitted about 6.87 billion tons of CO_2e per year or about 21.5 tons per person per year. Of the five major sectors nationwide — residential and commercial, industrial, agriculture, transportation, and electricity— electricity accounts for the highest fraction of GHG emissions (approximately 30 percent), closely followed by transportation (approximately 26 percent) and by industry (approximately 21 percent); these emissions from energy are primarily generated from the combustion of fossil fuels (approximately 82 percent), and emissions from transportation are entirely generated from direct fossil fuel combustion.[19] United States emissions increased by one percent from 2013 to 2014. Greenhouse gas emissions in 2014 were 9 percent below 2005 levels. Recent trends can be attributed to multiple factors including increased emissions from electricity generation, an increase in miles traveled by on-road vehicles, an increase in industrial production and emissions in multiple sectors, and year-to-year changes in the prevailing weather.

In 2015, California emitted approximately 440.4 million tons of CO_2e. This represents approcimately 6.4 percent of total U.S. emissions. This large number is due primarily to the sheer size of California compared to other states. California's gross emissions of GHG decreased by 5.6 percent from 466.3 million metric tons of CO_2e in 2000 to 441.5 million metric tons in 2014, with a maximum of 492.7 million metric tons in 2004.[20]

At 11.4 tons per person per year, California has one of the lowest per capita GHG emission rates in the country.[21] This is in part due to the success of the state's energy efficiency and renewable energy programs and commitments that have lowered the GHG emissions rate of growth by more than half of what it would have been otherwise. Another factor that has reduced California's fuel use and GHG emissions is its mild climate compared to that of many other states. In 2015, the composition of GHG emissions in California (expressed as CO_2e) were as follows:

- CO_2 accounted for 84.0 percent;
- CH_4 accounted for 9.0 percent;
- N_2O accounted for 2.7 percent; and
- Fluorinated gases (HFCs, PFC, and SF_6) accounted for 4.3 percent.

[18] Climate Analysis Indicator Tool, http://cait.wri.org/
[19] United States Environmental Protections Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2014*, April 2016, www.epa.gov/ghgemissions/us-greenhouse-gas-inventory-report-1990-2014
[20] California Air Resources Board, *Emissions Trends Report*, June 6, 2017, www.arb.ca.gov/cc/inventory/data/data.htm
[21] California Air Resources Board, *Emissions Trends Report*, June 6, 2017, www.arb.ca.gov/cc/inventory/data/data.htm

Of these gases, CARB found that transportation is the source of approximately 39 percent of the state's GHG emissions, followed by industrial sources at 23 percent and electricity generation (both in-state and out-of-state) at 19 percent. Agriculture is the source of approximately 8 percent, and residential activity is the source of about 6 percent, followed by commercial activities at 5 percent.[22]

The City of Rocklin published a community-wide GHG emissions inventory for the year of 2008. The transportation sector was responsible for the majority (54.7 percent) of the emissions. Electricity and natural gas consumption in residential and commercial/industrial sources contribute 44.9 percent of the communitywide emissions. The City of Rocklin emitted approximately 6,200 metric tons of CO_2e in 2008.[23]

Thresholds of Significance

The thresholds of significance applied to assess project-level air quality impacts for GHG emissions are:

- Construction phases of all projects and operational phases of stationary source projects with GHG emissions less than 10,000 metric tons of CO_2e per year are considered less than significant.
- Operational phases of land use projects with GHG emissions below the De Minimis Level of 1,100 metric tons of CO_2e per year are considered less than significant.
- Operational phases of land use projects with GHG emissions greater than 1,100 metric tons of CO_2e per year but less than 10,000 metric tons of CO_2e per year are compared to the following Efficiency Matrix to determine significance:
    - Residential land use projects with operational GHG emissions that meet the following efficiencies are considered less than significant:
        - Residential land use projects in urban areas with GHG emissions at or below 4.5 metric tons of CO_2e per year/capita
        - Residential land use projects in rural areas with GHG emissions at or below 5.5 metric tons of CO_2e per year/capita
    - Non-Residential land use projects with operational GHG emissions that meet the following efficiencies are considered less than significant:
        - Non-Residential land use projects in urban areas with GHG emissions at or below 26.5 metric tons of CO_2e per year/1,000 square feet

[22] California Air Resources Board, *Emissions Trends Report*, June 6, 2017. Accessed December 11, 2017 at www.arb.ca.gov/cc/inventory/data/data.htm
[23] City of Rocklin, 2008 Community-wide Baseline Greenhouse Gas Emissions Inventory, July 2010, https://www.rocklin.ca.us/sites/main/files/file-attachments/appendix_c_gpafeir_8-6-12.pdf

    - Non-Residential land use projects in rural areas with GHG emissions at or below 27.3 metric tons of CO_2e per year/1,000 square feet

- Operational phases of land use projects with GHG emissions greater than 10,000 metric tons of CO_2e per year are deemed to have a potentially significant GHG impact and would be deemed to have a cumulatively considerable contribution to global climate change

For quantifying a project's GHG emissions, PCAPCD recommends that all GHG emissions from a project be estimated, including a project's direct and indirect GHG emissions from operations. Direct emissions refer to emissions produced from onsite combustion of energy, such as natural gas used in furnaces and boilers, emissions from industrial processes, and fuel combustion from mobile sources. Indirect emissions are emissions produced offsite from energy production and water conveyance due to a project's energy use and water consumption.

Greenhouse Gas Emissions

CalEEMod was used to quantify GHG emissions associated with project construction activities, as well as long-term operational emissions produced by motor vehicles, natural gas combustion for space and water heating, electricity use, water use, solid waste and landscape maintenance equipment. CalEEMod incorporates GHG emission factors for the central electric utility serving the project area and mitigation measures based on the California Air Pollution Control Officer's Association (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures*.[24]

CalEEMod is sensitive to the year selected, since vehicle emissions have and continue to be reduced due to fuel efficiency standards and low carbon fuels. The operational year of 2020 was analyzed since it is the first full year that the project could conceivably be occupied.

Default rates for energy consumption were assumed in the model. Emissions rates associated with electricity consumption were adjusted to account for Pacific Gas & Electric utility's projected 2020 CO_2 intensity rate. This 2020 CO_2 intensity rate is based, in part, on the requirement of a renewable energy portfolio standard of 33 percent by the year 2020. CalEEMod uses a default rate of 641 pounds of CO_2 per megawatt of electricity produced. The projected CO_2 intensity rate of 290 pounds of CO_2 per megawatt of electricity produced was used.[25]

The project's estimated construction and operational GHG emissions are presented in **Table 8**. The estimated annual construction GHG emissions are approximately 61 metric tons of CO_2e in 2018 and approximately 189 metric tons of CO_2e in 2019, which are less than the PCAPCD Bright-Line significance threshold of 10,000 metric tons of CO_2e per year. Therefore, the construction emissions from the project would have a less-than-significant impact on climate change.

[24] California Air Pollution Control Officer's Association, *Quantifying Greenhouse Gas Mitigation Measures*, August, 2010, http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf
[25] Greenhouse Gas Emission Factors: Guidance for PG&E Customers, November 2015, http://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf

As shown in **Table 8**, the estimated operational GHG emissions are approximately 468 metric tons of CO_2e, which is below the PCAPCD De Minimis Level of 1,100 metric tons of CO_2e per year. Therefore, the operational emissions from the project would have a less-than-significant impact on climate change. CalEEMod output worksheets are included in **Attachment A: CalEEMod Output Files**.

Table 8: Estimated Greenhouse Gas Emissions (metric tons)

Source	Annual Metric Tons of CO2e
2018 Construction Emissions	**61**
2019 Construction Emissions	**189**
Significance Threshold	10,000
Potentially Significant (Yes or No)?	No
Operations	
Area Sources	<0.1
Energy	41.8
Mobile	405
Solid Waste	11.9
Water	9.1
Total Operational Emissions	**468**
PCAPCD De Minimis Level	1,100
Potentially Significant (Yes or No)?	**No**

SOURCE: CalEEMod Version 2016.3.2.

Consistency with Climate Action Plan

The City of Rocklin does not have an adopted Climate Action Plan or GHG Reduction Plan. The project would result in a significant impact if it would be in conflict with State plans, policies and regulations adopted for the purpose of reducing GHG emissions, such as AB 32. The assumption is that projects that do not exceed the GHG significance thresholds adopted by the PCAPCD would not conflict with State policies, plans and regulations. As disclosed in this GHG emissions analysis, the project would not exceed and would be well below PCAPCD GHG significance thresholds. Therefore, the project would have a less-than-significant impact.

Attachment A

CalEEMod Output Files

Construction and Operational Emissions

- Annual Emissions
- Summer Daily Emissions
- Winter Daily Emissions

Rocklin Tractor Supply Company

Placer-Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	19.03	1000sqft	0.44	19,034.00	0
Other Non-Asphalt Surfaces	1.46	Acre	1.46	63,597.60	0
Parking Lot	78.00	Space	0.70	31,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E, 2015

Land Use - 19,034 building on a 2.6 acre site with 78 parking spots. Assumed the rest of the site is paved.

Construction Phase - Construction beginning in November 2018 and ending in July 2019

Grading - 2.6 acre site, balanced grading

Vehicle Trips - Typical Tractor Supply Trip Information from Director of Real Estate

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	2.00
tblConstructionPhase	NumDays	6.00	5.00
tblConstructionPhase	NumDays	220.00	156.00
tblConstructionPhase	PhaseEndDate	11/5/2018	11/3/2018
tblConstructionPhase	PhaseEndDate	11/13/2018	11/10/2018
tblConstructionPhase	PhaseEndDate	9/17/2019	6/17/2019
tblConstructionPhase	PhaseEndDate	10/1/2019	7/1/2019
tblConstructionPhase	PhaseEndDate	10/15/2019	7/15/2019
tblConstructionPhase	PhaseStartDate	11/6/2018	11/4/2018
tblConstructionPhase	PhaseStartDate	11/14/2018	11/11/2018
tblConstructionPhase	PhaseStartDate	9/18/2019	6/18/2019
tblConstructionPhase	PhaseStartDate	10/2/2019	7/2/2019
tblGrading	AcresOfGrading	2.50	2.60
tblGrading	AcresOfGrading	3.00	2.60
tblLandUse	LandUseSquareFeet	19,030.00	19,034.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblVehicleTrips	ST_TR	1.32	21.02
tblVehicleTrips	SU_TR	0.68	21.02
tblVehicleTrips	WD_TR	6.97	13.13

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					
2018	0.0652	0.5066	0.3610	7.0000e-004	0.0271	0.0269	0.0540	0.0111	0.0256	0.0367	0.0000	61.0659	61.0659	0.0111	0.0000	61.3429
2019	0.2798	1.3617	1.1012	2.1700e-003	0.0310	0.0708	0.1018	8.4400e-003	0.0677	0.0761	0.0000	187.8069	187.8069	0.0310	0.0000	188.5818
Maximum	**0.2798**	**1.3617**	**1.1012**	**2.1700e-003**	**0.0310**	**0.0708**	**0.1018**	**0.0111**	**0.0677**	**0.0761**	**0.0000**	**187.8069**	**187.8069**	**0.0310**	**0.0000**	**188.5818**

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					
2018	0.0652	0.5066	0.3610	7.0000e-004	0.0271	0.0269	0.0540	0.0111	0.0256	0.0367	0.0000	61.0658	61.0658	0.0111	0.0000	61.3429
2019	0.2798	1.3617	1.1012	2.1700e-003	0.0310	0.0708	0.1018	8.4400e-003	0.0677	0.0761	0.0000	187.8068	187.8068	0.0310	0.0000	188.5816
Maximum	**0.2798**	**1.3617**	**1.1012**	**2.1700e-003**	**0.0310**	**0.0708**	**0.1018**	**0.0111**	**0.0677**	**0.0761**	**0.0000**	**187.8068**	**187.8068**	**0.0310**	**0.0000**	**188.5816**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-1-2018	1-31-2019	0.8492	0.8492
2	2-1-2019	4-30-2019	0.7729	0.7729
3	5-1-2019	7-31-2019	0.5989	0.5989
		Highest	0.8492	0.8492

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	0.0907	1.0000e-005	9.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7600e-003	1.7600e-003	0.0000	0.0000	1.8800e-003
Energy	1.9100e-003	0.0174	0.0146	1.0000e-004		1.3200e-003	1.3200e-003		1.3200e-003	1.3200e-003	0.0000	41.5264	41.5264	2.6200e-003	8.1000e-004	41.8347
Mobile	0.1042	0.7337	1.2330	4.4000e-003	0.3177	4.8400e-003	0.3226	0.0855	4.5700e-003	0.0900	0.0000	404.2491	404.2491	0.0165	0.0000	404.6612
Waste						0.0000	0.0000		0.0000	0.0000	4.7906	0.0000	4.7906	0.2831	0.0000	11.8685
Water						0.0000	0.0000		0.0000	0.0000	1.3961	3.1323	4.5284	0.1437	3.4500e-003	9.1495
Total	**0.1968**	**0.7511**	**1.2485**	**4.5000e-003**	**0.3177**	**6.1600e-003**	**0.3239**	**0.0855**	**5.8900e-003**	**0.0914**	**6.1867**	**448.9095**	**455.0963**	**0.4459**	**4.2600e-003**	**467.5157**

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	0.0907	1.0000e-005	9.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7600e-003	1.7600e-003	0.0000	0.0000	1.8800e-003
Energy	1.9100e-003	0.0174	0.0146	1.0000e-004		1.3200e-003	1.3200e-003		1.3200e-003	1.3200e-003	0.0000	41.5264	41.5264	2.6200e-003	8.1000e-004	41.8347
Mobile	0.1042	0.7337	1.2330	4.4000e-003	0.3177	4.8400e-003	0.3226	0.0855	4.5700e-003	0.0900	0.0000	404.2491	404.2491	0.0165	0.0000	404.6612
Waste						0.0000	0.0000		0.0000	0.0000	4.7906	0.0000	4.7906	0.2831	0.0000	11.8685
Water						0.0000	0.0000		0.0000	0.0000	1.3961	3.1323	4.5284	0.1437	3.4500e-003	9.1495
Total	**0.1968**	**0.7511**	**1.2485**	**4.5000e-003**	**0.3177**	**6.1600e-003**	**0.3239**	**0.0855**	**5.8900e-003**	**0.0914**	**6.1867**	**448.9095**	**455.0963**	**0.4459**	**4.2600e-003**	**467.5157**

	ROG	NOx	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	Site Preparation	Site Preparation	11/1/2018	11/3/2018	5	2	
2	Grading	Grading	11/4/2018	11/10/2018	5	5	
3	Building Construction	Building Construction	11/11/2018	6/17/2019	5	156	
4	Paving	Paving	6/18/2019	7/1/2019	5	10	
5	Architectural Coating	Architectural Coating	7/2/2019	7/15/2019	5	10	

Acres of Grading (Site Preparation Phase): 2.6

Acres of Grading (Grading Phase): 2.6

Acres of Paving: 2.16

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 28,551; Non-Residential Outdoor: 9,517; Striped Parking Area: 5,688 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	48.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2018

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					1.3800e-003	0.0000	1.3800e-003	1.5000e-004	0.0000	1.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9000e-003	0.0236	0.0128	2.0000e-005		9.5000e-004	9.5000e-004		8.8000e-004	8.8000e-004	0.0000	2.2393	2.2393	7.0000e-004	0.0000	2.2567
Total	**1.9000e-003**	**0.0236**	**0.0128**	**2.0000e-005**	**1.3800e-003**	**9.5000e-004**	**2.3300e-003**	**1.5000e-004**	**8.8000e-004**	**1.0300e-003**	**0.0000**	**2.2393**	**2.2393**	**7.0000e-004**	**0.0000**	**2.2567**

3.2 Site Preparation - 2018

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	2.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0577	0.0577	0.0000	0.0000	0.0578
Total	**3.0000e-005**	**2.0000e-005**	**2.6000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0577**	**0.0577**	**0.0000**	**0.0000**	**0.0578**

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					1.3800e-003	0.0000	1.3800e-003	1.5000e-004	0.0000	1.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9000e-003	0.0236	0.0128	2.0000e-005		9.5000e-004	9.5000e-004		8.8000e-004	8.8000e-004	0.0000	2.2393	2.2393	7.0000e-004	0.0000	2.2567
Total	**1.9000e-003**	**0.0236**	**0.0128**	**2.0000e-005**	**1.3800e-003**	**9.5000e-004**	**2.3300e-003**	**1.5000e-004**	**8.8000e-004**	**1.0300e-003**	**0.0000**	**2.2393**	**2.2393**	**7.0000e-004**	**0.0000**	**2.2567**

3.2 Site Preparation - 2018

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	2.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0577	0.0577	0.0000	0.0000	0.0578
Total	**3.0000e-005**	**2.0000e-005**	**2.6000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0577**	**0.0577**	**0.0000**	**0.0000**	**0.0578**

3.3 Grading - 2018

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	8.4200e-003	0.0000	8.4200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3800e-003	0.0607	0.0260	5.0000e-005		2.9200e-003	2.9200e-003		2.6900e-003	2.6900e-003	0.0000	4.7116	4.7116	1.4700e-003	0.0000	4.7483
Total	**5.3800e-003**	**0.0607**	**0.0260**	**5.0000e-005**	**0.0164**	**2.9200e-003**	**0.0194**	**8.4200e-003**	**2.6900e-003**	**0.0111**	**0.0000**	**4.7116**	**4.7116**	**1.4700e-003**	**0.0000**	**4.7483**

3.3 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	8.0000e-005	8.1000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1805	0.1805	1.0000e-005	0.0000	0.1806
Total	**1.0000e-004**	**8.0000e-005**	**8.1000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1805**	**0.1805**	**1.0000e-005**	**0.0000**	**0.1806**

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					0.0164	0.0000	0.0164	8.4200e-003	0.0000	8.4200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3800e-003	0.0607	0.0260	5.0000e-005		2.9200e-003	2.9200e-003		2.6900e-003	2.6900e-003	0.0000	4.7116	4.7116	1.4700e-003	0.0000	4.7483
Total	**5.3800e-003**	**0.0607**	**0.0260**	**5.0000e-005**	**0.0164**	**2.9200e-003**	**0.0194**	**8.4200e-003**	**2.6900e-003**	**0.0111**	**0.0000**	**4.7116**	**4.7116**	**1.4700e-003**	**0.0000**	**4.7483**

3.3 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	8.0000e-005	8.1000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1805	0.1805	1.0000e-005	0.0000	0.1806
Total	**1.0000e-004**	**8.0000e-005**	**8.1000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1805**	**0.1805**	**1.0000e-005**	**0.0000**	**0.1806**

3.4 Building Construction - 2018

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	0.0524	0.3727	0.2829	4.5000e-004		0.0226	0.0226		0.0217	0.0217	0.0000	38.0437	38.0437	8.2000e-003	0.0000	38.2486
Total	**0.0524**	**0.3727**	**0.2829**	**4.5000e-004**		**0.0226**	**0.0226**		**0.0217**	**0.0217**	**0.0000**	**38.0437**	**38.0437**	**8.2000e-003**	**0.0000**	**38.2486**

3.4 Building Construction - 2018

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	1.7200e-003	0.0467	0.0102	1.0000e-004	2.2300e-003	3.3000e-004	2.5600e-003	6.5000e-004	3.1000e-004	9.6000e-004	0.0000	9.5967	9.5967	5.3000e-004	0.0000	9.6099
Worker	3.6100e-003	2.6900e-003	0.0280	7.0000e-005	6.7800e-003	5.0000e-005	6.8300e-003	1.8100e-003	4.0000e-005	1.8500e-003	0.0000	6.2364	6.2364	1.9000e-004	0.0000	6.2410
Total	**5.3300e-003**	**0.0494**	**0.0383**	**1.7000e-004**	**9.0100e-003**	**3.8000e-004**	**9.3900e-003**	**2.4600e-003**	**3.5000e-004**	**2.8100e-003**	**0.0000**	**15.8331**	**15.8331**	**7.2000e-004**	**0.0000**	**15.8510**

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	0.0524	0.3727	0.2829	4.5000e-004		0.0226	0.0226		0.0217	0.0217	0.0000	38.0436	38.0436	8.2000e-003	0.0000	38.2485
Total	**0.0524**	**0.3727**	**0.2829**	**4.5000e-004**		**0.0226**	**0.0226**		**0.0217**	**0.0217**	**0.0000**	**38.0436**	**38.0436**	**8.2000e-003**	**0.0000**	**38.2485**

3.4 Building Construction - 2018

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	1.7200e-003	0.0467	0.0102	1.0000e-004	2.2300e-003	3.3000e-004	2.5600e-003	6.5000e-004	3.1000e-004	9.6000e-004	0.0000	9.5967	9.5967	5.3000e-004	0.0000	9.6099
Worker	3.6100e-003	2.6900e-003	0.0280	7.0000e-005	6.7800e-003	5.0000e-005	6.8300e-003	1.8100e-003	4.0000e-005	1.8500e-003	0.0000	6.2364	6.2364	1.9000e-004	0.0000	6.2410
Total	**5.3300e-003**	**0.0494**	**0.0383**	**1.7000e-004**	**9.0100e-003**	**3.8000e-004**	**9.3900e-003**	**2.4600e-003**	**3.5000e-004**	**2.8100e-003**	**0.0000**	**15.8331**	**15.8331**	**7.2000e-004**	**0.0000**	**15.8510**

3.4 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	0.1535	1.1346	0.9153	1.5000e-003		0.0654	0.0654		0.0627	0.0627	0.0000	125.8526	125.8526	0.0262	0.0000	126.5071
Total	**0.1535**	**1.1346**	**0.9153**	**1.5000e-003**		**0.0654**	**0.0654**		**0.0627**	**0.0627**	**0.0000**	**125.8526**	**125.8526**	**0.0262**	**0.0000**	**126.5071**

3.4 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0500e-003	0.1469	0.0304	3.3000e-004	7.4400e-003	8.9000e-004	8.3300e-003	2.1500e-003	8.5000e-004	3.0100e-003	0.0000	31.7167	31.7167	1.6700e-003	0.0000	31.7584
Worker	0.0109	7.8900e-003	0.0835	2.2000e-004	0.0226	1.5000e-004	0.0228	6.0200e-003	1.4000e-004	6.1600e-003	0.0000	20.1650	20.1650	5.5000e-004	0.0000	20.1788
Total	**0.0160**	**0.1548**	**0.1139**	**5.5000e-004**	**0.0301**	**1.0400e-003**	**0.0311**	**8.1700e-003**	**9.9000e-004**	**9.1700e-003**	**0.0000**	**51.8817**	**51.8817**	**2.2200e-003**	**0.0000**	**51.9372**

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	0.1535	1.1346	0.9153	1.5000e-003		0.0654	0.0654		0.0627	0.0627	0.0000	125.8524	125.8524	0.0262	0.0000	126.5070
Total	**0.1535**	**1.1346**	**0.9153**	**1.5000e-003**		**0.0654**	**0.0654**		**0.0627**	**0.0627**	**0.0000**	**125.8524**	**125.8524**	**0.0262**	**0.0000**	**126.5070**

3.4 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0500e-003	0.1469	0.0304	3.3000e-004	7.4400e-003	8.9000e-004	8.3300e-003	2.1500e-003	8.5000e-004	3.0100e-003	0.0000	31.7167	31.7167	1.6700e-003	0.0000	31.7584
Worker	0.0109	7.8900e-003	0.0835	2.2000e-004	0.0226	1.5000e-004	0.0228	6.0200e-003	1.4000e-004	6.1600e-003	0.0000	20.1650	20.1650	5.5000e-004	0.0000	20.1788
Total	**0.0160**	**0.1548**	**0.1139**	**5.5000e-004**	**0.0301**	**1.0400e-003**	**0.0311**	**8.1700e-003**	**9.9000e-004**	**9.1700e-003**	**0.0000**	**51.8817**	**51.8817**	**2.2200e-003**	**0.0000**	**51.9372**

3.5 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	6.2300e-003	0.0628	0.0593	9.0000e-005		3.6500e-003	3.6500e-003		3.3600e-003	3.3600e-003	0.0000	7.9208	7.9208	2.4600e-003	0.0000	7.9823
Paving	9.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.1500e-003**	**0.0628**	**0.0593**	**9.0000e-005**		**3.6500e-003**	**3.6500e-003**		**3.3600e-003**	**3.3600e-003**	**0.0000**	**7.9208**	**7.9208**	**2.4600e-003**	**0.0000**	**7.9823**

3.5 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.1700e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5251	0.5251	1.0000e-005	0.0000	0.5255
Total	**2.8000e-004**	**2.1000e-004**	**2.1700e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5251**	**0.5251**	**1.0000e-005**	**0.0000**	**0.5255**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.2300e-003	0.0628	0.0593	9.0000e-005		3.6500e-003	3.6500e-003		3.3600e-003	3.3600e-003	0.0000	7.9208	7.9208	2.4600e-003	0.0000	7.9823
Paving	9.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.1500e-003**	**0.0628**	**0.0593**	**9.0000e-005**		**3.6500e-003**	**3.6500e-003**		**3.3600e-003**	**3.3600e-003**	**0.0000**	**7.9208**	**7.9208**	**2.4600e-003**	**0.0000**	**7.9823**

3.5 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.1700e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5251	0.5251	1.0000e-005	0.0000	0.5255
Total	**2.8000e-004**	**2.1000e-004**	**2.1700e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5251**	**0.5251**	**1.0000e-005**	**0.0000**	**0.5255**

3.6 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	0.1014					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	9.1800e-003	9.2100e-003	1.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total	**0.1027**	**9.1800e-003**	**9.2100e-003**	**1.0000e-005**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

3.6 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.4000e-004	1.4500e-003	0.0000	3.9000e-004	0.0000	4.0000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.3501	0.3501	1.0000e-005	0.0000	0.3503
Total	**1.9000e-004**	**1.4000e-004**	**1.4500e-003**	**0.0000**	**3.9000e-004**	**0.0000**	**4.0000e-004**	**1.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3501**	**0.3501**	**1.0000e-005**	**0.0000**	**0.3503**

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	0.1014					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	9.1800e-003	9.2100e-003	1.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2793
Total	**0.1027**	**9.1800e-003**	**9.2100e-003**	**1.0000e-005**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.1000e-004**	**0.0000**	**1.2793**

3.6 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.4000e-004	1.4500e-003	0.0000	3.9000e-004	0.0000	4.0000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.3501	0.3501	1.0000e-005	0.0000	0.3503
Total	**1.9000e-004**	**1.4000e-004**	**1.4500e-003**	**0.0000**	**3.9000e-004**	**0.0000**	**4.0000e-004**	**1.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3501**	**0.3501**	**1.0000e-005**	**0.0000**	**0.3503**

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	0.1042	0.7337	1.2330	4.4000e-003	0.3177	4.8400e-003	0.3226	0.0855	4.5700e-003	0.0900	0.0000	404.2491	404.2491	0.0165	0.0000	404.6612
Unmitigated	0.1042	0.7337	1.2330	4.4000e-003	0.3177	4.8400e-003	0.3226	0.0855	4.5700e-003	0.0900	0.0000	404.2491	404.2491	0.0165	0.0000	404.6612

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	249.86	400.01	400.01	854,725	854,725
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	249.86	400.01	400.01	854,725	854,725

4.3 Trip Type Information

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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.489257	0.041257	0.220156	0.132626	0.025790	0.006586	0.027831	0.045583	0.001467	0.001229	0.006102	0.000783	0.001333
Other Non-Asphalt Surfaces	0.489257	0.041257	0.220156	0.132626	0.025790	0.006586	0.027831	0.045583	0.001467	0.001229	0.006102	0.000783	0.001333
Parking Lot	0.489257	0.041257	0.220156	0.132626	0.025790	0.006586	0.027831	0.045583	0.001467	0.001229	0.006102	0.000783	0.001333

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	22.5933	22.5933	2.2600e-003	4.7000e-004	22.7890
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	22.5933	22.5933	2.2600e-003	4.7000e-004	22.7890
NaturalGas Mitigated	1.9100e-003	0.0174	0.0146	1.0000e-004		1.3200e-003	1.3200e-003		1.3200e-003	1.3200e-003	0.0000	18.9332	18.9332	3.6000e-004	3.5000e-004	19.0457
NaturalGas Unmitigated	1.9100e-003	0.0174	0.0146	1.0000e-004		1.3200e-003	1.3200e-003		1.3200e-003	1.3200e-003	0.0000	18.9332	18.9332	3.6000e-004	3.5000e-004	19.0457

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	354794	1.9100e-003	0.0174	0.0146	1.0000e-004		1.3200e-003	1.3200e-003		1.3200e-003	1.3200e-003	0.0000	18.9332	18.9332	3.6000e-004	3.5000e-004	19.0457
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**1.9100e-003**	**0.0174**	**0.0146**	**1.0000e-004**		**1.3200e-003**	**1.3200e-003**		**1.3200e-003**	**1.3200e-003**	**0.0000**	**18.9332**	**18.9332**	**3.6000e-004**	**3.5000e-004**	**19.0457**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	354794	1.9100e-003	0.0174	0.0146	1.0000e-004		1.3200e-003	1.3200e-003		1.3200e-003	1.3200e-003	0.0000	18.9332	18.9332	3.6000e-004	3.5000e-004	19.0457
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**1.9100e-003**	**0.0174**	**0.0146**	**1.0000e-004**		**1.3200e-003**	**1.3200e-003**		**1.3200e-003**	**1.3200e-003**	**0.0000**	**18.9332**	**18.9332**	**3.6000e-004**	**3.5000e-004**	**19.0457**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	160837	21.1568	2.1200e-003	4.4000e-004	21.3402
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	10920	1.4364	1.4000e-004	3.0000e-005	1.4489
Total		**22.5933**	**2.2600e-003**	**4.7000e-004**	**22.7890**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	160837	21.1568	2.1200e-003	4.4000e-004	21.3402
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	10920	1.4364	1.4000e-004	3.0000e-005	1.4489
Total		**22.5933**	**2.2600e-003**	**4.7000e-004**	**22.7890**

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	0.0907	1.0000e-005	9.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7600e-003	1.7600e-003	0.0000	0.0000	1.8800e-003
Unmitigated	0.0907	1.0000e-005	9.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7600e-003	1.7600e-003	0.0000	0.0000	1.8800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0805					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7600e-003	1.7600e-003	0.0000	0.0000	1.8800e-003
Total	**0.0907**	**1.0000e-005**	**9.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.7600e-003**	**1.7600e-003**	**0.0000**	**0.0000**	**1.8800e-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	0.0101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0805					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7600e-003	1.7600e-003	0.0000	0.0000	1.8800e-003
Total	**0.0907**	**1.0000e-005**	**9.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.7600e-003**	**1.7600e-003**	**0.0000**	**0.0000**	**1.8800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.5284	0.1437	3.4500e-003	9.1495
Unmitigated	4.5284	0.1437	3.4500e-003	9.1495

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	4.40069 / 0	4.5284	0.1437	3.4500e-003	9.1495
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**4.5284**	**0.1437**	**3.4500e-003**	**9.1495**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	4.40069 / 0	4.5284	0.1437	3.4500e-003	9.1495
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**4.5284**	**0.1437**	**3.4500e-003**	**9.1495**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.7906	0.2831	0.0000	11.8685
Unmitigated	4.7906	0.2831	0.0000	11.8685

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	23.6	4.7906	0.2831	0.0000	11.8685
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**4.7906**	**0.2831**	**0.0000**	**11.8685**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	23.6	4.7906	0.2831	0.0000	11.8685
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**4.7906**	**0.2831**	**0.0000**	**11.8685**

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

Rocklin Tractor Supply Company

Placer-Sacramento County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	19.03	1000sqft	0.44	19,034.00	0
Other Non-Asphalt Surfaces	1.46	Acre	1.46	63,597.60	0
Parking Lot	78.00	Space	0.70	31,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E, 2015

Land Use - 19,034 building on a 2.6 acre site with 78 parking spots. Assumed the rest of the site is paved.

Construction Phase - Construction beginning in November 2018 and ending in July 2019

Grading - 2.6 acre site, balanced grading

Vehicle Trips - Typical Tractor Supply Trip Information from Director of Real Estate

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	2.00
tblConstructionPhase	NumDays	6.00	5.00
tblConstructionPhase	NumDays	220.00	156.00
tblConstructionPhase	PhaseEndDate	11/5/2018	11/3/2018
tblConstructionPhase	PhaseEndDate	11/13/2018	11/10/2018
tblConstructionPhase	PhaseEndDate	9/17/2019	6/17/2019
tblConstructionPhase	PhaseEndDate	10/1/2019	7/1/2019
tblConstructionPhase	PhaseEndDate	10/15/2019	7/15/2019
tblConstructionPhase	PhaseStartDate	11/6/2018	11/4/2018
tblConstructionPhase	PhaseStartDate	11/14/2018	11/11/2018
tblConstructionPhase	PhaseStartDate	9/18/2019	6/18/2019
tblConstructionPhase	PhaseStartDate	10/2/2019	7/2/2019
tblGrading	AcresOfGrading	2.50	2.60
tblGrading	AcresOfGrading	3.00	2.60
tblLandUse	LandUseSquareFeet	19,030.00	19,034.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblVehicleTrips	ST_TR	1.32	21.02
tblVehicleTrips	SU_TR	0.68	21.02
tblVehicleTrips	WD_TR	6.97	13.13

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					
2018	3.2306	24.3169	17.9788	0.0349	6.6557	1.2782	7.8245	3.3916	1.2248	4.4669	0.0000	3,344.1538	3,344.1538	0.7705	0.0000	3,357.7760
2019	20.5897	21.4323	17.2810	0.0347	0.5230	1.1074	1.6304	0.1416	1.0613	1.2030	0.0000	3,309.0047	3,309.0047	0.5452	0.0000	3,322.0309
Maximum	**20.5897**	**24.3169**	**17.9788**	**0.0349**	**6.6557**	**1.2782**	**7.8245**	**3.3916**	**1.2248**	**4.4669**	**0.0000**	**3,344.1538**	**3,344.1538**	**0.7705**	**0.0000**	**3,357.7760**

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					
2018	3.2306	24.3169	17.9788	0.0349	6.6557	1.2782	7.8245	3.3916	1.2248	4.4669	0.0000	3,344.1538	3,344.1538	0.7705	0.0000	3,357.7760
2019	20.5897	21.4323	17.2810	0.0347	0.5230	1.1074	1.6304	0.1416	1.0613	1.2030	0.0000	3,309.0047	3,309.0047	0.5452	0.0000	3,322.0309
Maximum	**20.5897**	**24.3169**	**17.9788**	**0.0349**	**6.6557**	**1.2782**	**7.8245**	**3.3916**	**1.2248**	**4.4669**	**0.0000**	**3,344.1538**	**3,344.1538**	**0.7705**	**0.0000**	**3,357.7760**

	ROG	NOx	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	0.4974	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0216	0.0216	6.0000e-005		0.0230
Energy	0.0105	0.0953	0.0801	5.7000e-004		7.2400e-003	7.2400e-003		7.2400e-003	7.2400e-003		114.3574	114.3574	2.1900e-003	2.1000e-003	115.0370
Mobile	0.9308	5.3247	9.9360	0.0352	2.4927	0.0362	2.5289	0.6680	0.0341	0.7021		3,564.8982	3,564.8982	0.1367		3,568.3148
Total	**1.4387**	**5.4201**	**10.0262**	**0.0358**	**2.4927**	**0.0435**	**2.5362**	**0.6680**	**0.0414**	**0.7094**		**3,679.2771**	**3,679.2771**	**0.1389**	**2.1000e-003**	**3,683.3747**

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	0.4974	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0216	0.0216	6.0000e-005		0.0230
Energy	0.0105	0.0953	0.0801	5.7000e-004		7.2400e-003	7.2400e-003		7.2400e-003	7.2400e-003		114.3574	114.3574	2.1900e-003	2.1000e-003	115.0370
Mobile	0.9308	5.3247	9.9360	0.0352	2.4927	0.0362	2.5289	0.6680	0.0341	0.7021		3,564.8982	3,564.8982	0.1367		3,568.3148
Total	**1.4387**	**5.4201**	**10.0262**	**0.0358**	**2.4927**	**0.0435**	**2.5362**	**0.6680**	**0.0414**	**0.7094**		**3,679.2771**	**3,679.2771**	**0.1389**	**2.1000e-003**	**3,683.3747**

	ROG	NOx	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	Site Preparation	Site Preparation	11/1/2018	11/3/2018	5	2	
2	Grading	Grading	11/4/2018	11/10/2018	5	5	
3	Building Construction	Building Construction	11/11/2018	6/17/2019	5	156	
4	Paving	Paving	6/18/2019	7/1/2019	5	10	
5	Architectural Coating	Architectural Coating	7/2/2019	7/15/2019	5	10	

Acres of Grading (Site Preparation Phase): 2.6

Acres of Grading (Grading Phase): 2.6

Acres of Paving: 2.16

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 28,551; Non-Residential Outdoor: 9,517; Striped Parking Area: 5,688 (Architectural Coating – sqft)

OffRoad Equipment

Rocklin Tractor Supply Company - Placer-Sacramento County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	48.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2018

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					1.3787	0.0000	1.3787	0.1489	0.0000	0.1489			0.0000			0.0000
Off-Road	1.8995	23.6201	12.7461	0.0245		0.9540	0.9540		0.8777	0.8777		2,468.4131	2,468.4131	0.7685		2,487.6244
Total	**1.8995**	**23.6201**	**12.7461**	**0.0245**	**1.3787**	**0.9540**	**2.3327**	**0.1489**	**0.8777**	**1.0265**		**2,468.4131**	**2,468.4131**	**0.7685**		**2,487.6244**

3.2 Site Preparation - 2018

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	0.0374	0.0220	0.2902	7.0000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		69.7380	69.7380	2.0700e-003		69.7896
Total	**0.0374**	**0.0220**	**0.2902**	**7.0000e-004**	**0.0657**	**4.3000e-004**	**0.0662**	**0.0174**	**4.0000e-004**	**0.0178**		**69.7380**	**69.7380**	**2.0700e-003**		**69.7896**

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					1.3787	0.0000	1.3787	0.1489	0.0000	0.1489			0.0000			0.0000
Off-Road	1.8995	23.6201	12.7461	0.0245		0.9540	0.9540		0.8777	0.8777	0.0000	2,468.4131	2,468.4131	0.7685		2,487.6244
Total	**1.8995**	**23.6201**	**12.7461**	**0.0245**	**1.3787**	**0.9540**	**2.3327**	**0.1489**	**0.8777**	**1.0265**	**0.0000**	**2,468.4131**	**2,468.4131**	**0.7685**		**2,487.6244**

3.2 Site Preparation - 2018

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	0.0374	0.0220	0.2902	7.0000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		69.7380	69.7380	2.0700e-003		69.7896
Total	**0.0374**	**0.0220**	**0.2902**	**7.0000e-004**	**0.0657**	**4.3000e-004**	**0.0662**	**0.0174**	**4.0000e-004**	**0.0178**		**69.7380**	**69.7380**	**2.0700e-003**		**69.7896**

3.3 Grading - 2018

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					6.5736	0.0000	6.5736	3.3698	0.0000	3.3698			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748		2,077.4666	2,077.4666	0.6467		2,093.6352
Total	**2.1515**	**24.2895**	**10.3804**	**0.0206**	**6.5736**	**1.1683**	**7.7419**	**3.3698**	**1.0748**	**4.4446**		**2,077.4666**	**2,077.4666**	**0.6467**		**2,093.6352**

3.3 Grading - 2018

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	0.0468	0.0274	0.3628	8.8000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		87.1725	87.1725	2.5800e-003		87.2371
Total	**0.0468**	**0.0274**	**0.3628**	**8.8000e-004**	**0.0822**	**5.4000e-004**	**0.0827**	**0.0218**	**5.0000e-004**	**0.0223**		**87.1725**	**87.1725**	**2.5800e-003**		**87.2371**

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					6.5736	0.0000	6.5736	3.3698	0.0000	3.3698			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748	0.0000	2,077.4666	2,077.4666	0.6467		2,093.6352
Total	**2.1515**	**24.2895**	**10.3804**	**0.0206**	**6.5736**	**1.1683**	**7.7419**	**3.3698**	**1.0748**	**4.4446**	**0.0000**	**2,077.4666**	**2,077.4666**	**0.6467**		**2,093.6352**

3.3 Grading - 2018

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	0.0468	0.0274	0.3628	8.8000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		87.1725	87.1725	2.5800e-003		87.2371
Total	**0.0468**	**0.0274**	**0.3628**	**8.8000e-004**	**0.0822**	**5.4000e-004**	**0.0827**	**0.0218**	**5.0000e-004**	**0.0223**		**87.1725**	**87.1725**	**2.5800e-003**		**87.2371**

3.4 Building Construction - 2018

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	2.9127	20.7077	15.7183	0.0250		1.2575	1.2575		1.2051	1.2051		2,329.7759	2,329.7759	0.5019		2,342.3232
Total	**2.9127**	**20.7077**	**15.7183**	**0.0250**		**1.2575**	**1.2575**		**1.2051**	**1.2051**		**2,329.7759**	**2,329.7759**	**0.5019**		**2,342.3232**

3.4 Building Construction - 2018

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	0.0934	2.5480	0.5193	5.7000e-003	0.1287	0.0181	0.1468	0.0371	0.0173	0.0544		595.9499	595.9499	0.0306		596.7149
Worker	0.2244	0.1317	1.7413	4.2000e-003	0.3943	2.5900e-003	0.3969	0.1046	2.3900e-003	0.1070		418.4279	418.4279	0.0124		418.7379
Total	**0.3178**	**2.6797**	**2.2605**	**9.9000e-003**	**0.5230**	**0.0207**	**0.5437**	**0.1416**	**0.0197**	**0.1613**		**1,014.3779**	**1,014.3779**	**0.0430**		**1,015.4528**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9127	20.7077	15.7183	0.0250		1.2575	1.2575		1.2051	1.2051	0.0000	2,329.7759	2,329.7759	0.5019		2,342.3232
Total	**2.9127**	**20.7077**	**15.7183**	**0.0250**		**1.2575**	**1.2575**		**1.2051**	**1.2051**	**0.0000**	**2,329.7759**	**2,329.7759**	**0.5019**		**2,342.3232**

3.4 Building Construction - 2018

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	0.0934	2.5480	0.5193	5.7000e-003	0.1287	0.0181	0.1468	0.0371	0.0173	0.0544		595.9499	595.9499	0.0306		596.7149
Worker	0.2244	0.1317	1.7413	4.2000e-003	0.3943	2.5900e-003	0.3969	0.1046	2.3900e-003	0.1070		418.4279	418.4279	0.0124		418.7379
Total	**0.3178**	**2.6797**	**2.2605**	**9.9000e-003**	**0.5230**	**0.0207**	**0.5437**	**0.1416**	**0.0197**	**0.1613**		**1,014.3779**	**1,014.3779**	**0.0430**		**1,015.4528**

3.4 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	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449		2,312.1454	2,312.1454	0.4810		2,324.1705
Total	**2.5581**	**18.9103**	**15.2545**	**0.0250**		**1.0901**	**1.0901**		**1.0449**	**1.0449**		**2,312.1454**	**2,312.1454**	**0.4810**		**2,324.1705**

3.4 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	0.0823	2.4063	0.4622	5.6500e-003	0.1287	0.0147	0.1434	0.0371	0.0140	0.0511		590.9405	590.9405	0.0290		591.6660
Worker	0.2035	0.1158	1.5643	4.0800e-003	0.3943	2.5600e-003	0.3969	0.1046	2.3600e-003	0.1070		405.9187	405.9187	0.0110		406.1945
Total	**0.2858**	**2.5220**	**2.0265**	**9.7300e-003**	**0.5230**	**0.0172**	**0.5402**	**0.1416**	**0.0164**	**0.1580**		**996.8593**	**996.8593**	**0.0401**		**997.8604**

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	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449	0.0000	2,312.1454	2,312.1454	0.4810		2,324.1705
Total	**2.5581**	**18.9103**	**15.2545**	**0.0250**		**1.0901**	**1.0901**		**1.0449**	**1.0449**	**0.0000**	**2,312.1454**	**2,312.1454**	**0.4810**		**2,324.1705**

3.4 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	0.0823	2.4063	0.4622	5.6500e-003	0.1287	0.0147	0.1434	0.0371	0.0140	0.0511		590.9405	590.9405	0.0290		591.6660
Worker	0.2035	0.1158	1.5643	4.0800e-003	0.3943	2.5600e-003	0.3969	0.1046	2.3600e-003	0.1070		405.9187	405.9187	0.0110		406.1945
Total	**0.2858**	**2.5220**	**2.0265**	**9.7300e-003**	**0.5230**	**0.0172**	**0.5402**	**0.1416**	**0.0164**	**0.1580**		**996.8593**	**996.8593**	**0.0401**		**997.8604**

3.5 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	1.2453	12.5685	11.8507	0.0178		0.7301	0.7301		0.6728	0.6728		1,746.2432	1,746.2432	0.5418		1,759.7870
Paving	0.1834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4287**	**12.5685**	**11.8507**	**0.0178**		**0.7301**	**0.7301**		**0.6728**	**0.6728**		**1,746.2432**	**1,746.2432**	**0.5418**		**1,759.7870**

3.5 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	0.0636	0.0362	0.4889	1.2700e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		126.8496	126.8496	3.4500e-003		126.9358
Total	**0.0636**	**0.0362**	**0.4889**	**1.2700e-003**	**0.1232**	**8.0000e-004**	**0.1240**	**0.0327**	**7.4000e-004**	**0.0334**		**126.8496**	**126.8496**	**3.4500e-003**		**126.9358**

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	1.2453	12.5685	11.8507	0.0178		0.7301	0.7301		0.6728	0.6728	0.0000	1,746.2432	1,746.2432	0.5418		1,759.7870
Paving	0.1834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4287**	**12.5685**	**11.8507**	**0.0178**		**0.7301**	**0.7301**		**0.6728**	**0.6728**	**0.0000**	**1,746.2432**	**1,746.2432**	**0.5418**		**1,759.7870**

3.5 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	0.0636	0.0362	0.4889	1.2700e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		126.8496	126.8496	3.4500e-003		126.9358
Total	**0.0636**	**0.0362**	**0.4889**	**1.2700e-003**	**0.1232**	**8.0000e-004**	**0.1240**	**0.0327**	**7.4000e-004**	**0.0334**		**126.8496**	**126.8496**	**3.4500e-003**		**126.9358**

3.6 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	20.2809					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	**20.5474**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

3.6 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	0.0424	0.0241	0.3259	8.5000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223		84.5664	84.5664	2.3000e-003		84.6239
Total	**0.0424**	**0.0241**	**0.3259**	**8.5000e-004**	**0.0822**	**5.3000e-004**	**0.0827**	**0.0218**	**4.9000e-004**	**0.0223**		**84.5664**	**84.5664**	**2.3000e-003**		**84.6239**

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	20.2809					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	**20.5474**	**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**

3.6 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	0.0424	0.0241	0.3259	8.5000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223		84.5664	84.5664	2.3000e-003		84.6239
Total	**0.0424**	**0.0241**	**0.3259**	**8.5000e-004**	**0.0822**	**5.3000e-004**	**0.0827**	**0.0218**	**4.9000e-004**	**0.0223**		**84.5664**	**84.5664**	**2.3000e-003**		**84.6239**

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	0.9308	5.3247	9.9360	0.0352	2.4927	0.0362	2.5289	0.6680	0.0341	0.7021		3,564.8982	3,564.8982	0.1367		3,568.3148
Unmitigated	0.9308	5.3247	9.9360	0.0352	2.4927	0.0362	2.5289	0.6680	0.0341	0.7021		3,564.8982	3,564.8982	0.1367		3,568.3148

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	249.86	400.01	400.01	854,725	854,725
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	249.86	400.01	400.01	854,725	854,725

4.3 Trip Type Information

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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.489257	0.041257	0.220156	0.132626	0.025790	0.006586	0.027831	0.045583	0.001467	0.001229	0.006102	0.000783	0.001333
Other Non-Asphalt Surfaces	0.489257	0.041257	0.220156	0.132626	0.025790	0.006586	0.027831	0.045583	0.001467	0.001229	0.006102	0.000783	0.001333
Parking Lot	0.489257	0.041257	0.220156	0.132626	0.025790	0.006586	0.027831	0.045583	0.001467	0.001229	0.006102	0.000783	0.001333

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	0.0105	0.0953	0.0801	5.7000e-004		7.2400e-003	7.2400e-003		7.2400e-003	7.2400e-003		114.3574	114.3574	2.1900e-003	2.1000e-003	115.0370
NaturalGas Unmitigated	0.0105	0.0953	0.0801	5.7000e-004		7.2400e-003	7.2400e-003		7.2400e-003	7.2400e-003		114.3574	114.3574	2.1900e-003	2.1000e-003	115.0370

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					
General Light Industry	972.038	0.0105	0.0953	0.0801	5.7000e-004		7.2400e-003	7.2400e-003		7.2400e-003	7.2400e-003		114.3574	114.3574	2.1900e-003	2.1000e-003	115.0370
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0105**	**0.0953**	**0.0801**	**5.7000e-004**		**7.2400e-003**	**7.2400e-003**		**7.2400e-003**	**7.2400e-003**		**114.3574**	**114.3574**	**2.1900e-003**	**2.1000e-003**	**115.0370**

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					
General Light Industry	0.972038	0.0105	0.0953	0.0801	5.7000e-004		7.2400e-003	7.2400e-003		7.2400e-003	7.2400e-003		114.3574	114.3574	2.1900e-003	2.1000e-003	115.0370
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0105**	**0.0953**	**0.0801**	**5.7000e-004**		**7.2400e-003**	**7.2400e-003**		**7.2400e-003**	**7.2400e-003**		**114.3574**	**114.3574**	**2.1900e-003**	**2.1000e-003**	**115.0370**

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	0.4974	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0216	0.0216	6.0000e-005		0.0230
Unmitigated	0.4974	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0216	0.0216	6.0000e-005		0.0230

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	0.0556					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4409					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5000e-004	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0216	0.0216	6.0000e-005		0.0230
Total	**0.4974**	**9.0000e-005**	**0.0101**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0216**	**0.0216**	**6.0000e-005**		**0.0230**

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	0.0556					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4409					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5000e-004	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0216	0.0216	6.0000e-005		0.0230
Total	**0.4974**	**9.0000e-005**	**0.0101**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0216**	**0.0216**	**6.0000e-005**		**0.0230**

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

Rocklin Tractor Supply Company

Placer-Sacramento County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	19.03	1000sqft	0.44	19,034.00	0
Other Non-Asphalt Surfaces	1.46	Acre	1.46	63,597.60	0
Parking Lot	78.00	Space	0.70	31,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E, 2015

Land Use - 19,034 building on a 2.6 acre site with 78 parking spots. Assumed the rest of the site is paved.

Construction Phase - Construction beginning in November 2018 and ending in July 2019

Grading - 2.6 acre site, balanced grading

Vehicle Trips - Typical Tractor Supply Trip Information from Director of Real Estate

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	2.00
tblConstructionPhase	NumDays	6.00	5.00
tblConstructionPhase	NumDays	220.00	156.00
tblConstructionPhase	PhaseEndDate	11/5/2018	11/3/2018
tblConstructionPhase	PhaseEndDate	11/13/2018	11/10/2018
tblConstructionPhase	PhaseEndDate	9/17/2019	6/17/2019
tblConstructionPhase	PhaseEndDate	10/1/2019	7/1/2019
tblConstructionPhase	PhaseEndDate	10/15/2019	7/15/2019
tblConstructionPhase	PhaseStartDate	11/6/2018	11/4/2018
tblConstructionPhase	PhaseStartDate	11/14/2018	11/11/2018
tblConstructionPhase	PhaseStartDate	9/18/2019	6/18/2019
tblConstructionPhase	PhaseStartDate	10/2/2019	7/2/2019
tblGrading	AcresOfGrading	2.50	2.60
tblGrading	AcresOfGrading	3.00	2.60
tblLandUse	LandUseSquareFeet	19,030.00	19,034.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblVehicleTrips	ST_TR	1.32	21.02
tblVehicleTrips	SU_TR	0.68	21.02
tblVehicleTrips	WD_TR	6.97	13.13

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					
2018	3.2287	24.3239	17.9287	0.0343	6.6557	1.2786	7.8245	3.3916	1.2252	4.4669	0.0000	3,278.6525	3,278.6525	0.7704	0.0000	3,292.3458
2019	20.5884	21.4935	17.2250	0.0341	0.5230	1.1077	1.6307	0.1416	1.0617	1.2033	0.0000	3,244.8507	3,244.8507	0.5449	0.0000	3,257.9464
Maximum	**20.5884**	**24.3239**	**17.9287**	**0.0343**	**6.6557**	**1.2786**	**7.8245**	**3.3916**	**1.2252**	**4.4669**	**0.0000**	**3,278.6525**	**3,278.6525**	**0.7704**	**0.0000**	**3,292.3458**

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					
2018	3.2287	24.3239	17.9287	0.0343	6.6557	1.2786	7.8245	3.3916	1.2252	4.4669	0.0000	3,278.6524	3,278.6524	0.7704	0.0000	3,292.3458
2019	20.5884	21.4935	17.2250	0.0341	0.5230	1.1077	1.6307	0.1416	1.0617	1.2033	0.0000	3,244.8507	3,244.8507	0.5449	0.0000	3,257.9464
Maximum	**20.5884**	**24.3239**	**17.9287**	**0.0343**	**6.6557**	**1.2786**	**7.8245**	**3.3916**	**1.2252**	**4.4669**	**0.0000**	**3,278.6524**	**3,278.6524**	**0.7704**	**0.0000**	**3,292.3458**

	ROG	NOx	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	0.4974	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0216	0.0216	6.0000e-005		0.0230
Energy	0.0105	0.0953	0.0801	5.7000e-004		7.2400e-003	7.2400e-003		7.2400e-003	7.2400e-003		114.3574	114.3574	2.1900e-003	2.1000e-003	115.0370
Mobile	0.7633	5.5830	9.6230	0.0324	2.4927	0.0367	2.5294	0.6680	0.0346	0.7026		3,276.3723	3,276.3723	0.1412		3,279.9011
Total	**1.2712**	**5.6784**	**9.7132**	**0.0329**	**2.4927**	**0.0439**	**2.5366**	**0.6680**	**0.0419**	**0.7099**		**3,390.7512**	**3,390.7512**	**0.1434**	**2.1000e-003**	**3,394.9611**

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	0.4974	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0216	0.0216	6.0000e-005		0.0230
Energy	0.0105	0.0953	0.0801	5.7000e-004		7.2400e-003	7.2400e-003		7.2400e-003	7.2400e-003		114.3574	114.3574	2.1900e-003	2.1000e-003	115.0370
Mobile	0.7633	5.5830	9.6230	0.0324	2.4927	0.0367	2.5294	0.6680	0.0346	0.7026		3,276.3723	3,276.3723	0.1412		3,279.9011
Total	**1.2712**	**5.6784**	**9.7132**	**0.0329**	**2.4927**	**0.0439**	**2.5366**	**0.6680**	**0.0419**	**0.7099**		**3,390.7512**	**3,390.7512**	**0.1434**	**2.1000e-003**	**3,394.9611**

	ROG	NOx	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	Site Preparation	Site Preparation	11/1/2018	11/3/2018	5	2	
2	Grading	Grading	11/4/2018	11/10/2018	5	5	
3	Building Construction	Building Construction	11/11/2018	6/17/2019	5	156	
4	Paving	Paving	6/18/2019	7/1/2019	5	10	
5	Architectural Coating	Architectural Coating	7/2/2019	7/15/2019	5	10	

Acres of Grading (Site Preparation Phase): 2.6

Acres of Grading (Grading Phase): 2.6

Acres of Paving: 2.16

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 28,551; Non-Residential Outdoor: 9,517; Striped Parking Area: 5,688 (Architectural Coating – sqft)

OffRoad Equipment

Rocklin Tractor Supply Company - Placer-Sacramento County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	48.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2018

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					1.3787	0.0000	1.3787	0.1489	0.0000	0.1489			0.0000			0.0000
Off-Road	1.8995	23.6201	12.7461	0.0245		0.9540	0.9540		0.8777	0.8777		2,468.4131	2,468.4131	0.7685		2,487.6244
Total	**1.8995**	**23.6201**	**12.7461**	**0.0245**	**1.3787**	**0.9540**	**2.3327**	**0.1489**	**0.8777**	**1.0265**		**2,468.4131**	**2,468.4131**	**0.7685**		**2,487.6244**

3.2 Site Preparation - 2018

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	0.0363	0.0275	0.2646	6.2000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		62.0940	62.0940	1.9100e-003		62.1417
Total	**0.0363**	**0.0275**	**0.2646**	**6.2000e-004**	**0.0657**	**4.3000e-004**	**0.0662**	**0.0174**	**4.0000e-004**	**0.0178**		**62.0940**	**62.0940**	**1.9100e-003**		**62.1417**

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					1.3787	0.0000	1.3787	0.1489	0.0000	0.1489			0.0000			0.0000
Off-Road	1.8995	23.6201	12.7461	0.0245		0.9540	0.9540		0.8777	0.8777	0.0000	2,468.4131	2,468.4131	0.7685		2,487.6244
Total	**1.8995**	**23.6201**	**12.7461**	**0.0245**	**1.3787**	**0.9540**	**2.3327**	**0.1489**	**0.8777**	**1.0265**	**0.0000**	**2,468.4131**	**2,468.4131**	**0.7685**		**2,487.6244**

3.2 Site Preparation - 2018

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	0.0363	0.0275	0.2646	6.2000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		62.0940	62.0940	1.9100e-003		62.1417
Total	**0.0363**	**0.0275**	**0.2646**	**6.2000e-004**	**0.0657**	**4.3000e-004**	**0.0662**	**0.0174**	**4.0000e-004**	**0.0178**		**62.0940**	**62.0940**	**1.9100e-003**		**62.1417**

3.3 Grading - 2018

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					6.5736	0.0000	6.5736	3.3698	0.0000	3.3698			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748		2,077.4666	2,077.4666	0.6467		2,093.6352
Total	**2.1515**	**24.2895**	**10.3804**	**0.0206**	**6.5736**	**1.1683**	**7.7419**	**3.3698**	**1.0748**	**4.4446**		**2,077.4666**	**2,077.4666**	**0.6467**		**2,093.6352**

3.3 Grading - 2018

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	0.0453	0.0344	0.3307	7.8000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		77.6175	77.6175	2.3900e-003		77.6771
Total	**0.0453**	**0.0344**	**0.3307**	**7.8000e-004**	**0.0822**	**5.4000e-004**	**0.0827**	**0.0218**	**5.0000e-004**	**0.0223**		**77.6175**	**77.6175**	**2.3900e-003**		**77.6771**

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					6.5736	0.0000	6.5736	3.3698	0.0000	3.3698			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748	0.0000	2,077.4666	2,077.4666	0.6467		2,093.6352
Total	**2.1515**	**24.2895**	**10.3804**	**0.0206**	**6.5736**	**1.1683**	**7.7419**	**3.3698**	**1.0748**	**4.4446**	**0.0000**	**2,077.4666**	**2,077.4666**	**0.6467**		**2,093.6352**

3.3 Grading - 2018

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	0.0453	0.0344	0.3307	7.8000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		77.6175	77.6175	2.3900e-003		77.6771
Total	**0.0453**	**0.0344**	**0.3307**	**7.8000e-004**	**0.0822**	**5.4000e-004**	**0.0827**	**0.0218**	**5.0000e-004**	**0.0223**		**77.6175**	**77.6175**	**2.3900e-003**		**77.6771**

3.4 Building Construction - 2018

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	2.9127	20.7077	15.7183	0.0250		1.2575	1.2575		1.2051	1.2051		2,329.7759	2,329.7759	0.5019		2,342.3232
Total	**2.9127**	**20.7077**	**15.7183**	**0.0250**		**1.2575**	**1.2575**		**1.2051**	**1.2051**		**2,329.7759**	**2,329.7759**	**0.5019**		**2,342.3232**

3.4 Building Construction - 2018

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	0.0984	2.5866	0.6231	5.5100e-003	0.1287	0.0185	0.1472	0.0371	0.0177	0.0548		576.3127	576.3127	0.0344		577.1724
Worker	0.2176	0.1653	1.5873	3.7400e-003	0.3943	2.5900e-003	0.3969	0.1046	2.3900e-003	0.1070		372.5638	372.5638	0.0115		372.8502
Total	**0.3160**	**2.7518**	**2.2104**	**9.2500e-003**	**0.5230**	**0.0211**	**0.5441**	**0.1416**	**0.0201**	**0.1617**		**948.8765**	**948.8765**	**0.0458**		**950.0226**

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	2.9127	20.7077	15.7183	0.0250		1.2575	1.2575		1.2051	1.2051	0.0000	2,329.7759	2,329.7759	0.5019		2,342.3232
Total	**2.9127**	**20.7077**	**15.7183**	**0.0250**		**1.2575**	**1.2575**		**1.2051**	**1.2051**	**0.0000**	**2,329.7759**	**2,329.7759**	**0.5019**		**2,342.3232**

3.4 Building Construction - 2018

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	0.0984	2.5866	0.6231	5.5100e-003	0.1287	0.0185	0.1472	0.0371	0.0177	0.0548		576.3127	576.3127	0.0344		577.1724
Worker	0.2176	0.1653	1.5873	3.7400e-003	0.3943	2.5900e-003	0.3969	0.1046	2.3900e-003	0.1070		372.5638	372.5638	0.0115		372.8502
Total	**0.3160**	**2.7518**	**2.2104**	**9.2500e-003**	**0.5230**	**0.0211**	**0.5441**	**0.1416**	**0.0201**	**0.1617**		**948.8765**	**948.8765**	**0.0458**		**950.0226**

3.4 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	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449		2,312.1454	2,312.1454	0.4810		2,324.1705
Total	**2.5581**	**18.9103**	**15.2545**	**0.0250**		**1.0901**	**1.0901**		**1.0449**	**1.0449**		**2,312.1454**	**2,312.1454**	**0.4810**		**2,324.1705**

3.4 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	0.0869	2.4380	0.5577	5.4600e-003	0.1287	0.0150	0.1437	0.0371	0.0144	0.0514		571.3105	571.3105	0.0327		572.1281
Worker	0.1969	0.1452	1.4128	3.6300e-003	0.3943	2.5600e-003	0.3969	0.1046	2.3600e-003	0.1070		361.3948	361.3948	0.0101		361.6478
Total	**0.2837**	**2.5832**	**1.9705**	**9.0900e-003**	**0.5230**	**0.0176**	**0.5406**	**0.1416**	**0.0167**	**0.1584**		**932.7053**	**932.7053**	**0.0428**		**933.7759**

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	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449	0.0000	2,312.1454	2,312.1454	0.4810		2,324.1705
Total	**2.5581**	**18.9103**	**15.2545**	**0.0250**		**1.0901**	**1.0901**		**1.0449**	**1.0449**	**0.0000**	**2,312.1454**	**2,312.1454**	**0.4810**		**2,324.1705**

3.4 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	0.0869	2.4380	0.5577	5.4600e-003	0.1287	0.0150	0.1437	0.0371	0.0144	0.0514		571.3105	571.3105	0.0327		572.1281
Worker	0.1969	0.1452	1.4128	3.6300e-003	0.3943	2.5600e-003	0.3969	0.1046	2.3600e-003	0.1070		361.3948	361.3948	0.0101		361.6478
Total	**0.2837**	**2.5832**	**1.9705**	**9.0900e-003**	**0.5230**	**0.0176**	**0.5406**	**0.1416**	**0.0167**	**0.1584**		**932.7053**	**932.7053**	**0.0428**		**933.7759**

3.5 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	1.2453	12.5685	11.8507	0.0178		0.7301	0.7301		0.6728	0.6728		1,746.2432	1,746.2432	0.5418		1,759.7870
Paving	0.1834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4287**	**12.5685**	**11.8507**	**0.0178**		**0.7301**	**0.7301**		**0.6728**	**0.6728**		**1,746.2432**	**1,746.2432**	**0.5418**		**1,759.7870**

3.5 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	0.0615	0.0454	0.4415	1.1300e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		112.9359	112.9359	3.1600e-003		113.0149
Total	**0.0615**	**0.0454**	**0.4415**	**1.1300e-003**	**0.1232**	**8.0000e-004**	**0.1240**	**0.0327**	**7.4000e-004**	**0.0334**		**112.9359**	**112.9359**	**3.1600e-003**		**113.0149**

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	1.2453	12.5685	11.8507	0.0178		0.7301	0.7301		0.6728	0.6728	0.0000	1,746.2432	1,746.2432	0.5418		1,759.7870
Paving	0.1834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4287**	**12.5685**	**11.8507**	**0.0178**		**0.7301**	**0.7301**		**0.6728**	**0.6728**	**0.0000**	**1,746.2432**	**1,746.2432**	**0.5418**		**1,759.7870**

3.5 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	0.0615	0.0454	0.4415	1.1300e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		112.9359	112.9359	3.1600e-003		113.0149
Total	**0.0615**	**0.0454**	**0.4415**	**1.1300e-003**	**0.1232**	**8.0000e-004**	**0.1240**	**0.0327**	**7.4000e-004**	**0.0334**		**112.9359**	**112.9359**	**3.1600e-003**		**113.0149**

3.6 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	20.2809					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	**20.5474**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

3.6 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	0.0410	0.0303	0.2943	7.6000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223		75.2906	75.2906	2.1100e-003		75.3433
Total	**0.0410**	**0.0303**	**0.2943**	**7.6000e-004**	**0.0822**	**5.3000e-004**	**0.0827**	**0.0218**	**4.9000e-004**	**0.0223**		**75.2906**	**75.2906**	**2.1100e-003**		**75.3433**

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	20.2809					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	**20.5474**	**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**

3.6 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	0.0410	0.0303	0.2943	7.6000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223		75.2906	75.2906	2.1100e-003		75.3433
Total	**0.0410**	**0.0303**	**0.2943**	**7.6000e-004**	**0.0822**	**5.3000e-004**	**0.0827**	**0.0218**	**4.9000e-004**	**0.0223**		**75.2906**	**75.2906**	**2.1100e-003**		**75.3433**

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	0.7633	5.5830	9.6230	0.0324	2.4927	0.0367	2.5294	0.6680	0.0346	0.7026		3,276.3723	3,276.3723	0.1412		3,279.9011
Unmitigated	0.7633	5.5830	9.6230	0.0324	2.4927	0.0367	2.5294	0.6680	0.0346	0.7026		3,276.3723	3,276.3723	0.1412		3,279.9011

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	249.86	400.01	400.01	854,725	854,725
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	249.86	400.01	400.01	854,725	854,725

4.3 Trip Type Information

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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.489257	0.041257	0.220156	0.132626	0.025790	0.006586	0.027831	0.045583	0.001467	0.001229	0.006102	0.000783	0.001333
Other Non-Asphalt Surfaces	0.489257	0.041257	0.220156	0.132626	0.025790	0.006586	0.027831	0.045583	0.001467	0.001229	0.006102	0.000783	0.001333
Parking Lot	0.489257	0.041257	0.220156	0.132626	0.025790	0.006586	0.027831	0.045583	0.001467	0.001229	0.006102	0.000783	0.001333

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	0.0105	0.0953	0.0801	5.7000e-004		7.2400e-003	7.2400e-003		7.2400e-003	7.2400e-003		114.3574	114.3574	2.1900e-003	2.1000e-003	115.0370
NaturalGas Unmitigated	0.0105	0.0953	0.0801	5.7000e-004		7.2400e-003	7.2400e-003		7.2400e-003	7.2400e-003		114.3574	114.3574	2.1900e-003	2.1000e-003	115.0370

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					
General Light Industry	972.038	0.0105	0.0953	0.0801	5.7000e-004		7.2400e-003	7.2400e-003		7.2400e-003	7.2400e-003		114.3574	114.3574	2.1900e-003	2.1000e-003	115.0370
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0105**	**0.0953**	**0.0801**	**5.7000e-004**		**7.2400e-003**	**7.2400e-003**		**7.2400e-003**	**7.2400e-003**		**114.3574**	**114.3574**	**2.1900e-003**	**2.1000e-003**	**115.0370**

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					
General Light Industry	0.972038	0.0105	0.0953	0.0801	5.7000e-004		7.2400e-003	7.2400e-003		7.2400e-003	7.2400e-003		114.3574	114.3574	2.1900e-003	2.1000e-003	115.0370
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0105**	**0.0953**	**0.0801**	**5.7000e-004**		**7.2400e-003**	**7.2400e-003**		**7.2400e-003**	**7.2400e-003**		**114.3574**	**114.3574**	**2.1900e-003**	**2.1000e-003**	**115.0370**

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	0.4974	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0216	0.0216	6.0000e-005		0.0230
Unmitigated	0.4974	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0216	0.0216	6.0000e-005		0.0230

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	0.0556					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4409					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5000e-004	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0216	0.0216	6.0000e-005		0.0230
Total	**0.4974**	**9.0000e-005**	**0.0101**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0216**	**0.0216**	**6.0000e-005**		**0.0230**

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	0.0556					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4409					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5000e-004	9.0000e-005	0.0101	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0216	0.0216	6.0000e-005		0.0230
Total	**0.4974**	**9.0000e-005**	**0.0101**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0216**	**0.0216**	**6.0000e-005**		**0.0230**

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