Appendix B

Air Quality and Greenhouse Gas Emissions

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B1 Air Quality Assessment

Air Quality Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project

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1.0 EXISTING AIR QUALITY

1.1 Project Description

The project will be implemented on four sites: the Synergy Oil Field Site, the "Pumpkin Patch" Site, the Los Cerritos Wetlands Authority (LCWA) Site, and the 33-acre City Marketplace Marsh (City Property) Site (Exhibit 1). The Synergy Oil Field Site is located at 6433 East 2nd Street between Pacific Coast Highway to the west, the Los Cerritos Channel to the north, Studebaker Road to the east, and 2nd Street to the south. The "Pumpkin Patch" Site is located at 6701 East Pacific Coast Highway at the northeast corner of the intersection with the San Gabriel Channel. The LCWA Site is located at the northeast corner of the intersection of Studebaker Road and Westminster Boulevard. The City Property Site is located between 2nd Street to the north and the San Gabriel River to the south.

Synergy Oil Field Site: On the Synergy Oil Field Site, the Project proposes to establish a wetlands mitigation bank and public access trail on the northerly approximately 78 acres of the 154-acre Synergy Oil Field (formerly known as the Bixby Oil Field), to implement a wetlands restoration plan on the southerly approximately 72 acres of the Synergy Oil Field, and to construct public access improvements, including a parking lot on existing disturbed areas and relocating and converting an existing building for use as a visitors' center on the remaining approximately 4 acres of the Synergy Oil Field. The mitigation bank provides for the phased restoration and permanent preservation of restored wetlands. The Project also proposes the removal of thirty-nine (39) oil wells from the southerly 72 acres. The Synergy Oil Field is owned and operated by Beach Oil Minerals Partners (Exhibit 2).

"Pumpkin Patch" Site: In order to facilitate the future restoration of the approximately southerly 72 acres on the Synergy Oil Field and construction of the public access improvements, the warehouse structures currently on the Synergy Oil Field will be removed and a portion of the oil production activities currently being conducted at the Synergy Oil Field and the City Property Site will be relocated to the approximately 7 acre property located at 6701 E. Pacific Coast Highway (commonly known as the "Pumpkin Patch"). The office uses currently occupying the Bixby building on the Synergy Oil Field site would be relocated to a new approximately 5,200 square feet (sf), two-story office building constructed on the Pumpkin Patch site. Other proposed site development on the Pumpkin Patch Site includes an approximately 9,750 sf of storage/warehouse, parking for 47 cars, drilling of up to fifty (50) new wells (both oil production and water injection wells) and associated production facilities. The height of the office building is 35 feet and the storage/warehouse is 22 feet (Exhibit 3).

Exhibit 1 - Overall Location Map

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Exhibit 2 - Synergy Oil Field Site

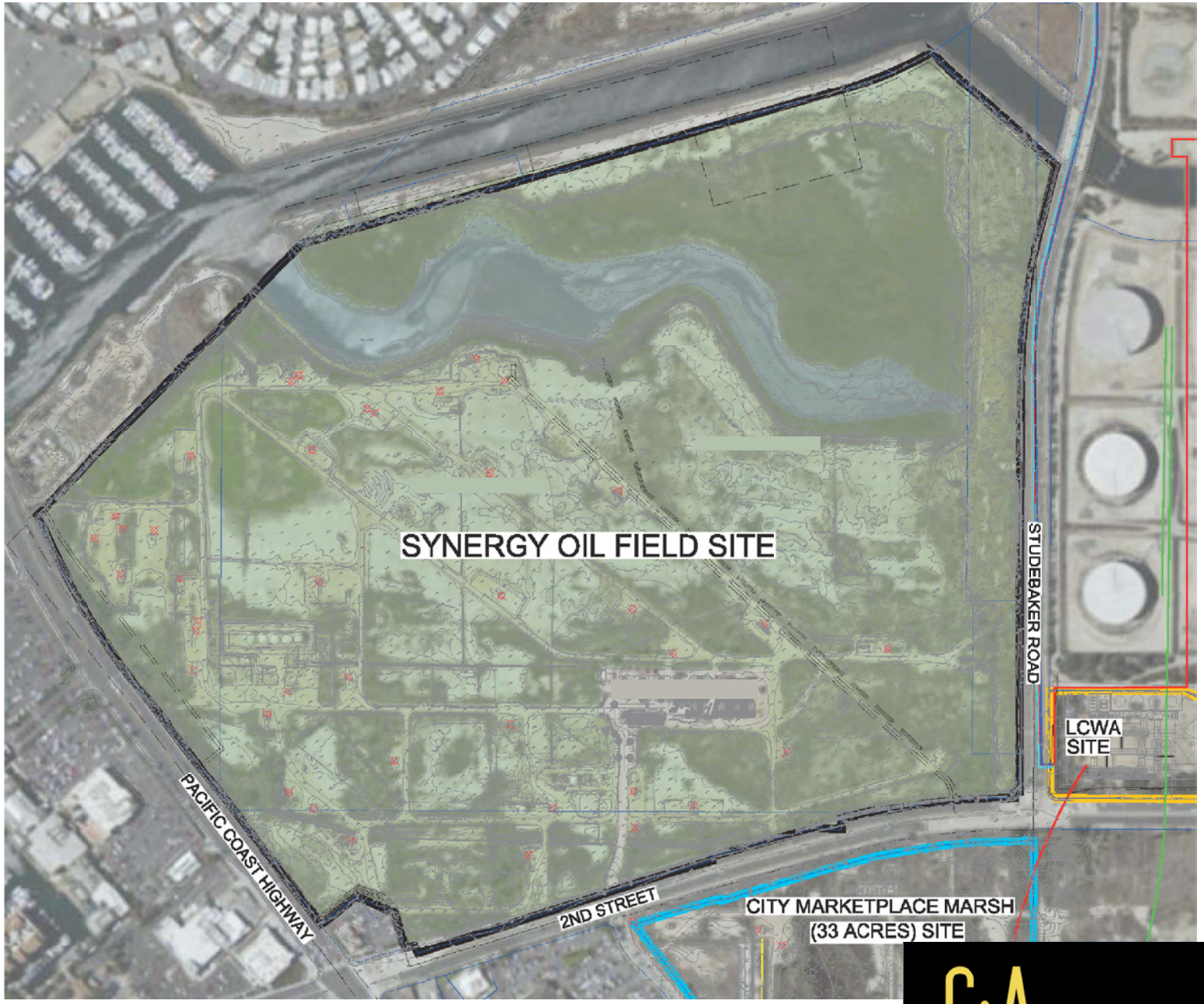

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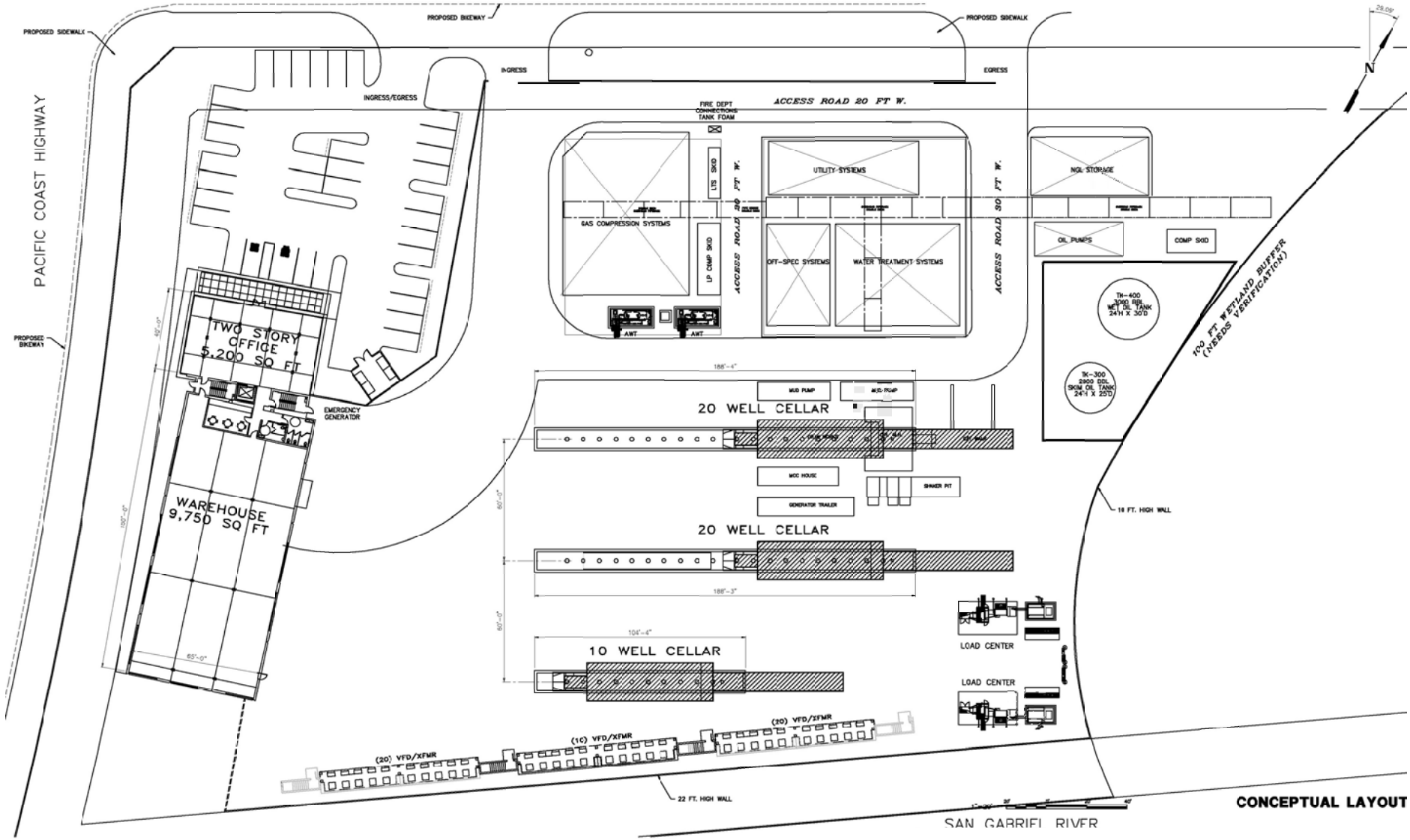
Exhibit 3 - Pumpkin Patch Concept Site Plan



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In addition to the 50 wells, two tanks will be constructed on the site: a 3,000-barrel tank for storing "wet oil" that is 30 feet in diameter and 24 feet high; and a 2,000 barrel "skim oil" tank that is 24 feet in diameter and 24 feet high. There is an existing oil well on the Pumpkin Patch site which will be used on a temporary basis as a test well to confirm the feasibility of oil production operations on Pumpkin Patch, and will be removed once the new operations are implemented.

A 22-foot high screen wall will be built on the perimeter of the Pumpkin Patch site. Vehicular access to the site will be from Studebaker Road. The structures will be set back 30 feet from Pacific Coast Highway and perimeter landscaping will be provided along Studebaker, Pacific Coast Highway and the San Gabriel River Channel.

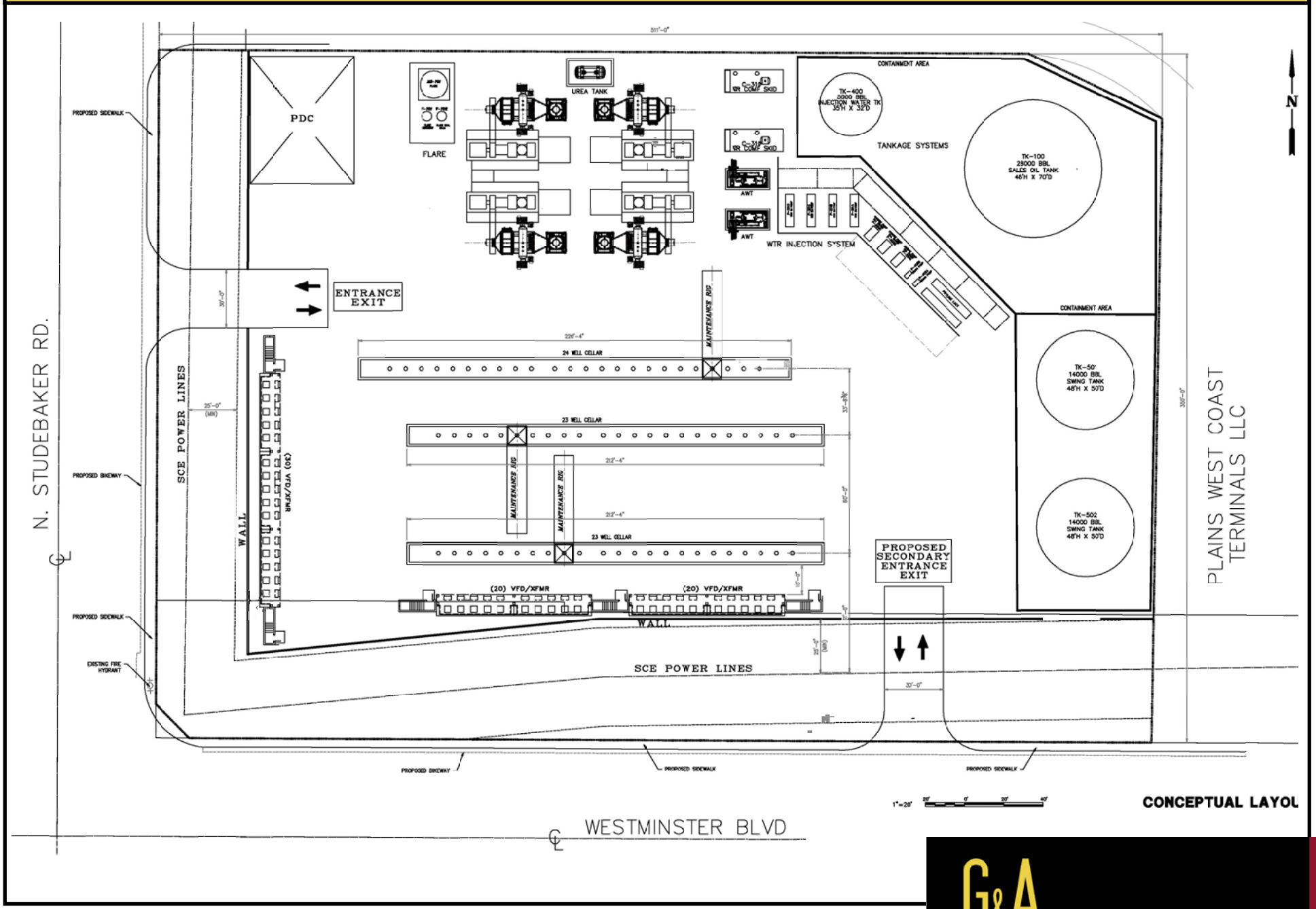
The Pumpkin Patch Site is owned by Beach Oil Minerals Partners. The Pumpkin Patch site is currently vacant, except for one operating oil well. It is currently used for seasonal sales of pumpkins and Christmas trees.

Although the Pumpkin Patch site is approximately 7 acres in size, the oil production operations will be located on 5 acres of the site closest to Pacific Coast Highway. The northeasterly 2-acre portion of the site will be retained as open space and used to provide a 100-foot buffer from the coastal wetland habitat area at the eastern edge of the site.

LCWA Site: The Project proposes the drilling and operation of up to seventy (70) wells on a 5-acre parcel owned by LCWA located at Studebaker and Westminster ("LCWA Site") to replace the oil production facilities currently on the Synergy Oil Field and the City Property Site. The LCWA Site is currently undeveloped and is used on a temporary lease basis for equipment storage and staging. Due to the geologic conditions at the Synergy Oil Field (i.e., the Newport-Inglewood Fault traverses the site), the oil field is divided between two operating areas; one on each side of the fault. The oil field operations north of the fault extract oil from a subterranean oil horizon that cannot be accessed from Pumpkin Patch, but can be accessed from the LCWA Site.

The wells will be a combination of oil production well and water injection wells. In addition to the oil production area, the project proposes to construct an elevated piperack, a 28,000 barrel sales oil tank (48 feet in height and 75 feet in diameter), two 14,000 barrel swing tanks (48 feet in height and 50 feet in diameter), and a 5,000-barrel injection water tank (35 feet in height and 32 feet in diameter). The site will also include a ground flare (20 to 25 feet high) to be used for emergencies only. The site will use a hybrid power-generating system comprised of a combination of electrical lines extending from an existing SCE facility to an onsite electrical utility connection, four gas-powered turbines to generate electricity to be used onsite, solar panels, and heat recovery systems. The turbines currently planned for use are the Mercury 50s by Solar Turbines. A 10-foot high screen wall will be built on the perimeter of the LCWA site. The project proposes to improve the existing driveway off of Studebaker Road to a 30-foot entrance/exit, and to construct a secondary 30-foot access from Westminster Boulevard (Exhibit 4).

Exhibit 4 - LCWA Concept Site Plan



City Property Site (33-acre Marketplace Marsh): The Project proposes the removal over time (approximately 40 years) of approximately thirteen (13) oil wells that are currently being operated on the 33-acre City Property Site located at Westminster and Shopkeeper Road. The wells are being operated pursuant to a Surface Use Release Agreement and Grant of Easements ("Surface Use Agreement") between the City and LCW Oil Operations, LLC. The wells would be removed and abandoned in accordance with the terms of the Surface Use Agreement which requires abandonment to a standard acceptable to the State of California Division of Oil, Gas and Geothermal Resources at the time of abandonment and suitable for the City's intended use for public open space.

This report assesses the potential short-term (construction) and long-term (operations) air emissions from the project and the air quality impact on the surrounding land uses.

1.2 Local, State, and Federal Air Quality Agencies

The proposed project is located in the South Coast Air Basin (SCAB). The SCAB is comprised of parts of Los Angeles, Riverside and San Bernardino counties and all of Orange County. The basin is bounded on the west by the Pacific Ocean and surrounded on the other sides by mountains. To the north lie the San Gabriel Mountains, to the north and east the San Bernardino Mountains, to the southeast the San Jacinto Mountains and to the south the Santa Ana Mountains. The basin forms a low plain and the mountains channel and confine airflow, which trap air pollutants.

The primary agencies responsible for regulations to improve air quality in the SCAB are the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The Southern California Association of Governments (SCAG) is an important partner to the SCAQMD, as it is the designated metropolitan planning authority for the area and produces estimates of anticipated future growth and vehicular travel in the basin that are used for air quality planning. The SCAQMD sets and enforces regulations for non-vehicular sources of air pollution in the basin.

The U.S. Environmental Protection Agency (U.S. EPA) is the primary federal agency for regulating air quality. The EPA implements the provisions of the Federal Clean Air Act (FCAA). This Act establishes national ambient air quality standards (NAAQS) that are applicable nationwide. The EPA designates areas with pollutant concentrations that do not meet the NAAQS as non-attainment areas for each criteria pollutant. States are required by the FCAA to prepare State Implementation Plans (SIP) for designated non-attainment areas. The SIP is required to demonstrate how the areas will attain the NAAQS by the prescribed deadlines and what measures will be required to attain the standards. The EPA also oversees implementation of the prescribed measures. Areas that achieve the NAAQS after a non-attainment designation are redesignated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the NAAQS.

The California Clean Air Act (CCAA) required all air pollution control districts in the state to prepare plans to reduce pollutant concentrations exceeding the CAAQS and ultimately achieve the CAAQS. The districts are required to review and revise these plans every three years. The SCAQMD satisfies this requirement through the publication of an Air Quality Management Plan (AQMP). The AQMP is developed by SCAQMD and SCAG in coordination with local governments and the private sector. The AQMP is incorporated into the SIP by CARB to satisfy the FCAA requirements discussed above. The AQMP is discussed further in Section 1.5.

The SCAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the Basin. The SCAQMD implements control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment. In addition, the SCAQMD receives and investigates odor complaints from residents.

The SCAQMD has rules and regulations that would apply to an oil and gas facility. These include the following along with a brief description of what the rule addresses:

- Rule 219. Equipment not requiring a written permit pursuant to Regulation II. The rule identifies equipment, processes, and operations that emit small amounts of air contaminants that do not require written permits;
- Rule 222. Filing requirements for specific emission sources not requiring a written permit pursuant to Regulation II. The rule provides an alternative to written permits;
- Rule 402. Nuisance - 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;
- Rule 462. Organic liquid loading emission limits;
- Rule 463. Organic liquid storage emission control requirements;
- Rule 464. Emissions from Wastewater Separators;
- Rule 466. Leaks from valves and flanges;
- Rule 466.1. Leaks from pumps and compressors;
- Rule 1110.2. Emissions from Gaseous- And Liquid-Fueled Engines limits;
- Rule 1134. Emissions of oxides of nitrogen from stationary gas turbines limits;
- Rule 1148. Thermally enhances oil recovery wells. Requires steam drive well to have ROG emissions of 4.5 pounds per day or less, or if the steam drive well is connected

to a vapor control system then the average emissions should be no more than 4.5 pounds per day.

- Rule 1148.1. Oil and gas production wells - addresses emissions of volatile organic compounds (VOCs) from the wellheads, the well cellars and the handling of produced gas at oil and gas production facilities;
- Rule 1148.2. Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers;
- Rule 1166. Volatile organic compound emissions from decontamination of soil procedures and requirements;
- Rule 1173. Control of volatile organic compound leaks and releases from components at petroleum facilities and chemical plants;
- Rule 1176. VOC emissions from wastewater systems limits and required controls;
- Rule 1178. Further reductions of VOC emissions from storage tanks at petroleum facilities;
- Rule 1401. New Source Review of toxic air contaminants. This rule specifies limits for maximum individual cancer risk (MICR), cancer burden, and noncancerous acute chronic hazard index (HI) from new permit units, relocations, or modifications for existing permit units which emit toxic air contaminants.

The SCAQMD adopted Regulation XX - Regional Clean Air Incentive Market (RECLAIM), which changed the framework of air quality rules and permits (SCAQMD 1993). The RECLAIM program is a pollution credit trading program that applies to the largest sources of NOx and SOx emissions within SCAQMD jurisdiction.

Additionally, during construction the project will be subject to SCAQMD Rule 403. The rule requires specific particulate control techniques for projects over 50 acres. For large projects watering of stock piles, grading surfaces, unpaved roads, and other activities require regular watering and maintaining certain soil moisture content. Smaller projects must comply with the requirements of Table 1 of Rule 403 which generally require watering to prevent visible dust plumes and tracking out dirt onto public streets.

1.3 Criteria Pollutants, Health Effects, and Standards

Under the Federal Clean Air Act (FCAA), the U.S. EPA has established National Ambient Air Quality Standards (NAAQS) for six major pollutants; ozone (O_3), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead. These six air pollutants are often referred to as the criteria pollutants. The NAAQS are two tiered: primary, to protect public health, and secondary, to

prevent degradation to the environment (i.e., impairment of visibility, damage to vegetation and property).

Under the California Clean Air Act (CCAA), the California Air Resources Board has established California Ambient Air Quality Standards (CAAQS) to protect the health and welfare of Californians. State standards have been established for the six criteria pollutants as well as four additional pollutants; visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Exhibit 5 presents the state and national ambient air quality standards.

Exhibit 5 - Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[10]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[10]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: California Air Resources Board website 10/1/15

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1.4 Attainment Designations

Based on monitored air pollutant concentrations, the U.S. EPA and CARB designate areas relative to their status in attaining the NAAQS and CAAQS respectively. Table 1 lists the current non-attainment designations for the SCAB. For the Federal standards, the required attainment date is also shown.

Table 1 Designations of Criteria Pollutants for the SCAB

Standard	Concentration	Classification	Latest Attainment Year
2008 8-hour Ozone	75 ppb	Extreme	2031
2012 Annual PM2.5	12 ug/m3	Moderate Serious	2021 2025
2006 24-hour PM2.5	35 ug/m3	Serious	2019
1997 8-hour Ozone	80 ppb	Extreme	2023
1979 1-hour Ozone	120 ppb	Extreme	2022

Source: Table ES-1, "Executive Summary, Draft Final Air Quality Management Plan," SCAQMD.

Table 1 shows that the U.S. EPA has designated SCAB as Extreme Non-attainment for ozone, Moderate Non-attainment for $PM_{2.5}$, and attainment/maintenance for CO and NO_2. The SCAB is designated as in attainment of the Federal SO_2 and lead NAAQS as well as the state CO, NO_2, SO_2, lead, hydrogen sulfide, and vinyl chloride CAAQS.

1.5 Air Quality Management Plan (AQMP)

As discussed above, the CAA requires plans to demonstrate attainment of the NAAQS for which an area is designated as nonattainment. Further, the CCAA requires SCAQMD to revise its plan to reduce pollutant concentrations exceeding the CAAQS every three years. In the SCAB, SCAQMD and SCAG, in coordination with local governments and the private sector, develop the Air Quality Management Plan (AQMP) for the air basin to satisfy these requirements. The AQMP is the most important air management document for the basin because it provides the blueprint for meeting state and federal ambient air quality standards.

On December 7, 2012, the 2012 AQMP was adopted by the SCAQMD Governing Board. The primary task of the 2012 AQMP is to bring the basin into attainment with federal health-based standards for unhealthful fine particulate matter (PM2.5) by 2014. The document states that to have any reasonable expectation of meeting the 2023 ozone deadline, the scope and pace of continued air quality improvement must greatly intensify.

The SCAQMD is in the process of developing the 2016 AQMP, which will be a comprehensive and integrated plan primarily focused on addressing the ozone and PM2.5

standards. The upcoming 2016 AQMP will develop integrated strategies and measures to meet the following NAAQS:

- 8-hour Ozone by 2032
- Annual PM2.5 by 2021-2025
- 1-hour Ozone by 2023
- 24-hour PM2.5 by 2019

The draft 2016 AQMP was released in June 2016, and a revised draft released in October 2016. The current schedule shows the SCAQMD Governing Board adopting the 2016 AQMP in February 2017.

1.6 Climate

The climate in and around the project area, as with all of Southern California, is controlled largely by the strength and position of the subtropical high-pressure cell over the Pacific Ocean. It maintains moderate temperatures and comfortable humidity, and limits precipitation to a few storms during the winter "wet" season. Temperatures are normally mild, excepting the summer months, which commonly bring substantially higher temperatures. In all portions of the basin, temperatures well above 100 degrees F. have been recorded in recent years. The annual average temperature in the basin is approximately 62 degrees Fahrenheit.

Winds in the project area are usually driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime onshore sea breezes. At night, the wind generally slows and reverses direction traveling towards the sea. Wind direction will be altered by local canyons, with wind tending to flow parallel to the canyons. During the transition period from one wind pattern to the other, the dominant wind direction rotates into the south and causes a minor wind direction maximum from the south. The frequency of calm winds (less than 2 miles per hour) is less than 10 percent. Therefore, there is little stagnation in the project vicinity, especially during busy daytime traffic hours.

Southern California frequently has temperature inversions, which inhibit the dispersion of pollutants. Inversions may be either ground based or elevated. Ground based inversions, sometimes referred to as radiation inversions, are most severe during clear, cold, early winter mornings. Under conditions of a ground-based inversion, very little mixing or turbulence occurs, and high concentrations of primary pollutants may occur local to major roadways. Elevated inversions can be generated by a variety of meteorological phenomena. Elevated inversions act as a lid or upper boundary and restrict vertical mixing. Below the elevated inversion, dispersion is not restricted. Mixing heights for elevated inversions are lower in the summer and more persistent. This low summer inversion puts a lid over the South Coast Air Basin (SCAB) and is responsible for the high levels of ozone observed during summer months in the air basin.

1.7 Monitored Air Quality

Air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin. Estimates for the SCAB have been made for existing emissions ("Final 2012 Air Quality Management Plan", February 2013). The data indicate that on-road (e.g., automobiles, busses and trucks) and off-road (e.g., trains, ships, and construction equipment) mobile sources are the major source of current emissions in the SCAB. Mobile sources account for approximately 59% of VOC emissions, 88% of NOx emissions, 50% of direct PM2.5 emissions, 75% of SOx emissions and 95% of CO emissions. Area sources (e.g., architectural coatings, residential water heaters, and consumer products) account for approximately 36% of VOC emissions and 39% of direct $PM_{2.5}$ emissions. Point sources (e.g., chemical manufacturing, petroleum production, and electric utilities) account for approximately 23% of SOx emissions. Entrained road dust account for approximately 10% of direct PM2.5 emissions.

The SCAQMD has divided the SCAB into 38 air-monitoring areas with a designated ambient air monitoring station in most areas. The project is in the South Los Angeles County Coastal Source-Receptor Area (SRA) 4. The Long Beach monitoring station is the representative facility for SRA 4. The data collected at this station is considered representative of the air quality experienced in the vicinity of the project. The air pollutants measured at the Long Beach station include ozone, carbon monoxide (CO), PM10, nitrogen dioxide, and sulfur dioxide. The air quality data monitored from 2013 to 2015 are presented in Table 2. (2016 data has not been released yet.) The air quality data monitored were obtained from the CARB air quality data website (www.arb.ca.gov/adam/).

Table 2 Air Quality Levels Measured at the Long Beach Station

Pollutant	California Standard	National Standard	Year	Max. Level	Days State Standard Exceeded	Days National Standard Exceeded
Ozone	0.09 ppm	None	2015	0.087	0	0
1 Hour			2014	0.087	0	0
Average			2013	0.090	0	0
Ozone	0.070 ppm	0.08 ppm[4]	2015	0.066	0	0
8 Hour			2014	0.072	1	0
Average			2013	0.069	0	0
CO	9.0 ppm	9 ppm	2015	n/a	n/a	n/a
8 Hour			2014	n/a	n/a	n/a
Average			2013	n/a	n/a	n/a
Fine	None	35 µg/m^3	2015	48.8	n/a	8.7
Particulates			2014	n/a	n/a	n/a
$PM_{2.5}$			2013	n/a	n/a	n/a
(24 Hour)						
Fine	13 µg/m^3	12 µg/m^3	2015	12.8	Not Exceeded	Exceeded
Particulates			2014	n/a	n/a	n/a
$PM_{2.5}$			2013	n/a	n/a	n/a
(Annual)						
Respirable	50 µg/m^3	150 µg/m^3	2015	80.0	37.6	0
Particulates			2014	84.0	19.3	0
PM_{10}			2013	n/a	n/a	n/a
24 Hour Average						
Respirable	20 µg/m^3	35 µg/m^3	2015	31.5	Yes	No
Particulates			2014	29.6	Yes	No
PM_{10}			2013	n/a	n/a	n/a
AAM						

n/a – data not available
* Insufficient data available to determine the value
Source: CARB Air Quality Data Statistics web site www.arb.ca.gov/adam/ accessed 1/4/2017

The Long Beach monitoring data presented in Table 2 show that air quality levels in the Long Beach area are very good. The area only has rare exceedances of the ozone, PM2.5, and PM10 standards.

1.8 Existing Emissions

A minimal amount of air emissions is currently generated by oil field operations. Currently 33 wells are in production. However, without any additional permits or discretionary approvals,

the field could operate all 53 wells in a combination of production wells and water injection wells. The oil production is cyclical, and the 53 wells estimate of potential operations is based on existing facilities, existing permits, as well as the cyclical operations and historical operation rates. Estimates were made of emissions for the field operating at its existing potential level.

Emissions for the existing potential level come from fugitive emissions of VOCs and more importantly, from the emissions associated with remedial and maintenance drilling rigs on-site. Oil trucks necessary to haul the crude oil away and employee travel to and from the site are also considered.

With operation of the existing potential level, it was estimated that two drilling rigs could be operating every day of the year during daylight hours (Email from InterAct, Val Lerma, P.E., December 6, 2016). These drilling rigs would be driven by diesel engines. Historically, a 425 hp and a 525 hp engines were used. Emissions from these drilling rigs were modeled using the CalEEMod emissions model and the output is presented in the Appendix.

Emissions of VOCs are estimated annually and reported to the SCAQMD ("Annual Emission Report," South Coast AQMD, Reporting Year 2015, Facility Id 175264, dated February 29, 2016). VOC emissions come from painting and use of solvents, storage tanks, valves, compressors, pumps, oil-water separator, well head, and miscellaneous sources. These emission estimates were scaled up from 33 wells to 53 wells for the emission estimate below.

At an operational level of 53 wells, the crude oil will need to be transported off-site via truck. The existing export line is too small to handle the increased crude production. Approximately 40 trucks per day would be required to haul the oil to the nearest refineries in Wilmington and Torrance.

Employee travel to and from the site was estimated. Approximately 15 employees work on-site each day. CalEEMod was used to estimate the employee travel emissions.

Finally, it should be noted that wells on-site are electric and that electric consumption will generate emissions. Much of the electricity for the South Coast Air Basin is generated outside of the area, and therefore, criterial pollutant emissions are not included in the project emissions per direction from the South Coast Air Quality Management District (http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook).

The estimate of potential existing emissions is presented below in Table 3. The emissions for criteria emissions are presented in terms of pounds per day.

Table 3 Potential Existing Emissions

Activity	Pollutant Emissions (Pounds Per Day) ROG	NOx	CO	SOx	PM10	PM2.5
Drilling Rigs	2.7	33.5	18.1	0.1	1.3	1.2
Fugitive VOC (ROG)	33.9	0	0	0	0	0
Oil Trucks	0.5	17.5	3.5	0.0	1.2	0.4
Employee Travel	0.1	0.4	1.0	0.0	0.2	0.1
Total	37.2	51.4	22.6	0.1	2.7	1.6

The analysis shows that the largest contributor to ROG emissions is the fugitive emissions. Otherwise the drilling rigs represent the greatest source of potential existing emissions. The emissions from employee travel to and from the site is very minor.

2.0 POTENTIAL AIR QUALITY IMPACTS

Air quality impacts are usually divided into short term and long term. Short-term impacts are usually the result of construction activities. Long-term impacts are associated with the operation of the proposed project. Impacts are further divided into regional and local air impacts. Regional impacts are associated with emissions that might contribute to an elevation of regional pollutants such as ozone. Local impacts occur adjacent or near to the source of emissions.

2.1 Thresholds of Significance

2.1.1 Regional Air Quality

In its "1993 CEQA Air Quality Handbook", the SCAQMD has established significance thresholds to assess the impact of project related air pollutant emissions. Table 4 presents these significance thresholds. There are separate thresholds for short-term construction and long-term operational emissions. A project with daily emission rates below these thresholds is considered to have a less than significant effect on air quality. It should be noted the thresholds recommended by the SCAQMD are very low and subject to controversy. It is up to the individual lead agencies to determine if the SCAQMD thresholds are appropriate for their projects.

Table 4 SCAQMD Regional Pollutant Emission Thresholds of Significance

	Pollutant Emissions (lbs./day)					
	CO	**ROG**	**NOx**	**PM10**	**PM2.5**	**SOx**
Construction	*550*	*75*	*100*	*150*	*55*	*150*
Operation	*550*	*55*	*55*	*150*	*55*	*150*

2.1.2 Localized Significance Thresholds

As part of the SCAQMD's environmental justice program, attention was focused on localized effects of air quality. In accordance with Governing Board direction, SCAQMD staff developed localized significance threshold (LST) methodology and mass rate look-up tables by Source Receptor Area (SRA) that can be used to determine whether or not a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area. The LST methodology is described in "Final Localized Significance Threshold Methodology" updated in 2009 by the SCAQMD and is available at the SCAQMD website (http://aqmd.gov/ceqa/handbook/LST/LST.html).

The LST mass rate look-up tables provided by the SCAQMD allow one to determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts. If the calculated on-site emissions for the proposed construction or operational activities are below the LST emission levels found on the LST mass rate look-up tables and no potentially significant impacts are found to be associated with other environmental issues, then the proposed construction or operation activity is not significant for local air quality.

The LST mass rate look-up tables are applicable to the following pollutants only: oxides of nitrogen (NO_x), carbon monoxide (CO), particulate matter less than 10 microns in aerodynamic diameter (PM_{10}), and particulate matter less than 2.5 microns ($PM_{2.5}$). LSTs are derived based on the location of the activity (i.e., the source/receptor area); the emission rates of NO_x, CO, $PM_{2.5}$ and PM_{10}; and the distance to the nearest exposed individual.
The LST methodology presents mass emission rates for each SRA, project sizes of 1, 2, and 5 acres, and nearest receptor distances of 25, 50, 100, 200, and 500 meters. For project sizes between the values given, or with receptors at distances between the given receptors, the methodology uses linear interpolation to determine the thresholds. If receptors are within 25 meters of the site, the methodology document says that the threshold for the 25-meter distance should be used. The threshold levels varying depending on the size of the project and the distance to the receptor. Therefore, threshold levels need to be calculated on a project-by-project basis.

2.2 Construction Emissions

Construction emissions are assessed in this section. Emissions for each phase of construction are presented along with the potential regional impact, the potential emissions when construction phases are overlapped is considered, and finally the potential localized impact of construction emissions is assessed.

2.2.1 Methodology

Emissions during the phases of construction were calculated using the California Emissions Estimator Model (CalEEMod). CalEEMod is a computer program developed by the SCAQMD in conjunction with the California Air Resources Board (CARB). The model calculates emissions for construction of various projects. For on-road vehicular emissions, the CalEEMod model utilizes the EMFAC2007 emission rates that have also been developed by CARB. CalEEMod considers the following phases in its calculation of construction emissions; demolition, site preparation, grading, building construction, paving, and painting. Not all of the construction activities have all of the phases contained in the CalEEMod. Scheduling and off-road equipment were provided by SPEC Services in its "Draft Project Description Information," (dated April 21, 2016). The SPEC document was the primary resource that describes the activities associated with each phase of the construction project.

2.2.2 Phases of Construction

The construction of the proposed project will consist of the following nine phases. Each phase is briefly described below. For a more thorough discussion the reader is referred to the SPEC document identified above.

1. Demolition/Site Preparation
2. Construction of Well Cellars
3. Installation of Process Equipment
4. Construction of Tanks
5. Off-Site Construction
6. Construction of Office, Warehouse, and Parking Lot
7. Wetland Restoration
8. Turbine Commissioning
9. Landfill Excavation and Fill

Demolition and Site Preparation. Demolition and site preparation is the first phase of construction. It is estimated to last approximately 4 months. During this time, pipelines and tanks will be removed, cut into manageable size pieces, and hauled to the nearest appropriate landfill. At this time the landfill in Montebello has been identified as the likely depository. Tanks and pumpjacks also will need to be dismantled and removed also. Currently it is estimated that 19 tanks on the Synergy and City Sites will be removed along with 53 pumpjacks. Existing on-site pipelines will be removed. An estimated 1,062 tons of material (including a 30% safety factor) will be hauled away. Some removal of impaired soils from the Synergy and City sites may be necessary. It is estimated that approximately 1,091 round trips will be needed to Simi Valley and 9 round trips to Kettleman Landfill to remove the impaired soil.

Construction of Well Cellars. The construction of well cellars and associated piping will be initiated next. The well cellars represent significant concrete structures and will be constructed at both the LCWA and Pumpkin Patch Sites. The well cellars will be approximately 8 feet deep and are designed to provide containment for a 25-year 24-hour rainstorm. Eventually the well cellars will contain the oil and gas production wells and also the water injection wells. The well cellars allow equipment, such as a drill rig, to move over the wells with no aboveground obstructions. Construction of the well cellars could take up to 12 months.

Installation of Process Equipment. The process area will consist of concrete pads and the processing equipment. Processing equipment includes pumps, gas compression systems,

water treatment systems, turbines and other systems. This phase could last up to 15 months. Typical construction equipment that is likely to be used during this phase include trackhoes, loader, dozer, roller, backhoe, cranes, portable generators, forklift, air compressor, and welding equipment powered by diesel engines.

Construction of Tanks. Six tanks will need to be constructed; two at the Pumpkin Patch Site and four at the LCWA Site. Two aerial lifts, two cranes, two forklifts, and two welders were assumed for the construction.

Off-site and On-Site Pipeline Construction. The project will include the installation of separate gas supply and oil shipping pipelines from the project facilities to the off-site tie-in points. Pipelines are expected to be constructed sequentially. A traffic plan will be prepared and construction will occur as approved by the City. A crude oil pipeline approximately 2,700 feet in length will be installed. Two lines roughly totaling 10,600 feet will handle gas sales and purchase. Horizontal directional drill (HDD) piping will be used to go under roadways and other sensitive areas without the need for surface excavation. Approximately 2,400 feet of HDD piping will be installed. Trenches will be needed to house the LP gas, LP clean water, and power and communication lines. A 5-foot deep and 3 foot wide ditch will be excavated. Broken asphalt will be hauled away, and roughly 3,000 cubic yards of sand and slurry back fill will need to be imported.

In addition to the pipelines connecting to off-site tie in points, the project also proposes the construction of a pipeline system and utility corridor that connects the Pumpkin Patch site to the LCWA site and which will traverse the City property. This pipeline will be used to transport oil produced on the Pumpkin Patch site to LCWA for storage until it is shipped off-site, and the utility corridor will be used to provide a connection for electrical power between the LCWA site and Pumpkin Patch site. A cased bored crossing is proposed to extend diagonally beneath the intersection of Studebaker and Westminster/2nd Street from the southwest corner of the LCWA site to the northeast corner of the City Property. The cased crossing will contain carrier and electrical lines. Once the cased crossing reaches the City Property, the bundle will be separated into a combination of above-ground and below-ground pipelines. The above-ground pipelines will be used for transporting oil, and the subsurface lines will be used for water, gas and electrical connections.

Construction of Office, Warehouse, and Parking Lot. A 5,200 square foot office building and a 9,750 square foot warehouse will be constructed on the Pumpkin Patch Site. A 47 space parking lot will also be constructed. On both the Pumpkin Patch and LCWA Sites 22-foot high perimeter walls will be built. Standard construction techniques will be employed.

Wetlands Restoration. Minor modifications to the 77.3-acre mitigation bank area will be made to enhance tidal flows necessary for reestablishment of coastal salt marsh habitat. Some grading will be necessary to establish tidal channels, remove some existing berms and construct other berms, and lower some areas. Additionally, sheet piles will be installed to stabilize channels. The work will be conducted during a 6 month period outside of the

nesting season. The earthwork necessary to complete each of these tasks will be accomplished through standard earth-moving equipment including excavators, bulldozers, front-end loaders, and trucks for hauling material. Additionally, sidewalk installation will be required Studebaker for both the Synergy and LCWA sites, along 2nd Street for the Synergy, LCWA, and City sites, and along Pacific Coast Highway for the Synergy site. Paving will be needed for driveway and parking area for the Visitor Center on the Synergy site.

Turbine Commissioning. Each of the four turbines will go through a commissioning process. It was assumed that only one turbine would be commissioned during a day due to the complexity of this initial startup. Commissioning involves starting and stopping the turbine up to 10 times during the day and running the turbine for up to 20 hours. Turbine commissioning would occur after most, if not all, of the other phases have been completed.

Landfill Excavation and Fill. In addition to pipeline removal, it may be necessary to remove the buried landfill under the western two-thirds of the Pumpkin Patch site. If needed, this work would consist of the following phases: (1) remove the dry trash from the site and haul to a transfer station for disposal; and (2) using excavation equipment with a dredging bucket, remove wet trash so the water would be allowed to drain within the confines of the excavation. Any residual water brought to the surface would be contained for transfer to an on-site liquid retention Baker-type tank; the collected water would be sampled and subsequently disposed at an approved offsite facility.

Based upon a visual determination to identify the appropriate disposal method, inert waste would be hauled to a transfer facility within 5 to 10 miles, potentially hazardous waste would be hauled to a Class I or Class II facility, likely the Kettleman Hills Landfill. It is assumed that approximately 63,000 cubic yards of waste would be exported, and approximately 45,000 cubic yards of clean dirt would be imported. This fill material would likely be obtained from a site within a 10 to 50 mile radius.

2.2.3 Emissions for Each Phase

The CalEEMod program was used to project the peak daily emissions from each phase of construction. The highest construction emissions are presented below and represent a worst-case scenario. No mitigation is included in the emissions presented below. The projected emissions are compared to the Significance Thresholds described in Section 2.1.2. The CalEEMod printouts are included in the Appendix.

Table 5 Peak Construction Emissions for Each Phase of Construction

Activity	Pollutant Emissions (Pounds Per Day) ROG	NOx	CO	SOx	PM10	PM2.5
1. Demolition/Site Prep	6.6	**130.2**	52.7	0.3	9.9	4.5
2. Well Cellars	7.2	57.8	43.1	0.1	3.9	3.7
3. Process Equipment	7.8	63.8	49.4	0.1	4.2	3.8
4. Tank Construction	26.4	13.1	10.0	0.0	0.9	0.8
5. Off-Site Construction	7.7	65.8	47.5	0.1	5.4	4.2
6. Office/Warehouse	74.8	24.0	19.5	0.0	2.0	1.5
7. Wetlands Restoration	8.9	99.8	74.8	0.1	11.9	7.9
8. Turbine Commission	12.3	16.5	65.9	3.1	10.4	10.4
All Phases Combined	**151.7**	**471.0**	362.8	3.8	48.6	36.8
9. Landfill Excavation	4.5	129.5	30.5	0.4	13.4	6.4
All Phases w/Landfill	**156.1**	**600.4**	393.3	4.1	62.0	43.2
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Phase Exceed Threshold?	***Yes***	***Yes***	*No*	*No*	*No*	*No*

As can be seen in Table 5 none of the individual phases of construction will exceed the SCAQMD regional thresholds except for the demolition/site prep phase. For this phase, NOx emissions will exceed the regional thresholds, and this is primarily due to haul trips to remove impaired soils. Some of the phases of construction will overlap with other phases of construction. If all phases of construction occurred simultaneously, then the emissions for ROG and NOx would exceed the thresholds. The emissions for CO, SOx, PM10 and PM2.5 would not be exceeded even if all of the phases of construction occurred at the same time. The following section examines more closely the construction phasing and the potential for impacts. The analysis of phasing focuses on ROG and NOx emissions since these are the only emissions that have the potential to exceed the thresholds.

Finally, it should be noted that the landfill phase has been broken out separately. It is uncertain if the excavation of the landfill will be needed and what the timing of the landfill operation would be. It is possible that the landfill may be excavated and filled prior to any other construction.

2.2.4 Effect of Overlapping Phases

The construction of the office and warehouse and the tanks result in the bulk of the ROG emissions. These emissions are due primarily to painting (architectural coatings). A mitigation measure is proposed in Section 3.1 that will reduce the ROG emissions from the office and warehouse construction and tank painting to an acceptable level.

The worst-case overlap for NOx emissions is during a time when five construction phases are underway; specifically, well cellars, process equipment, tank construction, off-site construction, and office/warehouse construction. The NOx emissions during this time period would total 224.4 pounds per day and represent the worst case for the project. Mitigation measures are considered in Section 3.1. However, there are no reasonable and feasible measures that can reduce the emissions to below 100 pounds per day. Therefore, there will be a significant regional air impact due to NOx emissions.

2.2.5 Localized Construction Air Impacts

The localized construction impact of the project was also assessed using the SCAQMD's methodology. This analysis determines if there will be impact on adjacent residential area due to the construction of the project. The nearest off-site residential area for each of the project components is shown in Table 6. The potential for exceeding the LST thresholds is a function of the distance between the residences and the project site, and the level of activity on the site. The Synergy wetlands restoration and Pumpkin Patch sites were selected for analysis. The wetlands restoration is located closest to residences. The Pumpkin Patch site will have the highest level of construction activity and is the second closest site to residential. These sites represent the worst-case situations for the project.

Table 6 Distance to Nearest Residential

Component	Distance (ft.)
Synergy (Wetlands)	330
Pumpkin Patch	830
City	1381
LCWA	1825

The on-site emissions due to construction were calculated utilizing CalEEMod as previously described. Only those emissions generated on-site are considered for the analysis. The emissions presented in Table 7 and Table 8 are those that would be emitted from activity within the project site. Table 7 and Table 8 represent the analysis for the Wetlands Restoration area and the Pumpkin Patch site, respectively. The total on-site construction emissions are compared to the Localized Significance Thresholds (LSTs) described in Section 2.1.2.

Table 7 On-Site Construction Emissions for Wetlands Restoration

Activity	Daily Emissions (lbs./day) NOx	CO	PM10	PM2.5
Wetlands Restoration	91.0	65.3	10.6	7.4
LST Thresholds	126	2,622	58	18
Exceed Threshold?	*No*	*No*	*No*	*No*

Table 8 On-Site Construction Emissions for Pumpkin Patch

Activity	Daily Emissions (lbs./day) NOx	CO	PM10	PM2.5
Well Cellars	39.7	27.4	2.6	2.5
Process Equipment	45.1	31.7	2.6	2.5
Tank Construction	13.0	9.6	0.9	0.8
Office/Warehouse	23.3	17	1.5	1.4
Total	121.1	85.7	7.6	7.2
LST Thresholds	148	5,246	109	53
Exceed Threshold?	*No*	*No*	*No*	*No*

None of the emissions will exceed the LST significance thresholds. Therefore, the impact of construction on nearby off-site sensitive receptor areas will be less than significant for all phases of the project. There will be no local air quality impacts.

2.2.6 Diesel Particulate Matter Emissions During Construction

In 1998, the California Air Resources Board (ARB) identified particulate matter from diesel-fueled engines (Diesel Particulate Matter or DPM) as a Toxic Air Contaminant (TAC). It is assumed that the majority of the heavy construction equipment utilized during construction would be diesel fueled and emit DPM. Please refer to the Health Risk Assessment in the EIR for a discussion of potential impacts from DPM.

2.3 Operational Impacts

2.3.1 Regional Operational Impacts

Operational air pollutant emissions due to the project were calculated using the CalEEMod program and spreadsheets. The program calculated operational emissions for the various phases of the proposed project. For the Pumpkin Patch site emission sources include cars and trucks going to and from the site, natural gas for space heating, a diesel-powered drilling rig, and other miscellaneous sources. The site will not normally consume electricity from the

public grid, but rather electricity will be generated by turbines at the LCWA site. One drilling rig will be in operation on a regular basis at both the LCWA and Pumpkin Patch sites, but will be electric (not diesel powered). Also at both the LCWA and Pumpkin Patch sites will be diesel powered workover drilling rigs. The workover rigs are anticipated to be approximately 500 hp and drill up to 50 hours per week. Fugitive VOC emissions (included in the ROG emissions) will be generated at the LCWA and Pumpkin Patch sites due to connectors, flanges, pump seals and valves. Tanks at both Pumpkin Patch and LCWA sites will be fixed-roof gas blanket design, which eliminates the direct emissions from tanks. Oil-containing tanks will be permitted through SCAQMD and equipped with BACT (Best Available Control Technology). A flare system and an emergency generator will be located at the LCWA site, but will only be used in emergencies, and therefore, and not included in the emission projections. At the LCWA site there will be four gas turbine generator sets to convert natural gas from the wells to electricity. Currently it is envisioned that these generators will provide all of the electricity needed at the LCWA and Pumpkin Patch sites most of the time. On rare occasions, additional power will need to be drawn from the SCE grid. At the Visitor Center on the Synergy site, emissions will be generated by electric consumption for lighting and natural gas consumption for space heating. The vast majority of emissions will be associated with cars traveling to and from the Visitor Center. Re-current painting of the facilities at all of the sites will also contribute to the emissions.

CalEEMod was used to calculate the maximum daily emissions except for the emissions from the gas turbine generator sets. Output files from the CalEEMod program are presented in the appendix.

Emission calculations were provided by Solar Turbines (manufacturer of the Mercury 50 turbines and dated November 7, 2016). The turbines will be part of a microgrid. The microgrid controls integration of multiple energy sources and uses to maximize efficiency, environmental benefits, cost savings and reliability. The energy source components will include a SCE grid connection, four 4.5 MW gas turbines (e.g., Solar Turbines Mercury 50) with heat recovery steam generators for cogeneration with potential generation of 18 MW, and solar photovoltaic with generation potential of 158 kW. The microgrid system will provide all of the energy needed for the facilities including drilling rigs and supporting equipment, pumps, two electric vehicle charging stations, and other equipment. The turbines will be required by the SCAQMD to meet the BACT standards, and this will likely require that the turbines have emission control features including lean-premix and selective catalytic reduction (SCR). SCR can reduce NOx emissions by up to 87%, and it was assumed that this level of reduction would be required by the SCAQMD. The PM2.5 and PM10 emission rate is based on test data in the possession of Solar Turbine. A letter from Solar Turbine regarding the particulate emissions is provided in the Appendix.

Table 9 presents the results of the emission projections showing the maximum daily air pollutant emissions for each site. The turbines, which will be at the LCWA site, are broken out separately. The existing oil field well sites would be phased out over a 40-year period, starting upon the completion and occupation of the new office building and warehouse on

the Pumpkin Patch site. The emissions associated with the assumed baseline oil operations will be reduced by 75 percent once building permits are obtained for the office building on the Pumpkin Patch site. Over the next 20 years, half of the existing 53 wells will be abandoned. This represents an 87.5 percent reduction from the assumed baseline emission levels. By year 40, all wells will be abandoned, which represents a 100 percent reduction of the baseline emissions. Therefore, Table 10 provides the emissions for the first 20 years of the project. Table 10 provides the emission estimates for the second 20 years of the project, and Table 11 presents the emissions after 40 years and after all of the existing production facilities have been shutdown.

Table 9 First 20 Years - Project Operational Emissions (pounds per day)

	ROG	NOx	CO	SOx	PM10	PM2.5
Pumpkin Patch	5.0	19.4	11.6	0.0	1.3	0.8
Visitor Center	1.3	2.7	10.8	0.0	1.9	0.5
LCWA Site	8.4	18.6	8.5	0.0	0.7	0.6
Turbines @ LCWA	54.2	78.0	94.9	14.7	25.0	25.0
New Facility Emissions	68.9	118.6	125.8	14.8	28.8	26.9
Phase out of 75% of Existing	28.0	42.9	17.9	0.1	2.3	1.3
Project Emissions	40.9	**75.7**	107.9	14.7	26.5	25.6
SCQAMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Exceed Thresholds	*No*	***Yes***	*No*	*No*	*No*	*No*

Table 10 Years 20 to 40 - Project Operational Emissions (pounds per day)

	ROG	NOx	CO	SOx	PM10	PM2.5
Pumpkin Patch	5.0	19.4	11.6	0.0	1.3	0.8
Visitor Center	1.3	2.7	10.8	0.0	1.9	0.5
LCWA Site	8.4	18.6	8.5	0.0	0.7	0.6
Turbines @ LCWA	54.2	78.0	94.9	14.7	25.0	25.0
New Facility Emissions	68.9	118.6	125.8	14.8	28.8	26.9
Phase out of 87.5% of Existing	32.6	47.1	20.3	0.1	2.5	1.5
Project Emissions	36.3	**71.5**	105.5	14.7	26.3	25.4
SCQAMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Exceed Thresholds	*No*	***Yes***	*No*	*No*	*No*	*No*

Table 11 After 40 Years - Project Operational Emissions (pounds per day)

	ROG	NOx	CO	SOx	PM10	PM2.5
Pumpkin Patch	5.0	19.4	11.6	0.0	1.2	0.8
Visitor Center	1.3	2.7	10.8	0.0	1.9	0.5
LCWA Site	8.4	18.5	8.5	0.0	0.6	0.6
Turbines @ LCWA	54.2	78.0	94.9	14.7	25.0	25.0
New Facility Emissions	68.9	118.6	125.9	14.8	28.8	26.9
Complete Phase Out of Existing Operations	37.2	51.4	22.6	0.1	2.7	1.6
Project Emissions	31.7	**67.3**	103.2	14.7	26.1	25.3
SCQAMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Exceed Thresholds	*No*	***Yes***	*No*	*No*	*No*	*No*

The data in Table 9 show that the change in project emissions are below the SCAQMD thresholds for all pollutants except NOx. The main emission source for this pollutant is the turbines. The diesel drilling rigs at the Pumpkin Patch and LCWA sites are secondary contributors. However, the threshold for NOx will still be exceeded. Mitigation measures to reduce NOx are discussed in Section 3.2.

Table 12 compares the project emissions (opening year) due to the project to the projected basinwide emissions from the 2012 AQMP. This comparison shows that the project would result in a net increase in emissions that is insignificant in comparison to basinwide emissions.

Table 12 Comparison of Project Emissions with SCAB Emissions

	Pollutant Emissions (tons/day)					
	ROG	NOx	CO	SOx	PM10	PM2.5
Project Emissions	0.0205	0.0379	0.0540	0.0073	0.0133	0.0128
2031 South Coast Air Basin*	345	214	1,188	18	N/A	65
Project as Percentage of Basin	0.0059%	0.0177%	0.0045%	0.0408%	N/A	0.0197%

*Table 3-4E Final Draft 2016 AQMP

2.3.2 Local Air Quality Impacts Due to Operation

For local air impacts, the LCWA represents the worst-case situation since the emissions at this site are so much higher than all the other sites. The on-site operational emissions were calculated utilizing CalEEMod and turbine emissions calculated using the U.S. EPA methodology described above. The emissions presented in Table 13 are those that would be emitted from activity within the LCWA site. The total on-site operational emissions are compared to the Localized Significance Thresholds (LSTs) described in Section 2.1.2.

Table 13 On-Site Emissions by Operations

	Daily Emissions (lbs./day)			
Activity	NOx	CO	PM10	PM2.5
On-Site Emissions	18.6	8.5	0.7	0.6
Turbines	78.0	94.9	25.0	25.0
Total Emissions	96.6	103.4	25.7	25.6
LST Thresholds	186	11,326	51	33
Exceed Threshold?	*No*	*No*	*No*	*No*

None of the emissions will exceed the LST significance thresholds. Therefore, the closest residences will not be adversely affected during operations.

2.3.3 Potential for Odors

Odors are considered significant if they produce a "nuisance". Odor significance for the SCAQMD is based on creating a nuisance per Rule 402. Rule 402 states that "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, or have a natural tendency to cause, injury or damage to business or property." The SCAQMD has an established Public Nuisance Investigation Policies and Procedures to guide the SCAQMD inspectors in determining whether to issue a Notice of Violation (NOV) for a nuisance. The procedures direct SCAQMD investigators to interview complainants and observe, identify, or otherwise establish evidence odorous emissions. An NOV is issued if a "multiple complaint condition" is documented, defined as six or more complainants.

There are an estimated 400 oil and gas production facilities operating within Los Angeles County (as per the SCAQMD Board meeting June 6, 2014). The agency's current odor complaint identification and investigation practices are effective but, in some cases, odors are elusive. The AQMD receives thousands of complaints about odor from the public each year. Odors are the single largest source of complaints reported by residents of the South Coast Air Basin and comprise almost half of the total air quality complaints received annually. Facilities frequently reported as suspected sources of odors include waste transfer and recycling stations, wastewater treatment plants, landfills, composting operations, petroleum operations, food and byproduct processes, factories, and agricultural activities, such as livestock operations (as per the SCAQMD Board meeting June 6, 2014). While most oil and gas production facilities operate without generating NOVs, NOVs have occurred at oilfields in the Los Angeles area, with two recent high profile odor releases occurring at the Baldwin Hills Oilfield (which generated a drilling moratorium, an EIR, and the development of a Community Standards District in 2008) and the Allenco Facility, which generated over 270 odor complaints between 2010 and 2013 per the SCAQMD.

Odor complaints would be expected to not be an issue with the proposed facilities. The oil production facilities that are being replaced are old with minimal emission controls at well heads and flanges, pumps, and other equipment that has seen many years of use. The proposed facility will have new equipment that must meet all of the latest SCAQMD regulations. For example, tanks used at other facilities may have been open or had floating roofs. All of the tanks for this project will have fixed roof tanks which eliminate odors. Second, the LCWA and Pumpkin Patch sites are located at some distance from residential areas. This distance helps to disperse any odorous material that might accidentally be released from the facility. Finally, the facilities must comply with SCAQMD Rule 402 which requires that the facilities cannot be a nuisance and must modify operations to comply.

2.3.4 Compliance with Air Quality Planning

The following section deals with the major air planning requirements for this project. Specifically, consistency of the project with the AQMP is addressed. As discussed below, consistency with the AQMP is a requirement of the California Environmental Quality Act (CEQA).

An air quality assessment must discuss any inconsistencies between the proposed project and applicable General Plans and regional plans (California Environmental Quality Act (CEQA) guidelines (Section 15125)). Regional plans that apply to the proposed project include the South Coast Air Quality Management Plan (AQMP). In this regard, this section will discuss any inconsistencies between the proposed project and the AQMP.

The purpose of the consistency discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the project would interfere with the region's ability to comply with Federal and State air quality standards. If the decision-maker determines that the project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD's CEQA Handbook states "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the plan if it furthers one or more policies and does not obstruct other policies. The Handbook identifies two key indicators of consistency:

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

(2) Whether the project will exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

Criterion 1 - Increase in the Frequency or Severity of Violations?

Based on the air quality modeling analysis contained in this report, with mitigation there will be significant short-term construction impacts of NOx emissions on a regional scale. However, there will not be exceedances of the SCAQMD localized significance thresholds (LST), and therefore, local concentrations of NOx will not be impacted by the project. Therefore, short-term construction activities will not increase the frequency or severity of existing air quality violations.

The proposed project operation will increase regional emissions, but will increase regional emissions by an amount less than the SCAQMD regional thresholds except for NOx. Again, the operational LST analysis indicates that no significant local air quality impacts will result. Because the project is not projected to impact the local air quality, the project is found to be consistent with the AQMP for the first criterion.

Additionally, it should be noted that the project is proposing to use an energy efficient microgrid system. The microgrid controls integration of multiple energy sources and uses to maximize efficiency, environmental benefits, cost savings and reliability. The energy source components will include a SCE grid connection, four 4.5 MW gas turbines (e.g., Solar Turbines Mercury 50) with heat recovery steam generators for cogeneration with potential generation of 18 MW, and solar photovoltaic with generation potential of 158 kW. The microgrid system will provide all of the energy needed for the facilities including drilling rigs and supporting equipment, pumps, two electric vehicle charging stations, and other equipment.

Criterion 2 - Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the project with the assumptions in the AQMP. Thus, the emphasis of this criterion is to ensure that the analyses conducted for the project are based on the same forecasts as the AQMP. The Regional Comprehensive Plan and Guide (RCP&G) consist of three sections: Core Chapters, Ancillary Chapters, and Bridge Chapters. The Growth Management, Regional Mobility, Air Quality, Water Quality, and Hazardous Waste Management chapters constitute the Core Chapters of the document. These chapters currently respond directly to federal and state requirements placed on SCAG. Local governments are required to use these as the basis of their plans for purposes of consistency with applicable regional plans under CEQA.

Since the SCAG forecasts are not detailed, the test for consistency of this project is not specific. The AQMP assumptions are based upon projections from local general plans. Projects that are consistent with the local general plan are consistent with the AQMP assumptions. The emission projections for the project (Section 2.3.2) show that the project will not impact local air quality significantly, and therefore, does not represent a significant change in air quality levels. Therefore, the second criterion is met for consistency with the AQMP.

Additionally, the project will comply with any new requirements specified in the 2016 AQMP. The project will be replacing old facilities that tend to leak volatile organic compounds (VOC) at flanges, valves, pumps, and other equipment with newer equipment that essentially eliminates these leaks. Measure CMB-03 of the AQMP calls out for replacing flares with turbines or other equipment that make use of any natural gas generated. The proposed project will be consistent with this measure. Therefore, the project in terms of its design and operation appear to be consistent with the control measures contained in the 2016 AQMP.

2.4 Alternatives

Because the majority of operational emissions are a result of the proposed power generation (i.e., gas turbines), two alternatives to the project's proposed power generation are considered below. The first alternative, No Cogeneration, assumes that the waste heat from the turbines would simply be exhausted, instead of being captured and used for other operations. No cogeneration is the more common field installation, but results in a lower overall efficiency and higher air emissions. The second alternative assumes that all power for the LCWA and Pumpkin Patch facilities would be obtained from Southern California Edison (SCE).

2.4.1 No Cogeneration

Most oil production facilities of the type proposed do not utilize cogeneration. The use of cogeneration represents the utilization of advanced technology and an additional capital expense. However, the proposed project has included the use of cogeneration to minimize air pollutant emissions, and make more efficient use of its energy generation.

The primary focus of the cogeneration process will be to heat oil and water, and cool gas as part of the oil production/separation process. The water reclaimed from this process is injected back into the oil production formation, and the gas and oil is sold for use and further processing, respectively. As the oil/water mixture enters the separation chamber it is heated and chemicals may be applied to enhance separation. Gas coming off of this process is cooled to remove water and heavy hydrocarbons. Without cogeneration, natural gas would be combusted in a boiler to heat the oil/water mixture. With cogeneration, waste heat from the turbine exhaust is used to heat the oil/water mixture rather than being exhausted to the atmosphere. Again, without cogeneration, refrigeration units powered by electricity would be utilized. With cogeneration, the steam from the turbines powers the refrigeration units.

Therefore, without cogeneration additional gases would be generated by the combustion of natural gas for heating and by electric consumption for cooling. The SCAQMD recommends that electrical consumption emissions not be considered in CEQA analysis primarily because much of the power plant emissions are generated outside of the local air basin. These additional emissions due to the combustion of natural gas were calculated. SPEC Services (email dated December 20, 2016) estimated that 480 mscfd (thousand standard cubic feet per day) of natural gas would need to be combusted for heating. Emission factors from the U.S. Environmental Protection Agency ("Compilation of Air Emission Factors, AP-42", https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emission-factors) were used to compute emissions from the combustion of natural gas for heating except for NOx. The CalEEMod default ("California Emissions Estimator Model User's Guide, Appendix D, Table 12.4) was used to calculate NOx. The results are presented in Table 14. The table provides the additional air pollutant emissions for heating.

Table 14 Emissions With and Without Cogeneration (pounds per day)

	ROG	NOx	CO	SOx	PM10	PM2.5
Additional Heating Emissions	2.6	5.4	40.3	0.3	3.6	2.7
Power Emissions With Cogen	54.2	78.0	94.9	14.7	25.0	25.0
Power Emissions Without Cogen	56.9	83.3	135.3	15.0	28.6	27.7
Percent Increase Without Cogen	4.9%	6.9%	42.5%	2.0%	14.6%	11.0%

The data in Table 14 indicates that the power emission reductions between the project with cogeneration and a no cogeneration alternative range from 2% to over 40% depending on the pollutant. Very significant savings of 6.9% for NOx and 42.5% for CO will be achieved by utilizing cogeneration as the project proposes. Savings of 14.6% for PM10 and 11.0% for PM2.5 will be achieved and are substantial. Therefore, the use of cogeneration as proposed for the project results in a significant air pollutant savings, specifically, a reduction in criteria pollutant emissions.

2.4.2 All Power from Southern California Edison

This alternative would eliminate the turbine power generation and replace it with power from the SCE power grid. Emission rates for SCE for criteria pollutants (i.e., ROG, NOx, CO, PM10 and PM2.5) are not included in CalEEMod. Neither the latest version of CalEEMod (v. 2016.3.1) nor the previous version (v. 2013.2.2) contain emission factors for the criteria pollutants for SCE electric generation. The SCAQMD guidance on electric consumption is not to include criteria pollutants in CEQA assessments since so much of the electric power is generated out of the air basin and would not impact the basin's air quality.

However, it is clear that as part of the oil production process, natural gas will be generated. This natural gas needs to be utilized in some manner. Historically, natural gas was simply flared off but this is a "dirty" process and is generally not allowed except for emergencies in Southern California. The process proposed by this project, specifically, a highly efficient microgrid system with clean-burning turbines, is a very efficient use of the natural gas generated. The use of natural gas for space or water heating, for example, would result in much higher emissions than the proposed turbines. Therefore, the proposed project would be a superior alternative to using just power from SCE when one considers the potential uses of the natural gas generated as part of the project.

3.0 MITIGATION MEASURES

3.1 Short-Term Impacts

During the office/warehouse construction phase, ROG emissions were projected to be above the regional significance threshold. The ROG emissions for painting tanks, while not exceeding the threshold alone, contributed substantially to ROG emissions for construction. A mitigation measure is provided below that bring the emissions to below the thresholds, and will ensure that even when combined with other phases of construction the ROG emissions will be below the regional thresholds.

AQ-1: Use low VOC paints. Only paints with a volatile organic content (VOC) of 75 grams per liter (g/l) or less will be used. This will bring the ROG emissions down to 24.4 pounds per day during the office/warehouse construction phase, and 7.7 pounds per day for the tank construction phase. This will also ensure that even when combined with other phases the emissions will be below the 75 pounds per day threshold for ROG. The total ROG emissions for all construction phases will be 65.2 pounds per day. Therefore, with implementation of this mitigation measure the short-term emissions of ROG will be reduced to a level of less than significant.

NOx emissions were projected to be above the regional threshold of 100 pounds per day when multiple phases of construction are underway, which is most of the time. The wetlands restoration phase will come after the other phases are complete, and will not have a significant impact. The mitigation measure provided below reduces the emissions, but not below the NOx threshold.

Mitigation Measure AQ-2: NOx Reduction Measures. The following NOx reduction measures should be implemented.

1. Require all off-road diesel-powered construction equipment greater than 50 hp (e.g., excavators, graders, dozers, scrappers, tractors, loaders, etc.) to comply with EPA-Certified Tier IV emission controls where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB.
2. A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.
3. Eliminate the use of all portable generators. Require the use of electricity from power poles rather than temporary diesel or gasoline power generators.
4. Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow.
5. Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site.
6. Reroute construction trucks away from congested streets or sensitive receptor areas.

The measures identified will reduce NOx emissions, but not to an extent that the emissions are below the threshold of significance. Some of the measures above are readily quantifiable with CalEEMod. Other measures will reduce NOx, but by a minimal and non-quantifiable amount. Table 15 identifies the NOx emissions for each of the critical phases. Some phases have a substantial reduction (refer back to Table 5), while other phases have little change in emissions. Each phase by itself does not exceed the significance threshold, except for the landfill excavation. The exceedance is caused primarily with haul trips associated with the landfill remediation. However, when all phases are occurring simultaneously, which will happen infrequently, the NOx emissions will exceed the threshold.

Table 15 Peak Mitigated NOx Construction Emissions

Activity	NOx (pounds per day)
1. Demolition/Site Prep	93.7
2. Well Cellars	39.9
3. Process Equipment	46.2
4. Tank Construction	0.9
5. Off-Site Construction	65.8
6. Office/Warehouse	24.0
7. Restoration	12.9
8. Turbine Commission	16.5
All Phases Combined	**299.9**
Landfill Excavation	118.9
All Phases with Landfill	**418.8**
SCAQMD Thresholds	*100*
Phase Exceed Threshold?	*No*

3.2 Long-Term Impacts

Long-term regional impacts are projected for NOx and ROG emissions for the first 20 years of the project. After 20 years, only NOx is projected to exceed the SCAQMD thresholds. The exceedances are due primarily to the turbines, but the diesel drilling rigs also contribute to the exceedance. Best Available Control Technology (BACT) will be required by the SCQAMD for the turbines and this has been accounted for in the emission projections already. Cogeneration is also part of the project, which is an advanced technology for this type of project, and results in significant emission reductions. The project proponent will be working with the turbine manufacturer and others to reduce the emissions to the greatest extent

possible, however, at this time there is no guarantee that emissions can be brought under the regional thresholds.

The on-site diesel work-over drilling rigs are a secondary contributor to the exceedances. Tier IV diesel drilling rigs are available and would reduce emissions. Therefore, the following mitigation measure is proposed.

Mitigation Measure AQ-3: NOx Operational Reduction Measures. The following NOx reduction measures should be implemented.

1. Require all diesel-powered drilling rigs located at the Pumpkin Patch and LCWA sites to comply with EPA-Certified Tier IV emission controls. This drilling rig equipment shall be outfitted with BACT devices certified by CARB.

Tables 16 through 18 show the results when Tier IV drilling rigs are used. The mitigation measure reduces the NOx emissions sufficiently so that the SCAQMD thresholds are not exceeded. None of the thresholds are exceeded and no significant impacts will occur.

Table 16 First 20 Years - Mitigated Operational Emissions (pounds per day)

	ROG	NOx	CO	SOx	PM10	PM2.5
Pumpkin Patch	4.3	6.5	17.7	0.0	0.9	0.4
Visitor Center	1.3	2.7	10.8	0.0	1.9	0.5
LCWA Site	7.8	5.6	14.6	0.0	0.3	0.2
Turbines @ LCWA	54.2	78.0	94.9	14.7	25.0	25.0
Total Project Emissions	67.6	92.8	138.0	14.8	28.0	26.2
Curtailed Emissions	28.0	42.9	17.9	0.1	2.3	1.3
Change in Emissions	39.6	49.9	120.2	14.7	25.7	24.8
SCQAMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Exceed Thresholds	*No*	*No*	*No*	*No*	*No*	*No*

Table 17 Years 20 to 40 - Mitigated Operational Emissions (pounds per day)

	ROG	NOx	CO	SOx	PM10	PM2.5
Pumpkin Patch	4.3	6.5	17.7	0.0	0.9	0.4
Visitor Center	1.3	2.7	10.8	0.0	1.9	0.5
LCWA Site	7.8	5.6	14.6	0.0	0.3	0.2
Turbines @ LCWA	54.2	78.0	94.9	14.7	25.0	25.0
Total Project Emissions	67.6	92.8	138.0	14.8	28.0	26.2
Phase out of 87.5% of Existing	32.6	47.1	20.3	0.1	2.5	1.5
Project Emissions	35.1	45.7	117.8	14.7	25.5	24.7
SCQAMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Exceed Thresholds	*No*	*No*	*No*	*No*	*No*	*No*

Table 18 After 40 Years - Mitigated Operational Emissions (pounds per day)

	ROG	NOx	CO	SOx	PM10	PM2.5
Pumpkin Patch	4.3	6.5	17.7	0.0	0.9	0.4
Visitor Center	1.3	2.7	10.8	0.0	1.9	0.5
LCWA Site	7.8	5.6	14.6	0.0	0.3	0.2
Turbines @ LCWA	54.2	78.0	94.9	14.7	25.0	25.0
Total Project Emissions	67.6	92.8	138.0	14.8	28.0	26.2
Complete Phase Out of Existing	37.2	51.4	22.6	0.1	2.7	1.6
Project Emissions	30.5	41.4	115.4	14.7	25.4	24.5
SCQAMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Exceed Thresholds	*No*	*No*	*No*	*No*	*No*	*No*

4.0 UNAVOIDABLE SIGNIFICANT IMPACTS

4.1 Short-Term Impacts

With the mitigation measures identified above, the emissions of NOx during construction will exceed the regional thresholds, and therefore, there will be a significant impact for short-term NOx emissions.

4.2 Long-Term Impacts

The analysis demonstrates that the project will exceed the regional emissions for NOx due to the operation of the proposed project. However, with mitigation none of the thresholds are exceeded and no significant impacts will occur.

It should be noted that the project will be generating electricity on-site, and therefore, some emissions will not be generated by power plants that would otherwise be generating emissions. For EIR analysis, the SCAQMD has indicated that emissions generated for electric consumption should be considered to be outside of the air basin. However, the Seal Beach/Long Beach area still has active power plants that would not have to be generating electricity (and emissions) for this project.

APPENDIX

Wetlands Facility Construction - Demolition/Site Prep Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	190.70	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acreage for project

Construction Phase - Demolition and Site Prep will occur simultaneously. Therefore everything put under Demolition.
Duration per SPEC schedule

Off-road Equipment - Per SPEC equipment schedule

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Haul truck distance to Montebello disposal site.

Demolition - Estimate by G&A and reviewed by SPEC. Includes pipe removal from Synergy, City and Pumpkin Patch sites.

Table Name	Column Name	Default Value	New Value

tblConstructionPhase	NumDays	220.00	5.00
tblConstructionPhase	NumDays	3,100.00	100.00
tblConstructionPhase	NumDays	200.00	85.00
tblConstructionPhase	NumDays	310.00	2.00
tblConstructionPhase	NumDays	220.00	5.00
tblConstructionPhase	NumDays	120.00	1.00
tblConstructionPhase	PhaseEndDate	5/1/2017	1/16/2017
tblConstructionPhase	PhaseStartDate	4/29/2017	1/14/2017
tblGrading	AcresOfGrading	5.00	0.00
tblLandUse	LotAcreage	0.02	190.70
tblOffRoadEquipment	HorsePower	162.00	175.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	LoadFactor	0.38	0.73
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblTripsAndVMT	HaulingTripLength	20.00	23.10

tblTripsAndVMT	WorkerTripNumber	13.00	5.00
tblTripsAndVMT	WorkerTripNumber	23.00	10.00
tblTripsAndVMT	WorkerTripNumber	23.00	18.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	9.3731	100.4806	75.3937	0.1121	19.2576	5.2746	24.1677	10.1331	4.8771	14.6503	0.0000	11,308.2486	11,308.2486	3.2008	0.0000	11,375.4657
Total	**9.3731**	**100.4806**	**75.3937**	**0.1121**	**19.2576**	**5.2746**	**24.1677**	**10.1331**	**4.8771**	**14.6503**	**0.0000**	**11,308.2486**	**11,308.2486**	**3.2008**	**0.0000**	**11,375.4657**

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					
2017	9.3731	100.4806	75.3937	0.1121	19.2576	5.2746	24.1677	10.1331	4.8771	14.6503	0.0000	11,308.2486	11,308.2486	3.2008	0.0000	11,375.4657
Total	**9.3731**	**100.4806**	**75.3937**	**0.1121**	**19.2576**	**5.2746**	**24.1677**	**10.1331**	**4.8771**	**14.6503**	**0.0000**	**11,308.2486**	**11,308.2486**	**3.2008**	**0.0000**	**11,375.4657**

	ROG	**NOx**	**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	0.0262	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Mobile	0.0363	0.1228	0.4514	9.2000e-004	0.0654	1.9100e-003	0.0673	0.0175	1.7500e-003	0.0192		85.0513	85.0513	3.9100e-003		85.1333
Total	**0.0630**	**0.1278**	**0.4557**	**9.5000e-004**	**0.0654**	**2.2900e-003**	**0.0677**	**0.0175**	**2.1300e-003**	**0.0196**		**91.1143**	**91.1143**	**4.0300e-003**	**1.1000e-004**	**91.2333**

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	0.0262	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Mobile	0.0363	0.1228	0.4514	9.2000e-004	0.0654	1.9100e-003	0.0673	0.0175	1.7500e-003	0.0192		85.0513	85.0513	3.9100e-003		85.1333
Total	**0.0630**	**0.1278**	**0.4557**	**9.5000e-004**	**0.0654**	**2.2900e-003**	**0.0677**	**0.0175**	**2.1300e-003**	**0.0196**		**91.1143**	**91.1143**	**4.0300e-003**	**1.1000e-004**	**91.2333**

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

Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	4/28/2017	5	85	
2	Site Preparation	Site Preparation	1/14/2017	1/16/2017	5	1	
3	Grading	Grading	1/17/2017	1/18/2017	5	2	
4	Building Construction	Building Construction	1/19/2017	6/7/2017	5	100	
5	Paving	Paving	6/8/2017	6/14/2017	5	5	
6	Architectural Coating	Architectural Coating	6/15/2017	6/21/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,500; Non-Residential Outdoor: 500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	3	8.00	175	0.73
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	8	6.00	75	0.37
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	162	0.38

Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	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
Demolition	11	28.00	0.00	105.00	14.70	6.90	23.10	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2674	0.0000	0.2674	0.0405	0.0000	0.0405			0.0000			0.0000
Off-Road	3.7247	39.1285	32.4037	0.0474		2.2924	2.2924		2.1090	2.1090		4,846.1843	4,846.1843	1.4849		4,877.3664
Total	**3.7247**	**39.1285**	**32.4037**	**0.0474**	**0.2674**	**2.2924**	**2.5597**	**0.0405**	**2.1090**	**2.1495**		**4,846.1843**	**4,846.1843**	**1.4849**		**4,877.3664**

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	0.0230	0.3678	0.2795	1.0500e-003	0.0249	5.6800e-003	0.0305	6.8100e-003	5.2200e-003	0.0120		103.7336	103.7336	7.4000e-004		103.7491
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1071	0.1449	1.5114	3.7100e-003	0.3130	2.5200e-003	0.3155	0.0830	2.3200e-003	0.0853		300.4010	300.4010	0.0158		300.7322
Total	**0.1301**	**0.5127**	**1.791**	**4.76E-03**	**0.3378**	**8.20E-03**	**0.346**	**0.0898**	**7.54E-03**	**0.0974**		**404.1347**	**404.1347**	**0.0165**		**404.4812**

Mitigated Construction On-Site

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

Fugitive Dust					0.2674	0.0000	0.2674	0.0405	0.0000	0.0405			0.0000			0.0000
Off-Road	3.7247	39.1285	32.4037	0.0474		2.2924	2.2924		2.1090	2.1090	0.0000	4,846.1843	4,846.1843	1.4849		4,877.3664
Total	**3.7247**	**39.1285**	**32.4037**	**0.0474**	**0.2674**	**2.2924**	**2.5597**	**0.0405**	**2.1090**	**2.1495**	**0.0000**	**4,846.1843**	**4,846.1843**	**1.4849**		**4,877.3664**

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	0.0230	0.3678	0.2795	1.0500e-003	0.0249	5.6800e-003	0.0305	6.8100e-003	5.2200e-003	0.0120		103.7336	103.7336	7.4000e-004		103.7491
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1071	0.1449	1.5114	3.7100e-003	0.3130	2.5200e-003	0.3155	0.0830	2.3200e-003	0.0853		300.4010	300.4010	0.0158		300.7322
Total	**0.1301**	**0.5127**	**1.7910**	**4.7600e-003**	**0.3378**	**8.2000e-003**	**0.3460**	**0.0898**	**7.5400e-003**	**0.0974**		**404.1347**	**404.1347**	**0.0165**		**404.4812**

3.3 Site Preparation - 2017

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					18.5965	0.0000	18.5965	9.9879	0.0000	9.9879			0.0000			0.0000
Off-Road	4.8404	52.2632	37.0536	0.0360		2.6090	2.6090		2.4003	2.4003		3,685.8924	3,685.8924	1.1294		3,709.6088
Total	**4.8404**	**52.2632**	**37.0536**	**0.0360**	**18.5965**	**2.6090**	**21.2056**	**9.9879**	**2.4003**	**12.3883**		**3,685.8924**	**3,685.8924**	**1.1294**		**3,709.6088**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

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					18.5965	0.0000	18.5965	9.9879	0.0000	9.9879			0.0000			0.0000
Off-Road	4.8404	52.2632	37.0536	0.0360		2.6090	2.6090		2.4003	2.4003	0.0000	3,685.8924	3,685.8924	1.1294		3,709.6088
Total	**4.8404**	**52.2632**	**37.0536**	**0.0360**	**18.5965**	**2.6090**	**21.2056**	**9.9879**	**2.4003**	**12.3883**	**0.0000**	**3,685.8924**	**3,685.8924**	**1.1294**		**3,709.6088**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	5.4801	60.7877	40.6593	0.0586		2.9731	2.9731		2.7598	2.7598		5,950.6436	5,950.6436	1.6938		5,986.2138
Total	**5.4801**	**60.7877**	**40.6593**	**0.0586**	**0.7528**	**2.9731**	**3.7259**	**0.4138**	**2.7598**	**3.1736**		**5,950.6436**	**5,950.6436**	**1.6938**		**5,986.2138**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	5.4801	60.7877	40.6593	0.0586		2.9731	2.9731		2.7598	2.7598	0.0000	5,950.6436	5,950.6436	1.6938		5,986.2138
Total	**5.4801**	**60.7877**	**40.6593**	**0.0586**	**0.7528**	**2.9731**	**3.7259**	**0.4138**	**2.7598**	**3.1736**	**0.0000**	**5,950.6436**	**5,950.6436**	**1.6938**		**5,986.2138**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

3.5 Building Construction - 2017

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	2.3450	18.8788	13.7257	0.0205		1.2835	1.2835		1.2151	1.2151		1,990.0433	1,990.0433	0.4506		1,999.5062
Total	**2.3450**	**18.8788**	**13.7257**	**0.0205**		**1.2835**	**1.2835**		**1.2151**	**1.2151**		**1,990.0433**	**1,990.0433**	**0.4506**		**1,999.5062**

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

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	2.3450	18.8788	13.7257	0.0205		1.2835	1.2835		1.2151	1.2151	0.0000	1,990.0433	1,990.0433	0.4506		1,999.5062
Total	**2.3450**	**18.8788**	**13.7257**	**0.0205**		**1.2835**	**1.2835**		**1.2151**	**1.2151**	**0.0000**	**1,990.0433**	**1,990.0433**	**0.4506**		**1,999.5062**

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

3.6 Paving - 2017

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	1.6060	16.2665	12.3165	0.0191		0.9231	0.9231		0.8528	0.8528		1,889.6392	1,889.6392	0.5483		1,901.1531
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6060**	**16.2665**	**12.3165**	**0.0191**		**0.9231**	**0.9231**		**0.8528**	**0.8528**		**1,889.6392**	**1,889.6392**	**0.5483**		**1,901.1531**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

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	1.6060	16.2665	12.3165	0.0191		0.9231	0.9231		0.8528	0.8528	0.0000	1,889.6392	1,889.6392	0.5483		1,901.1531
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6060**	**16.2665**	**12.3165**	**0.0191**		**0.9231**	**0.9231**		**0.8528**	**0.8528**	**0.0000**	**1,889.6392**	**1,889.6392**	**0.5483**		**1,901.1531**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278

Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

3.7 Architectural Coating - 2017

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	4.6350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**4.9673**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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

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	4.6350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**4.9673**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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

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	0.0363	0.1228	0.4514	9.2000e-004	0.0654	1.9100e-003	0.0673	0.0175	1.7500e-003	0.0192		85.0513	85.0513	3.9100e-003		85.1333
Unmitigated	0.0363	0.1228	0.4514	9.2000e-004	0.0654	1.9100e-003	0.0673	0.0175	1.7500e-003	0.0192		85.0513	85.0513	3.9100e-003		85.1333

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	6.97	1.32	0.68	23,312	23,312
Total	6.97	1.32	0.68	23,312	23,312

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515683	0.060583	0.179994	0.140474	0.041721	0.006653	0.015053	0.028382	0.001919	0.002521	0.004323	0.000600	0.002094

5.0 Energy Detail

4.4 Fleet Mix

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	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998

NaturalGas Unmitigated	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998

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	51.5342	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Total		**5.6000e-004**	**5.0500e-003**	**4.2400e-003**	**3.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**		**6.0629**	**6.0629**	**1.2000e-004**	**1.1000e-004**	**6.0998**

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	0.0515342	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Total		**5.6000e-004**	**5.0500e-003**	**4.2400e-003**	**3.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**		**6.0629**	**6.0629**	**1.2000e-004**	**1.1000e-004**	**6.0998**

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	0.0262	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0262	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	0.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Architectural Coating	6.3500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0262**	**0.0000**	**1.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

Mitigated

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

Consumer Products	0.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Architectural Coating	6.3500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0262**	**0.0000**	**1.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Synergy - Remediation Truck Haul Trips Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	10.00	Acre	10.00	435,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Trips and VMT - Weighted average for Kettleman and Simi Valley Landfills

Grading - Synergy remediatiion

Construction Off-road Equipment Mitigation - Tier IV is required mitigation.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblGrading	AcresOfGrading	50.00	10.00
tblGrading	MaterialExported	0.00	17,600.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblTripsAndVMT	HaulingTripLength	20.00	68.20

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	7.9418	150.1436	54.4594	0.3310	18.2675	3.0631	20.8460	9.9840	2.8337	12.3563	0.0000	35,239.2413	35,239.2413	3.6158	0.0000	35,329.6370
2019	3.6229	29.8917	26.7695	0.0651	2.4999	1.3605	3.8604	0.6733	1.2797	1.9530	0.0000	6,518.1457	6,518.1457	0.8339	0.0000	6,538.9940
Maximum	**7.9418**	**150.1436**	**54.4594**	**0.3310**	**18.2675**	**3.0631**	**20.8460**	**9.9840**	**2.8337**	**12.3563**	**0.0000**	**35,239.2413**	**35,239.2413**	**3.6158**	**0.0000**	**35,329.6370**

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	3.6132	93.9218	52.3691	0.3310	9.3670	0.5309	9.8979	3.9263	0.5122	3.9899	0.0000	35,239.2413	35,239.2413	3.6158	0.0000	35,329.6370
2019	1.5896	11.0476	27.0660	0.0651	2.4999	0.1114	2.6113	0.6733	0.1078	0.7811	0.0000	6,518.1457	6,518.1457	0.8339	0.0000	6,538.9940
Maximum	**3.6132**	**93.9218**	**52.3691**	**0.3310**	**9.3670**	**0.5309**	**9.8979**	**3.9263**	**0.5122**	**3.9899**	**0.0000**	**35,239.2413**	**35,239.2413**	**3.6158**	**0.0000**	**35,329.6370**

	ROG	**NOx**	**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	**55.01**	**41.70**	**2.21**	**0.00**	**42.86**	**85.48**	**49.37**	**56.84**	**84.93**	**66.66**	**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	0.0225	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.4093	2.1516	5.0682	0.0171	1.3920	0.0178	1.4098	0.3725	0.0167	0.3892		1,737.7816	1,737.7816	0.0930		1,740.1067
Total	**0.4318**	**2.1516**	**5.0692**	**0.0171**	**1.3920**	**0.0178**	**1.4098**	**0.3725**	**0.0167**	**0.3892**		**1,737.7837**	**1,737.7837**	**0.0930**	**0.0000**	**1,740.1090**

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	0.0225	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.4093	2.1516	5.0682	0.0171	1.3920	0.0178	1.4098	0.3725	0.0167	0.3892		1,737.7816	1,737.7816	0.0930		1,740.1067
Total	**0.4318**	**2.1516**	**5.0692**	**0.0171**	**1.3920**	**0.0178**	**1.4098**	**0.3725**	**0.0167**	**0.3892**		**1,737.7837**	**1,737.7837**	**0.0930**	**0.0000**	**1,740.1090**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2018	6/28/2018	5	20	
2	Site Preparation	Site Preparation	6/29/2018	7/12/2018	5	10	
3	Grading	Grading	7/13/2018	8/9/2018	5	20	
4	Building Construction	Building Construction	8/10/2018	6/27/2019	5	230	
5	Paving	Paving	6/28/2019	7/25/2019	5	20	
6	Architectural Coating	Architectural Coating	7/26/2019	8/22/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

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

OffRoad Equipment

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

Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	37.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	183.00	71.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	2,200.00	14.70	6.90	68.20	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 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	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**		**1.9386**	**1.9386**		**1.8048**	**1.8048**		**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

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	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479
Total	**0.0879**	**0.0635**	**0.6811**	**1.7200e-003**	**0.1677**	**1.3400e-003**	**0.1690**	**0.0445**	**1.2300e-003**	**0.0457**		**171.1019**	**171.1019**	**5.8400e-003**		**171.2479**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**0.4623**	**2.0032**	**23.2798**	**0.0388**		**0.0616**	**0.0616**		**0.0616**	**0.0616**	**0.0000**	**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

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	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479
Total	**0.0879**	**0.0635**	**0.6811**	**1.7200e-003**	**0.1677**	**1.3400e-003**	**0.1690**	**0.0445**	**1.2300e-003**	**0.0457**		**171.1019**	**171.1019**	**5.8400e-003**		**171.2479**

3.3 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708		3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.0663**	**2.5769**	**20.6432**	**9.9307**	**2.3708**	**12.3014**		**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

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	0.1055	0.0762	0.8174	2.0600e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		205.3223	205.3223	7.0100e-003		205.4974
Total	**0.1055**	**0.0762**	**0.8174**	**2.0600e-003**	**0.2012**	**1.6000e-003**	**0.2028**	**0.0534**	**1.4800e-003**	**0.0548**		**205.3223**	**205.3223**	**7.0100e-003**		**205.4974**

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					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**0.4656**	**2.0175**	**20.8690**	**0.0380**	**7.0458**	**0.0621**	**7.1079**	**3.8730**	**0.0621**	**3.9351**	**0.0000**	**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

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	0.1055	0.0762	0.8174	2.0600e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		205.3223	205.3223	7.0100e-003		205.4974
Total	**0.1055**	**0.0762**	**0.8174**	**2.0600e-003**	**0.2012**	**1.6000e-003**	**0.2028**	**0.0534**	**1.4800e-003**	**0.0548**		**205.3223**	**205.3223**	**7.0100e-003**		**205.4974**

3.4 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					6.6519	0.0000	6.6519	3.3826	0.0000	3.3826			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230		6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**6.6519**	**2.6337**	**9.2856**	**3.3826**	**2.4230**	**5.8056**		**6,244.4284**	**6,244.4284**	**1.9440**		**6,293.0278**

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	2.7345	90.5372	18.4618	0.2667	6.5493	0.4276	6.9768	1.7944	0.4091	2.2034		28,766.6771	28,766.6771	1.6641		28,808.2787
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1172	0.0846	0.9082	2.2900e-003	0.2236	1.7800e-003	0.2253	0.0593	1.6400e-003	0.0609		228.1358	228.1358	7.7800e-003		228.3305
Total	**2.8517**	**90.6218**	**19.3700**	**0.2690**	**6.7728**	**0.4293**	**7.2022**	**1.8537**	**0.4107**	**2.2644**		**28,994.8129**	**28,994.8129**	**1.6719**		**29,036.6092**

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					2.5942	0.0000	2.5942	1.3192	0.0000	1.3192			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0620		0.1015	0.1015		0.1015	0.1015	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**0.7616**	**3.3000**	**32.9991**	**0.0620**	**2.5942**	**0.1015**	**2.6958**	**1.3192**	**0.1015**	**1.4207**	**0.0000**	**6,244.4284**	**6,244.4284**	**1.9440**		**6,293.0278**

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	2.7345	90.5372	18.4618	0.2667	6.5493	0.4276	6.9768	1.7944	0.4091	2.2034		28,766.6771	28,766.6771	1.6641		28,808.2787
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1172	0.0846	0.9082	2.2900e-003	0.2236	1.7800e-003	0.2253	0.0593	1.6400e-003	0.0609		228.1358	228.1358	7.7800e-003		228.3305
Total	**2.8517**	**90.6218**	**19.3700**	**0.2690**	**6.7728**	**0.4293**	**7.2022**	**1.8537**	**0.4107**	**2.2644**		**28,994.8129**	**28,994.8129**	**1.6719**		**29,036.6092**

3.5 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	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883

Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**		**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

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	0.3153	8.6184	2.3786	0.0181	0.4544	0.0638	0.5183	0.1308	0.0611	0.1919		1,922.3707	1,922.3707	0.1447		1,925.9872
Worker	1.0721	0.7745	8.3099	0.0210	2.0455	0.0163	2.0618	0.5425	0.0150	0.5575		2,087.4429	2,087.4429	0.0712		2,089.2237
Total	**1.3874**	**9.3929**	**10.6885**	**0.0390**	**2.4999**	**0.0801**	**2.5801**	**0.6733**	**0.0761**	**0.7494**		**4,009.8137**	**4,009.8137**	**0.2159**		**4,015.2109**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**0.3278**	**2.2347**	**17.4603**	**0.0269**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

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	0.3153	8.6184	2.3786	0.0181	0.4544	0.0638	0.5183	0.1308	0.0611	0.1919		1,922.3707	1,922.3707	0.1447		1,925.9872
Worker	1.0721	0.7745	8.3099	0.0210	2.0455	0.0163	2.0618	0.5425	0.0150	0.5575		2,087.4429	2,087.4429	0.0712		2,089.2237
Total	**1.3874**	**9.3929**	**10.6885**	**0.0390**	**2.4999**	**0.0801**	**2.5801**	**0.6733**	**0.0761**	**0.7494**		**4,009.8137**	**4,009.8137**	**0.2159**		**4,015.2109**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

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	0.2860	8.1298	2.1872	0.0179	0.4544	0.0547	0.5091	0.1308	0.0523	0.1831		1,905.0455	1,905.0455	0.1394		1,908.5315
Worker	0.9758	0.6831	7.4185	0.0203	2.0455	0.0159	2.0614	0.5425	0.0147	0.5572		2,021.5200	2,021.5200	0.0632		2,023.0990
Total	**1.2618**	**8.8129**	**9.6058**	**0.0382**	**2.4999**	**0.0706**	**2.5705**	**0.6733**	**0.0670**	**0.7403**		**3,926.5655**	**3,926.5655**	**0.2026**		**3,931.6305**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**0.3278**	**2.2347**	**17.4603**	**0.0269**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

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	0.2860	8.1298	2.1872	0.0179	0.4544	0.0547	0.5091	0.1308	0.0523	0.1831		1,905.0455	1,905.0455	0.1394		1,908.5315
Worker	0.9758	0.6831	7.4185	0.0203	2.0455	0.0159	2.0614	0.5425	0.0147	0.5572		2,021.5200	2,021.5200	0.0632		2,023.0990
Total	**1.2618**	**8.8129**	**9.6058**	**0.0382**	**2.4999**	**0.0706**	**2.5705**	**0.6733**	**0.0670**	**0.7403**		**3,926.5655**	**3,926.5655**	**0.2026**		**3,931.6305**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4544**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**		**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

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	0.0800	0.0560	0.6081	1.6600e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		165.6984	165.6984	5.1800e-003		165.8278
Total	**0.0800**	**0.0560**	**0.6081**	**1.6600e-003**	**0.1677**	**1.3000e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**		**165.6984**	**165.6984**	**5.1800e-003**		**165.8278**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2805**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

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	0.0800	0.0560	0.6081	1.6600e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		165.6984	165.6984	5.1800e-003		165.8278
Total	**0.0800**	**0.0560**	**0.6081**	**1.6600e-003**	**0.1677**	**1.3000e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**		**165.6984**	**165.6984**	**5.1800e-003**		**165.8278**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

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

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	0.1973	0.1381	1.4999	4.1000e-003	0.4136	3.2200e-003	0.4168	0.1097	2.9700e-003	0.1127		408.7226	408.7226	0.0128		409.0419
Total	**0.1973**	**0.1381**	**1.4999**	**4.1000e-003**	**0.4136**	**3.2200e-003**	**0.4168**	**0.1097**	**2.9700e-003**	**0.1127**		**408.7226**	**408.7226**	**0.0128**		**409.0419**

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**0.0297**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

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	0.1973	0.1381	1.4999	4.1000e-003	0.4136	3.2200e-003	0.4168	0.1097	2.9700e-003	0.1127		408.7226	408.7226	0.0128		409.0419
Total	**0.1973**	**0.1381**	**1.4999**	**4.1000e-003**	**0.4136**	**3.2200e-003**	**0.4168**	**0.1097**	**2.9700e-003**	**0.1127**		**408.7226**	**408.7226**	**0.0128**		**409.0419**

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	0.4093	2.1516	5.0682	0.0171	1.3920	0.0178	1.4098	0.3725	0.0167	0.3892		1,737.7816	1,737.7816	0.0930		1,740.1067
Unmitigated	0.4093	2.1516	5.0682	0.0171	1.3920	0.0178	1.4098	0.3725	0.0167	0.3892		1,737.7816	1,737.7816	0.0930		1,740.1067

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	18.90	227.50	167.40	201,181	201,181

Total	18.90	227.50	167.40	201,181	201,181

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0225	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-003
Unmitigated	0.0225	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-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	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0224					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-003
Total	**0.0225**	**1.0000e-005**	**1.0300e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.1900e-003**	**2.1900e-003**	**1.0000e-005**		**2.3400e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0224					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-003
Total	**0.0225**	**1.0000e-005**	**1.0300e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.1900e-003**	**2.1900e-003**	**1.0000e-005**		**2.3400e-003**

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

Wetlands Facility Construction - Well Cellars Only

South Coast AQMD Air District, Winter

Note: All emissions calculated under "Building Construction"

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	15.00	1000sqft	0.34	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per SPEC schedule

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Per SPEC equipment schedule

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	261.00
tblConstructionPhase	PhaseEndDate	1/18/2018	1/31/2018
tblConstructionPhase	PhaseEndDate	2/7/2018	6/14/2017

tblConstructionPhase	PhaseStartDate	1/19/2017	2/1/2017
tblConstructionPhase	PhaseStartDate	2/1/2018	6/8/2017
tblOffRoadEquipment	HorsePower	81.00	80.00
tblOffRoadEquipment	HorsePower	226.00	208.00
tblOffRoadEquipment	HorsePower	89.00	149.00
tblOffRoadEquipment	HorsePower	255.00	226.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	LoadFactor	0.73	0.38
tblOffRoadEquipment	LoadFactor	0.40	0.29
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	6.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	77.0269	67.6879	51.3064	0.0810	0.8645	4.4245	4.7053	0.4434	4.2210	4.2957	0.0000	7,782.9979	7,782.9979	1.5590	0.0000	7,815.7367
2018	6.2290	51.5108	42.0010	0.0675	0.0796	3.2359	3.3155	0.0214	3.1054	3.1268	0.0000	6,469.8468	6,469.8468	1.2117	0.0000	6,495.2925

Total	**83.2559**	**119.1987**	**93.3074**	**0.1485**	**0.9441**	**7.6605**	**8.0208**	**0.4648**	**7.3264**	**7.4225**	**0.0000**	**14,252.8447**	**14,252.8447**	**2.7707**	**0.0000**	**14,311.0292**

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					
2017	77.0269	67.6879	51.3064	0.0810	0.8645	4.4245	4.7053	0.4434	4.2210	4.2957	0.0000	7,782.9979	7,782.9979	1.5590	0.0000	7,815.7367
2018	6.2290	51.5108	42.0010	0.0675	0.0796	3.2359	3.3155	0.0214	3.1054	3.1268	0.0000	6,469.8468	6,469.8468	1.2117	0.0000	6,495.2925
Total	**83.2559**	**119.1987**	**93.3074**	**0.1485**	**0.9441**	**7.6605**	**8.0208**	**0.4648**	**7.3264**	**7.4225**	**0.0000**	**14,252.8447**	**14,252.8447**	**2.7707**	**0.0000**	**14,311.0292**

	ROG	**NOx**	**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	0.3924	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.4900e-003
Energy	8.3400e-003	0.0758	0.0637	4.5000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003		90.9428	90.9428	1.7400e-003	1.6700e-003	91.4963
Mobile	0.5445	1.8414	6.7704	0.0137	0.9812	0.0287	1.0099	0.2621	0.0263	0.2884		1,275.7688	1,275.7688	0.0586		1,276.9999
Total	**0.9452**	**1.9172**	**6.8357**	**0.0142**	**0.9812**	**0.0344**	**1.0156**	**0.2621**	**0.0321**	**0.2942**		**1,366.7149**	**1,366.7149**	**0.0604**	**1.6700e-003**	**1,368.4996**

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	0.3924	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.4900e-003
Energy	8.3400e-003	0.0758	0.0637	4.5000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003		90.9428	90.9428	1.7400e-003	1.6700e-003	91.4963
Mobile	0.5445	1.8414	6.7704	0.0137	0.9812	0.0287	1.0099	0.2621	0.0263	0.2884		1,275.7688	1,275.7688	0.0586		1,276.9999
Total	**0.9452**	**1.9172**	**6.8357**	**0.0142**	**0.9812**	**0.0344**	**1.0156**	**0.2621**	**0.0321**	**0.2942**		**1,366.7149**	**1,366.7149**	**0.0604**	**1.6700e-003**	**1,368.4996**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/13/2017	5	10	
2	Site Preparation	Site Preparation	1/14/2017	1/16/2017	5	1	
3	Grading	Grading	1/17/2017	1/18/2017	5	2	
4	Building Construction	Building Construction	2/1/2017	1/31/2018	5	261	
5	Paving	Paving	6/8/2017	6/14/2017	5	5	
6	Architectural Coating	Architectural Coating	6/15/2017	6/21/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 22,500; Non-Residential Outdoor: 7,500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	80	0.38
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	3	4.00	208	0.29
Building Construction	Forklifts	1	6.00	149	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	226	0.29
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	6	8.00	75	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition		0		84	0.74
Demolition		0		89	0.20
Demolition		0		78	0.48
Demolition		0		46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Rollers	2	6.00	84	0.38
Building Construction	Generator Sets	4	8.00	84	0.74
Building Construction	Air Compressors	2	6.00	78	0.48
Building Construction	Welders	3	6.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	21	6.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930		1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**		**0.7266**	**0.7266**		**0.6930**	**0.6930**		**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

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	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930	0.0000	1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**		**0.7266**	**0.7266**		**0.6930**	**0.6930**	**0.0000**	**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089		955.8663	955.8663	0.2929		962.0167
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**		**955.8663**	**955.8663**	**0.2929**		**962.0167**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

Mitigated Construction On-Site

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

Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089	0.0000	955.8663	955.8663	0.2929		962.0167
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**	**0.0000**	**955.8663**	**955.8663**	**0.2929**		**962.0167**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930		1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**	**0.7528**	**0.7266**	**1.4794**	**0.4138**	**0.6930**	**1.1068**		**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930	0.0000	1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**	**0.7528**	**0.7266**	**1.4794**	**0.4138**	**0.6930**	**1.1068**	**0.0000**	**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

3.5 Building Construction - 2017

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	7.1261	57.5683	42.5407	0.0663		3.8180	3.8180		3.6595	3.6595		6,414.0359	6,414.0359	1.2484		6,440.2511
Total	**7.1261**	**57.5683**	**42.5407**	**0.0663**		**3.8180**	**3.8180**		**3.6595**	**3.6595**		**6,414.0359**	**6,414.0359**	**1.2484**		**6,440.2511**

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	0.0167	0.1610	0.2270	4.3000e-004	0.0125	2.5600e-003	0.0151	3.5600e-003	2.3600e-003	5.9200e-003		42.5388	42.5388	3.1000e-004		42.5454
Worker	0.0230	0.0311	0.3239	8.0000e-004	0.0671	5.4000e-004	0.0676	0.0178	5.0000e-004	0.0183		64.3717	64.3717	3.3800e-003		64.4426

Total	**0.0396**	**0.1921**	**0.5509**	**1.2300e-003**	**0.0796**	**3.1000e-003**	**0.0827**	**0.0214**	**2.8600e-003**	**0.0242**		**106.9105**	**106.9105**	**3.6900e-003**		**106.9880**

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	7.1261	57.5683	42.5407	0.0663		3.8180	3.8180		3.6595	3.6595	0.0000	6,414.0359	6,414.0359	1.2484		6,440.2511
Total	**7.1261**	**57.5683**	**42.5407**	**0.0663**		**3.8180**	**3.8180**		**3.6595**	**3.6595**	**0.0000**	**6,414.0359**	**6,414.0359**	**1.2484**		**6,440.2511**

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	0.0167	0.1610	0.2270	4.3000e-004	0.0125	2.5600e-003	0.0151	3.5600e-003	2.3600e-003	5.9200e-003		42.5388	42.5388	3.1000e-004		42.5454
Worker	0.0230	0.0311	0.3239	8.0000e-004	0.0671	5.4000e-004	0.0676	0.0178	5.0000e-004	0.0183		64.3717	64.3717	3.3800e-003		64.4426
Total	**0.0396**	**0.1921**	**0.5509**	**1.2300e-003**	**0.0796**	**3.1000e-003**	**0.0827**	**0.0214**	**2.8600e-003**	**0.0242**		**106.9105**	**106.9105**	**3.6900e-003**		**106.9880**

3.5 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	6.1928	51.3350	41.4901	0.0663		3.2330	3.2330		3.1027	3.1027		6,366.0545	6,366.0545	1.2083		6,391.4279
Total	**6.1928**	**51.3350**	**41.4901**	**0.0663**		**3.2330**	**3.2330**		**3.1027**	**3.1027**		**6,366.0545**	**6,366.0545**	**1.2083**		**6,391.4279**

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	0.0156	0.1477	0.2178	4.3000e-004	0.0125	2.4100e-003	0.0149	3.5600e-003	2.2200e-003	5.7800e-003		41.8243	41.8243	3.1000e-004		41.8307
Worker	0.0206	0.0282	0.2931	8.0000e-004	0.0671	5.2000e-004	0.0676	0.0178	4.9000e-004	0.0183		61.9680	61.9680	3.1400e-003		62.0339
Total	**0.0362**	**0.1759**	**0.5109**	**1.2300e-003**	**0.0796**	**2.9300e-003**	**0.0825**	**0.0214**	**2.7100e-003**	**0.0241**		**103.7923**	**103.7923**	**3.4500e-003**		**103.8646**

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	6.1928	51.3350	41.4901	0.0663		3.2330	3.2330		3.1027	3.1027	0.0000	6,366.0545	6,366.0545	1.2083		6,391.4279
Total	**6.1928**	**51.3350**	**41.4901**	**0.0663**		**3.2330**	**3.2330**		**3.1027**	**3.1027**	**0.0000**	**6,366.0545**	**6,366.0545**	**1.2083**		**6,391.4279**

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	0.0156	0.1477	0.2178	4.3000e-004	0.0125	2.4100e-003	0.0149	3.5600e-003	2.2200e-003	5.7800e-003		41.8243	41.8243	3.1000e-004		41.8307
Worker	0.0206	0.0282	0.2931	8.0000e-004	0.0671	5.2000e-004	0.0676	0.0178	4.9000e-004	0.0183		61.9680	61.9680	3.1400e-003		62.0339
Total	**0.0362**	**0.1759**	**0.5109**	**1.2300e-003**	**0.0796**	**2.9300e-003**	**0.0825**	**0.0214**	**2.7100e-003**	**0.0241**		**103.7923**	**103.7923**	**3.4500e-003**		**103.8646**

3.6 Paving - 2017

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	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572		1,068.9366	1,068.9366	0.2968		1,075.1698
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0406**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**		**1,068.9366**	**1,068.9366**	**0.2968**		**1,075.1698**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

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	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572	0.0000	1,068.9366	1,068.9366	0.2968		1,075.1698
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0406**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**	**0.0000**	**1,068.9366**	**1,068.9366**	**0.2968**		**1,075.1698**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

3.7 Architectural Coating - 2017

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	69.5250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**69.8573**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	3.8200e-003	5.1700e-003	0.0540	1.3000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		10.7286	10.7286	5.6000e-004		10.7404
Total	**3.8200e-003**	**5.1700e-003**	**0.0540**	**1.3000e-004**	**0.0112**	**9.0000e-005**	**0.0113**	**2.9600e-003**	**8.0000e-005**	**3.0500e-003**		**10.7286**	**10.7286**	**5.6000e-004**		**10.7404**

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	69.5250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**69.8573**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	3.8200e-003	5.1700e-003	0.0540	1.3000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		10.7286	10.7286	5.6000e-004		10.7404
Total	**3.8200e-003**	**5.1700e-003**	**0.0540**	**1.3000e-004**	**0.0112**	**9.0000e-005**	**0.0113**	**2.9600e-003**	**8.0000e-005**	**3.0500e-003**		**10.7286**	**10.7286**	**5.6000e-004**		**10.7404**

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	0.5445	1.8414	6.7704	0.0137	0.9812	0.0287	1.0099	0.2621	0.0263	0.2884		1,275.7688	1,275.7688	0.0586		1,276.9999
Unmitigated	0.5445	1.8414	6.7704	0.0137	0.9812	0.0287	1.0099	0.2621	0.0263	0.2884		1,275.7688	1,275.7688	0.0586		1,276.9999

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	104.55	19.80	10.20	349,676	349,676
Total	104.55	19.80	10.20	349,676	349,676

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515683	0.060583	0.179994	0.140474	0.041721	0.006653	0.015053	0.028382	0.001919	0.002521	0.004323	0.000600	0.002094

5.0 Energy Detail

4.4 Fleet Mix

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	8.3400e-003	0.0758	0.0637	4.5000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003		90.9428	90.9428	1.7400e-003	1.6700e-003	91.4963
NaturalGas Unmitigated	8.3400e-003	0.0758	0.0637	4.5000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003		90.9428	90.9428	1.7400e-003	1.6700e-003	91.4963

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	773.014	8.3400e-003	0.0758	0.0637	4.5000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003		90.9428	90.9428	1.7400e-003	1.6700e-003	91.4963
Total		**8.3400e-003**	**0.0758**	**0.0637**	**4.5000e-004**		**5.7600e-003**	**5.7600e-003**		**5.7600e-003**	**5.7600e-003**		**90.9428**	**90.9428**	**1.7400e-003**	**1.6700e-003**	**91.4963**

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	0.773014	8.3400e-003	0.0758	0.0637	4.5000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003		90.9428	90.9428	1.7400e-003	1.6700e-003	91.4963
Total		**8.3400e-003**	**0.0758**	**0.0637**	**4.5000e-004**		**5.7600e-003**	**5.7600e-003**		**5.7600e-003**	**5.7600e-003**		**90.9428**	**90.9428**	**1.7400e-003**	**1.6700e-003**	**91.4963**

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	0.3924	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.4900e-003
Unmitigated	0.3924	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.4900e-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	lb/day										lb/day					
Architectural Coating	0.0952					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2970					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.4900e-003
Total	**0.3924**	**2.0000e-005**	**1.6000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**		**3.4900e-003**

Mitigated

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

Architectural Coating	0.0952					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2970					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.4900e-003
Total	**0.3924**	**2.0000e-005**	**1.6000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**		**3.4900e-003**

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 Vegetation

Wetlands Facility Construction - Process Equipment Only

South Coast AQMD Air District, Winter

Note: All emissions calculated in "Building Construction" category.

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	64.80	1000sqft	1.49	64,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per SPEC schedule

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Per SPEC equipment schedule

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	325.00
tblConstructionPhase	PhaseEndDate	5/7/2018	6/29/2018
tblConstructionPhase	PhaseEndDate	7/13/2018	11/27/2017

tblConstructionPhase	PhaseStartDate	2/7/2017	4/3/2017
tblConstructionPhase	PhaseStartDate	6/30/2018	11/14/2017
tblOffRoadEquipment	HorsePower	226.00	208.00
tblOffRoadEquipment	HorsePower	89.00	149.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	255.00	358.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	158.3294	75.9984	59.1373	0.0880	5.8890	4.5633	7.1965	2.9774	4.3398	4.4780	0.0000	8,478.3594	8,478.3594	1.7368	0.0000	8,514.8312
2018	6.8550	57.1377	47.2645	0.0729	0.3706	3.2843	3.6549	0.0996	3.1447	3.2443	0.0000	6,927.1010	6,927.1010	1.2826	0.0000	6,954.0352
Total	**165.1844**	**133.1361**	**106.4018**	**0.1609**	**6.2596**	**7.8476**	**10.8513**	**3.0771**	**7.4845**	**7.7223**	**0.0000**	**15,405.4604**	**15,405.4604**	**3.0193**	**0.0000**	**15,468.8664**

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					
2017	158.3294	75.9984	59.1373	0.0880	5.8890	4.5633	7.1965	2.9774	4.3398	4.4780	0.0000	8,478.3594	8,478.3594	1.7368	0.0000	8,514.8312
2018	6.8550	57.1377	47.2645	0.0729	0.3706	3.2843	3.6549	0.0996	3.1447	3.2443	0.0000	6,927.1010	6,927.1010	1.2826	0.0000	6,954.0352
Total	**165.1844**	**133.1361**	**106.4018**	**0.1609**	**6.2596**	**7.8476**	**10.8513**	**3.0771**	**7.4845**	**7.7223**	**0.0000**	**15,405.4604**	**15,405.4604**	**3.0193**	**0.0000**	**15,468.8663**

	ROG	**NOx**	**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	1.6952	7.0000e-005	6.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0142	0.0142	4.0000e-005		0.0151
Energy	0.0360	0.3274	0.2750	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.8728	392.8728	7.5300e-003	7.2000e-003	395.2638
Mobile	2.3522	7.9550	29.2483	0.0594	4.2388	0.1238	4.3625	1.1323	0.1137	1.2460		5,511.3213	5,511.3213	0.2532		5,516.6394
Total	**4.0834**	**8.2824**	**29.5302**	**0.0613**	**4.2388**	**0.1487**	**4.3875**	**1.1323**	**0.1386**	**1.2709**		**5,904.2083**	**5,904.2083**	**0.2608**	**7.2000e-003**	**5,911.9182**

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	1.6952	7.0000e-005	6.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0142	0.0142	4.0000e-005		0.0151
Energy	0.0360	0.3274	0.2750	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.8728	392.8728	7.5300e-003	7.2000e-003	395.2638
Mobile	2.3522	7.9550	29.2483	0.0594	4.2388	0.1238	4.3625	1.1323	0.1137	1.2460		5,511.3213	5,511.3213	0.2532		5,516.6394
Total	**4.0834**	**8.2824**	**29.5302**	**0.0613**	**4.2388**	**0.1487**	**4.3875**	**1.1323**	**0.1386**	**1.2709**		**5,904.2083**	**5,904.2083**	**0.2608**	**7.2000e-003**	**5,911.9182**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	1/31/2017	5	2	
3	Grading	Grading	2/1/2017	2/6/2017	5	4	
4	Building Construction	Building Construction	4/3/2017	6/29/2018	5	325	
5	Paving	Paving	11/14/2017	11/27/2017	5	10	
6	Architectural Coating	Architectural Coating	11/28/2017	12/11/2017	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 97,200; Non-Residential Outdoor: 32,400 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Graders	1	6.00	174	0.41
Building Construction	Cranes	2	6.00	208	0.29
Building Construction	Forklifts	1	6.00	149	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	6.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	5	6.00	75	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Building Construction	Rubber Tired Dozers	1	6.00	358	0.40
Building Construction	Rollers	1	6.00	84	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Air Compressors	1	6.00	78	0.48
Building Construction	Generator Sets	4	8.00	84	0.74
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	27.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	4.4928	44.0393	34.5609	0.0396		2.5257	2.5257		2.3727	2.3727		3,960.1415	3,960.1415	0.9545		3,980.1857
Total	**4.4928**	**44.0393**	**34.5609**	**0.0396**		**2.5257**	**2.5257**		**2.3727**	**2.3727**		**3,960.1415**	**3,960.1415**	**0.9545**		**3,980.1857**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

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	4.4928	44.0393	34.5609	0.0396		2.5257	2.5257		2.3727	2.3727	0.0000	3,960.1415	3,960.1415	0.9545		3,980.1857
Total	**4.4928**	**44.0393**	**34.5609**	**0.0396**		**2.5257**	**2.5257**		**2.3727**	**2.3727**	**0.0000**	**3,960.1415**	**3,960.1415**	**0.9545**		**3,980.1857**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

3.3 Site Preparation - 2017

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					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	2.3109	24.2288	15.9299	0.0171		1.3067	1.3067		1.2022	1.2022		1,752.1239	1,752.1239	0.5369		1,763.3977
Total	**2.3109**	**24.2288**	**15.9299**	**0.0171**	**5.7996**	**1.3067**	**7.1063**	**2.9537**	**1.2022**	**4.1559**		**1,752.1239**	**1,752.1239**	**0.5369**		**1,763.3977**

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	0.0306	0.0414	0.4318	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		85.8289	85.8289	4.5000e-003		85.9235
Total	**0.0306**	**0.0414**	**0.4318**	**1.0600e-003**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**85.8289**	**85.8289**	**4.5000e-003**		**85.9235**

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					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	2.3109	24.2288	15.9299	0.0171		1.3067	1.3067		1.2022	1.2022	0.0000	1,752.1239	1,752.1239	0.5369		1,763.3977
Total	**2.3109**	**24.2288**	**15.9299**	**0.0171**	**5.7996**	**1.3067**	**7.1063**	**2.9537**	**1.2022**	**4.1559**	**0.0000**	**1,752.1239**	**1,752.1239**	**0.5369**		**1,763.3977**

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	0.0306	0.0414	0.4318	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		85.8289	85.8289	4.5000e-003		85.9235
Total	**0.0306**	**0.0414**	**0.4318**	**1.0600e-003**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**85.8289**	**85.8289**	**4.5000e-003**		**85.9235**

3.4 Grading - 2017

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					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.8844	19.7889	13.1786	0.0141		1.0661	1.0661		0.9808	0.9808		1,439.1894	1,439.1894	0.4410		1,448.4496
Total	**1.8844**	**19.7889**	**13.1786**	**0.0141**	**4.9143**	**1.0661**	**5.9804**	**2.5256**	**0.9808**	**3.5064**		**1,439.1894**	**1,439.1894**	**0.4410**		**1,448.4496**

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	0.0306	0.0414	0.4318	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		85.8289	85.8289	4.5000e-003		85.9235
Total	**0.0306**	**0.0414**	**0.4318**	**1.0600e-003**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**85.8289**	**85.8289**	**4.5000e-003**		**85.9235**

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					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.8844	19.7889	13.1786	0.0141		1.0661	1.0661		0.9808	0.9808	0.0000	1,439.1894	1,439.1894	0.4410		1,448.4496
Total	**1.8844**	**19.7889**	**13.1786**	**0.0141**	**4.9143**	**1.0661**	**5.9804**	**2.5256**	**0.9808**	**3.5064**	**0.0000**	**1,439.1894**	**1,439.1894**	**0.4410**		**1,448.4496**

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	0.0306	0.0414	0.4318	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		85.8289	85.8289	4.5000e-003		85.9235
Total	**0.0306**	**0.0414**	**0.4318**	**1.0600e-003**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**85.8289**	**85.8289**	**4.5000e-003**		**85.9235**

3.5 Building Construction - 2017

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	7.6091	62.8076	46.6988	0.0670		3.8124	3.8124		3.6481	3.6481		6,467.5939	6,467.5939	1.3073		6,495.0468
Total	**7.6091**	**62.8076**	**46.6988**	**0.0670**		**3.8124**	**3.8124**		**3.6481**	**3.6481**		**6,467.5939**	**6,467.5939**	**1.3073**		**6,495.0468**

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	0.0917	0.8858	1.2485	2.3700e-003	0.0688	0.0141	0.0829	0.0196	0.0130	0.0325		233.9636	233.9636	1.7100e-003		233.9994
Worker	0.1033	0.1397	1.4575	3.5800e-003	0.3018	2.4300e-003	0.3042	0.0800	2.2400e-003	0.0823		289.6724	289.6724	0.0152		289.9917
Total	**0.1949**	**1.0255**	**2.7059**	**5.9500e-003**	**0.3706**	**0.0165**	**0.3871**	**0.0996**	**0.0152**	**0.1148**		**523.6360**	**523.6360**	**0.0169**		**523.9911**

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	7.6091	62.8076	46.6988	0.0670		3.8124	3.8124		3.6481	3.6481	0.0000	6,467.5939	6,467.5939	1.3073		6,495.0467
Total	**7.6091**	**62.8076**	**46.6988**	**0.0670**		**3.8124**	**3.8124**		**3.6481**	**3.6481**	**0.0000**	**6,467.5939**	**6,467.5939**	**1.3073**		**6,495.0467**

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	0.0917	0.8858	1.2485	2.3700e-003	0.0688	0.0141	0.0829	0.0196	0.0130	0.0325		233.9636	233.9636	1.7100e-003		233.9994
Worker	0.1033	0.1397	1.4575	3.5800e-003	0.3018	2.4300e-003	0.3042	0.0800	2.2400e-003	0.0823		289.6724	289.6724	0.0152		289.9917
Total	**0.1949**	**1.0255**	**2.7059**	**5.9500e-003**	**0.3706**	**0.0165**	**0.3871**	**0.0996**	**0.0152**	**0.1148**		**523.6360**	**523.6360**	**0.0169**		**523.9911**

3.5 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	6.6764	56.1985	44.7478	0.0670		3.2686	3.2686		3.1303	3.1303		6,418.2115	6,418.2115	1.2668		6,444.8137
Total	**6.6764**	**56.1985**	**44.7478**	**0.0670**		**3.2686**	**3.2686**		**3.1303**	**3.1303**		**6,418.2115**	**6,418.2115**	**1.2668**		**6,444.8137**

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	0.0857	0.8125	1.1980	2.3700e-003	0.0688	0.0133	0.0821	0.0196	0.0122	0.0318		230.0334	230.0334	1.7000e-003		230.0690
Worker	0.0929	0.1267	1.3188	3.5800e-003	0.3018	2.3600e-003	0.3042	0.0800	2.1900e-003	0.0822		278.8561	278.8561	0.0141		279.1525
Total	**0.1786**	**0.9392**	**2.5168**	**5.9500e-003**	**0.3706**	**0.0156**	**0.3862**	**0.0996**	**0.0144**	**0.1140**		**508.8895**	**508.8895**	**0.0158**		**509.2215**

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	6.6764	56.1985	44.7478	0.0670		3.2686	3.2686		3.1303	3.1303	0.0000	6,418.2115	6,418.2115	1.2668		6,444.8137
Total	**6.6764**	**56.1985**	**44.7478**	**0.0670**		**3.2686**	**3.2686**		**3.1303**	**3.1303**	**0.0000**	**6,418.2115**	**6,418.2115**	**1.2668**		**6,444.8137**

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	0.0857	0.8125	1.1980	2.3700e-003	0.0688	0.0133	0.0821	0.0196	0.0122	0.0318		230.0334	230.0334	1.7000e-003		230.0690
Worker	0.0929	0.1267	1.3188	3.5800e-003	0.3018	2.3600e-003	0.3042	0.0800	2.1900e-003	0.0822		278.8561	278.8561	0.0141		279.1525
Total	**0.1786**	**0.9392**	**2.5168**	**5.9500e-003**	**0.3706**	**0.0156**	**0.3862**	**0.0996**	**0.0144**	**0.1140**		**508.8895**	**508.8895**	**0.0158**		**509.2215**

3.6 Paving - 2017

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	1.1857	12.0981	9.0308	0.0133		0.7333	0.7333		0.6755	0.6755		1,347.6575	1,347.6575	0.4052		1,356.1677
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1857**	**12.0981**	**9.0308**	**0.0133**		**0.7333**	**0.7333**		**0.6755**	**0.6755**		**1,347.6575**	**1,347.6575**	**0.4052**		**1,356.1677**

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	0.0497	0.0673	0.7017	1.7200e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.4719	139.4719	7.3200e-003		139.6256
Total	**0.0497**	**0.0673**	**0.7017**	**1.7200e-003**	**0.1453**	**1.1700e-003**	**0.1465**	**0.0385**	**1.0800e-003**	**0.0396**		**139.4719**	**139.4719**	**7.3200e-003**		**139.6256**

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	1.1857	12.0981	9.0308	0.0133		0.7333	0.7333		0.6755	0.6755	0.0000	1,347.6575	1,347.6575	0.4052		1,356.1677
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1857**	**12.0981**	**9.0308**	**0.0133**		**0.7333**	**0.7333**		**0.6755**	**0.6755**	**0.0000**	**1,347.6575**	**1,347.6575**	**0.4052**		**1,356.1677**

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	0.0497	0.0673	0.7017	1.7200e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.4719	139.4719	7.3200e-003		139.6256

Total	**0.0497**	**0.0673**	**0.7017**	**1.7200e-003**	**0.1453**	**1.1700e-003**	**0.1465**	**0.0385**	**1.0800e-003**	**0.0396**		**139.4719**	**139.4719**	**7.3200e-003**		**139.6256**

3.7 Architectural Coating - 2017

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	150.1740					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**150.5063**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

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	150.1740					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**150.5063**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

Mitigated	2.3522	7.9550	29.2483	0.0594	4.2388	0.1238	4.3625	1.1323	0.1137	1.2460		5,511.3213	5,511.3213	0.2532		5,516.6394
Unmitigated	2.3522	7.9550	29.2483	0.0594	4.2388	0.1238	4.3625	1.1323	0.1137	1.2460		5,511.3213	5,511.3213	0.2532		5,516.6394

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	451.66	85.54	44.06	1,510,599	1,510,599
Total	451.66	85.54	44.06	1,510,599	1,510,599

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515683	0.060583	0.179994	0.140474	0.041721	0.006653	0.015053	0.028382	0.001919	0.002521	0.004323	0.000600	0.002094

5.0 Energy Detail

4.4 Fleet Mix

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	0.0360	0.3274	0.2750	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.8728	392.8728	7.5300e-003	7.2000e-003	395.2638

NaturalGas Unmitigated	0.0360	0.3274	0.2750	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.8728	392.8728	7.5300e-003	7.2000e-003	395.2638

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	3339.42	0.0360	0.3274	0.2750	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.8728	392.8728	7.5300e-003	7.2000e-003	395.2638
Total		**0.0360**	**0.3274**	**0.2750**	**1.9600e-003**		**0.0249**	**0.0249**		**0.0249**	**0.0249**		**392.8728**	**392.8728**	**7.5300e-003**	**7.2000e-003**	**395.2638**

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	3.33942	0.0360	0.3274	0.2750	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.8728	392.8728	7.5300e-003	7.2000e-003	395.2638
Total		**0.0360**	**0.3274**	**0.2750**	**1.9600e-003**		**0.0249**	**0.0249**		**0.0249**	**0.0249**		**392.8728**	**392.8728**	**7.5300e-003**	**7.2000e-003**	**395.2638**

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	1.6952	7.0000e-005	6.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0142	0.0142	4.0000e-005		0.0151
Unmitigated	1.6952	7.0000e-005	6.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0142	0.0142	4.0000e-005		0.0151

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	0.4114					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2830					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-004	7.0000e-005	6.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0142	0.0142	4.0000e-005		0.0151
Total	**1.6952**	**7.0000e-005**	**6.9200e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0142**	**0.0142**	**4.0000e-005**		**0.0151**

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	0.4114					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	1.2830					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-004	7.0000e-005	6.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0142	0.0142	4.0000e-005		0.0151
Total	**1.6952**	**7.0000e-005**	**6.9200e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0142**	**0.0142**	**4.0000e-005**		**0.0151**

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 Vegetation

Wetlands Facility Construction - Tank Construction Only

South Coast AQMD Air District, Winter

Note: All emisions calculated under "Building Construction" and "Architectural Coatings"

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	9.78	1000sqft	0.22	9,777.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per SPEC schedule. Painting duration is estimate.

Off-road Equipment - Per SPEC equipment schedule

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment -

Off-road Equipment -

Architectural Coating - Surface area of all six tanks.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	4,889.00	43,078.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	14,666.00	0.00

tblConstructionPhase	NumDays	5.00	20.00
tblLandUse	LandUseSquareFeet	9,780.00	9,777.00
tblProjectCharacteristics	OperationalYear	2014	2019

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	25.2604	14.7690	13.9266	0.0214	0.8645	0.9497	1.4794	0.4434	0.9165	1.0304	0.0000	2,033.4691	2,033.4691	0.3574	0.0000	2,040.9739
Total	**25.2604**	**14.7690**	**13.9266**	**0.0214**	**0.8645**	**0.9497**	**1.4794**	**0.4434**	**0.9165**	**1.0304**	**0.0000**	**2,033.4691**	**2,033.4691**	**0.3574**	**0.0000**	**2,040.9739**

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	25.2604	14.7690	13.9266	0.0214	0.8645	0.9497	1.4794	0.4434	0.9165	1.0304	0.0000	2,033.4691	2,033.4691	0.3574	0.0000	2,040.9739
Total	**25.2604**	**14.7690**	**13.9266**	**0.0214**	**0.8645**	**0.9497**	**1.4794**	**0.4434**	**0.9165**	**1.0304**	**0.0000**	**2,033.4691**	**2,033.4691**	**0.3574**	**0.0000**	**2,040.9739**

	ROG	**NOx**	**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	0.2558	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1400e-003	2.1400e-003	1.0000e-005		2.2600e-003
Energy	5.4300e-003	0.0494	0.0415	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.2765	59.2765	1.1400e-003	1.0900e-003	59.6373
Mobile	0.2373	0.8109	2.9329	9.0500e-003	0.6403	0.0128	0.6531	0.1711	0.0118	0.1829		726.4386	726.4386	0.0264		726.9927
Total	**0.4985**	**0.8603**	**2.9754**	**9.3500e-003**	**0.6403**	**0.0166**	**0.6569**	**0.1711**	**0.0156**	**0.1867**		**785.7173**	**785.7173**	**0.0275**	**1.0900e-003**	**786.6322**

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	0.2558	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1400e-003	2.1400e-003	1.0000e-005		2.2600e-003
Energy	5.4300e-003	0.0494	0.0415	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.2765	59.2765	1.1400e-003	1.0900e-003	59.6373
Mobile	0.2373	0.8109	2.9329	9.0500e-003	0.6403	0.0128	0.6531	0.1711	0.0118	0.1829		726.4386	726.4386	0.0264		726.9927
Total	**0.4985**	**0.8603**	**2.9754**	**9.3500e-003**	**0.6403**	**0.0166**	**0.6569**	**0.1711**	**0.0156**	**0.1867**		**785.7173**	**785.7173**	**0.0275**	**1.0900e-003**	**786.6322**

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

Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2018	1/12/2018	5	10	
2	Site Preparation	Site Preparation	1/13/2018	1/15/2018	5	1	
3	Grading	Grading	1/16/2018	1/17/2018	5	2	
4	Building Construction	Building Construction	1/18/2018	6/6/2018	5	100	
5	Paving	Paving	6/7/2018	6/13/2018	5	5	
6	Architectural Coating	Architectural Coating	6/14/2018	7/11/2018	5	20	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 43,078 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	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
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	4.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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	1.7068	14.6987	13.1939	0.0194		0.9484	0.9484		0.9153	0.9153		1,878.5490	1,878.5490	0.3076		1,885.0082
Total	**1.7068**	**14.6987**	**13.1939**	**0.0194**		**0.9484**	**0.9484**		**0.9153**	**0.9153**		**1,878.5490**	**1,878.5490**	**0.3076**		**1,885.0082**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

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	1.7068	14.6987	13.1939	0.0194		0.9484	0.9484		0.9153	0.9153	0.0000	1,878.5490	1,878.5490	0.3076		1,885.0082
Total	**1.7068**	**14.6987**	**13.1939**	**0.0194**		**0.9484**	**0.9484**		**0.9153**	**0.9153**	**0.0000**	**1,878.5490**	**1,878.5490**	**0.3076**		**1,885.0082**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

3.3 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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.0983	10.9398	7.0042	9.3200e-003		0.6535	0.6535		0.6012	0.6012		938.5863	938.5863	0.2922		944.7224
Total	**1.0983**	**10.9398**	**7.0042**	**9.3200e-003**	**0.5303**	**0.6535**	**1.1837**	**0.0573**	**0.6012**	**0.6584**		**938.5863**	**938.5863**	**0.2922**		**944.7224**

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	0.0172	0.0235	0.2442	6.6000e-004	0.0559	4.4000e-004	0.0563	0.0148	4.0000e-004	0.0152		51.6400	51.6400	2.6100e-003		51.6949
Total	**0.0172**	**0.0235**	**0.2442**	**6.6000e-004**	**0.0559**	**4.4000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**		**51.6400**	**51.6400**	**2.6100e-003**		**51.6949**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.0983	10.9398	7.0042	9.3200e-003		0.6535	0.6535		0.6012	0.6012	0.0000	938.5863	938.5863	0.2922		944.7224
Total	**1.0983**	**10.9398**	**7.0042**	**9.3200e-003**	**0.5303**	**0.6535**	**1.1837**	**0.0573**	**0.6012**	**0.6584**	**0.0000**	**938.5863**	**938.5863**	**0.2922**		**944.7224**

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	0.0172	0.0235	0.2442	6.6000e-004	0.0559	4.4000e-004	0.0563	0.0148	4.0000e-004	0.0152		51.6400	51.6400	2.6100e-003		51.6949
Total	**0.0172**	**0.0235**	**0.2442**	**6.6000e-004**	**0.0559**	**4.4000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**		**51.6400**	**51.6400**	**2.6100e-003**		**51.6949**

3.4 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					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.0530	9.3216	8.3495	0.0120		0.6139	0.6139		0.5862	0.5862		1,173.8565	1,173.8565	0.2268		1,178.6197
Total	**1.0530**	**9.3216**	**8.3495**	**0.0120**	**0.7528**	**0.6139**	**1.3667**	**0.4138**	**0.5862**	**1.0000**		**1,173.8565**	**1,173.8565**	**0.2268**		**1,178.6197**

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	0.0344	0.0469	0.4884	1.3300e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		103.2801	103.2801	5.2300e-003		103.3898
Total	**0.0344**	**0.0469**	**0.4884**	**1.3300e-003**	**0.1118**	**8.7000e-004**	**0.1127**	**0.0296**	**8.1000e-004**	**0.0305**		**103.2801**	**103.2801**	**5.2300e-003**		**103.3898**

Mitigated Construction On-Site

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

Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.0530	9.3216	8.3495	0.0120		0.6139	0.6139		0.5862	0.5862	0.0000	1,173.8565	1,173.8565	0.2268		1,178.6197
Total	**1.0530**	**9.3216**	**8.3495**	**0.0120**	**0.7528**	**0.6139**	**1.3667**	**0.4138**	**0.5862**	**1.0000**	**0.0000**	**1,173.8565**	**1,173.8565**	**0.2268**		**1,178.6197**

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	0.0344	0.0469	0.4884	1.3300e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		103.2801	103.2801	5.2300e-003		103.3898
Total	**0.0344**	**0.0469**	**0.4884**	**1.3300e-003**	**0.1118**	**8.7000e-004**	**0.1127**	**0.0296**	**8.1000e-004**	**0.0305**		**103.2801**	**103.2801**	**5.2300e-003**		**103.3898**

3.5 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	1.0786	10.9578	7.7239	0.0113		0.7055	0.7055		0.6491	0.6491		1,140.2487	1,140.2487	0.3550		1,147.7032
Total	**1.0786**	**10.9578**	**7.7239**	**0.0113**		**0.7055**	**0.7055**		**0.6491**	**0.6491**		**1,140.2487**	**1,140.2487**	**0.3550**		**1,147.7032**

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	0.0156	0.1477	0.2178	4.3000e-004	0.0125	2.4100e-003	0.0149	3.5600e-003	2.2200e-003	5.7800e-003		41.8243	41.8243	3.1000e-004		41.8307
Worker	0.0138	0.0188	0.1954	5.3000e-004	0.0447	3.5000e-004	0.0451	0.0119	3.2000e-004	0.0122		41.3120	41.3120	2.0900e-003		41.3559
Total	**0.0293**	**0.1665**	**0.4132**	**9.6000e-004**	**0.0572**	**2.7600e-003**	**0.0600**	**0.0154**	**2.5400e-003**	**0.0180**		**83.1363**	**83.1363**	**2.4000e-003**		**83.1867**

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	1.0786	10.9578	7.7239	0.0113		0.7055	0.7055		0.6491	0.6491	0.0000	1,140.2487	1,140.2487	0.3550		1,147.7032
Total	**1.0786**	**10.9578**	**7.7239**	**0.0113**		**0.7055**	**0.7055**		**0.6491**	**0.6491**	**0.0000**	**1,140.2487**	**1,140.2487**	**0.3550**		**1,147.7032**

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	0.0156	0.1477	0.2178	4.3000e-004	0.0125	2.4100e-003	0.0149	3.5600e-003	2.2200e-003	5.7800e-003		41.8243	41.8243	3.1000e-004		41.8307
Worker	0.0138	0.0188	0.1954	5.3000e-004	0.0447	3.5000e-004	0.0451	0.0119	3.2000e-004	0.0122		41.3120	41.3120	2.0900e-003		41.3559
Total	**0.0293**	**0.1665**	**0.4132**	**9.6000e-004**	**0.0572**	**2.7600e-003**	**0.0600**	**0.0154**	**2.5400e-003**	**0.0180**		**83.1363**	**83.1363**	**2.4000e-003**		**83.1867**

3.6 Paving - 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	0.9092	8.6233	7.1255	0.0111		0.5050	0.5050		0.4681	0.4681		1,054.2145	1,054.2145	0.2968		1,060.4462
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9092**	**8.6233**	**7.1255**	**0.0111**		**0.5050**	**0.5050**		**0.4681**	**0.4681**		**1,054.2145**	**1,054.2145**	**0.2968**		**1,060.4462**

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	0.0619	0.0845	0.8792	2.3900e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4600e-003	0.0548		185.9041	185.9041	9.4100e-003		186.1016
Total	**0.0619**	**0.0845**	**0.8792**	**2.3900e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4600e-003**	**0.0548**		**185.9041**	**185.9041**	**9.4100e-003**		**186.1016**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9092	8.6233	7.1255	0.0111		0.5050	0.5050		0.4681	0.4681	0.0000	1,054.2145	1,054.2145	0.2968		1,060.4462
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9092**	**8.6233**	**7.1255**	**0.0111**		**0.5050**	**0.5050**		**0.4681**	**0.4681**	**0.0000**	**1,054.2145**	**1,054.2145**	**0.2968**		**1,060.4462**

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	0.0619	0.0845	0.8792	2.3900e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4600e-003	0.0548		185.9041	185.9041	9.4100e-003		186.1016
Total	**0.0619**	**0.0845**	**0.8792**	**2.3900e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4600e-003**	**0.0548**		**185.9041**	**185.9041**	**9.4100e-003**		**186.1016**

3.7 Architectural Coating - 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					
Archit. Coating	24.9583					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**25.2570**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	3.4400e-003	4.6900e-003	0.0488	1.3000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		10.3280	10.3280	5.2000e-004		10.3390
Total	**3.4400e-003**	**4.6900e-003**	**0.0488**	**1.3000e-004**	**0.0112**	**9.0000e-005**	**0.0113**	**2.9600e-003**	**8.0000e-005**	**3.0500e-003**		**10.3280**	**10.3280**	**5.2000e-004**		**10.3390**

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	24.9583					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**25.2570**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	3.4400e-003	4.6900e-003	0.0488	1.3000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		10.3280	10.3280	5.2000e-004		10.3390
Total	**3.4400e-003**	**4.6900e-003**	**0.0488**	**1.3000e-004**	**0.0112**	**9.0000e-005**	**0.0113**	**2.9600e-003**	**8.0000e-005**	**3.0500e-003**		**10.3280**	**10.3280**	**5.2000e-004**		**10.3390**

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	0.2373	0.8109	2.9329	9.0500e-003	0.6403	0.0128	0.6531	0.1711	0.0118	0.1829		726.4386	726.4386	0.0264		726.9927
Unmitigated	0.2373	0.8109	2.9329	9.0500e-003	0.6403	0.0128	0.6531	0.1711	0.0118	0.1829		726.4386	726.4386	0.0264		726.9927

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT

General Light Industry	68.17	12.91	6.65	227,989	227,989
Total	68.17	12.91	6.65	227,989	227,989

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.510142	0.059804	0.180842	0.139058	0.042603	0.006701	0.016107	0.033206	0.001939	0.002487	0.004384	0.000580	0.002146

5.0 Energy Detail

4.4 Fleet Mix

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	5.4300e-003	0.0494	0.0415	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.2765	59.2765	1.1400e-003	1.0900e-003	59.6373
NaturalGas Unmitigated	5.4300e-003	0.0494	0.0415	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.2765	59.2765	1.1400e-003	1.0900e-003	59.6373

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	503.85	5.4300e-003	0.0494	0.0415	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.2765	59.2765	1.1400e-003	1.0900e-003	59.6373
Total		**5.4300e-003**	**0.0494**	**0.0415**	**3.0000e-004**		**3.7500e-003**	**3.7500e-003**		**3.7500e-003**	**3.7500e-003**		**59.2765**	**59.2765**	**1.1400e-003**	**1.0900e-003**	**59.6373**

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	0.50385	5.4300e-003	0.0494	0.0415	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.2765	59.2765	1.1400e-003	1.0900e-003	59.6373
Total		**5.4300e-003**	**0.0494**	**0.0415**	**3.0000e-004**		**3.7500e-003**	**3.7500e-003**		**3.7500e-003**	**3.7500e-003**		**59.2765**	**59.2765**	**1.1400e-003**	**1.0900e-003**	**59.6373**

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	0.2558	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1400e-003	2.1400e-003	1.0000e-005		2.2600e-003

Unmitigated	0.2558	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1400e-003	2.1400e-003	1.0000e-005		2.2600e-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	lb/day										lb/day					
Architectural Coating	0.0621					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1936					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1400e-003	2.1400e-003	1.0000e-005		2.2600e-003
Total	**0.2558**	**1.0000e-005**	**1.0100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.1400e-003**	**2.1400e-003**	**1.0000e-005**		**2.2600e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0621					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1936					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1400e-003	2.1400e-003	1.0000e-005		2.2600e-003
Total	**0.2558**	**1.0000e-005**	**1.0100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.1400e-003**	**2.1400e-003**	**1.0000e-005**		**2.2600e-003**

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 Vegetation

BOMP - Existing Emissions - Drilling Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	53.00	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 53 Wells

Construction Phase - Two rigs operating for the full year.

Off-road Equipment - Two rigs based on InterAct info.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	0.00	365.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	PhaseEndDate	12/7/2016	12/31/2017
tblConstructionPhase	PhaseStartDate	12/8/2016	1/1/2017
tblOffRoadEquipment	HorsePower	221.00	425.00

tblOffRoadEquipment	HorsePower	221.00	525.00
tblOffRoadEquipment	LoadFactor	0.50	0.73
tblOffRoadEquipment	LoadFactor	0.50	0.73
tblOffRoadEquipment	OffRoadEquipmentType	Concrete/Industrial Saws	Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	5.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	3.1210	0.0000	0.0000	2.9184	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2017	2.7213	33.4878	18.3914	0.0676	0.8087	1.2676	2.0763	0.4286	1.1908	1.6194	0.0000	6,853.1890	6,853.1890	1.9546	0.0000	6,902.0539
Maximum	**2.7213**	**33.4878**	**18.3914**	**0.0676**	**0.8087**	**3.1210**	**2.0763**	**0.4286**	**2.9184**	**1.6194**	**0.0000**	**6,853.1890**	**6,853.1890**	**1.9546**	**0.0000**	**6,902.0539**

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					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	3.1210	0.0000	0.0000	2.9184	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

2017	2.7213	33.4878	18.3914	0.0676	0.8087	1.2676	2.0763	0.4286	1.1908	1.6194	0.0000	6,853.1890	6,853.1890	1.9546	0.0000	6,902.0539
Maximum	**2.7213**	**33.4878**	**18.3914**	**0.0676**	**0.8087**	**3.1210**	**2.0763**	**0.4286**	**2.9184**	**1.6194**	**0.0000**	**6,853.1890**	**6,853.1890**	**1.9546**	**0.0000**	**6,902.0539**

	ROG	NOx	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	5.2000e-004	5.0000e-005	5.4900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0116	0.0116	3.0000e-005		0.0124
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**5.2000e-004**	**5.0000e-005**	**5.4900e-003**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**		**0.0116**	**0.0116**	**3.0000e-005**	**0.0000**	**0.0124**

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	5.2000e-004	5.0000e-005	5.4900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0116	0.0116	3.0000e-005		0.0124
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**5.2000e-004**	**5.0000e-005**	**5.4900e-003**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**		**0.0116**	**0.0116**	**3.0000e-005**	**0.0000**	**0.0124**

	ROG	NOx	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	Architectural Coating	Architectural Coating	12/8/2016	12/7/2016	5	0	
2	Building Construction	Building Construction	12/8/2016	12/7/2016	5	0	
3	Demolition	Demolition	12/8/2016	12/7/2016	5	0	
4	Paving	Paving	12/8/2016	12/7/2016	5	0	
5	Site Preparation	Site Preparation	12/8/2016	12/7/2016	5	0	
6	Grading	Grading	1/1/2017	12/31/2017	7	365	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Bore/Drill Rigs	1	8.00	425	0.73
Building Construction	Cranes	1	4.00	231	0.29

Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Bore/Drill Rigs	1	8.00	525	0.73
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40

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
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2016

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

Mitigated Construction Off-Site

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

3.3 Building Construction - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

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

3.4 Demolition - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.5 Paving - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

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

Mitigated Construction Off-Site

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

3.6 Site Preparation - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

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

3.7 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	2.6884	33.4635	18.1322	0.0670		1.2672	1.2672		1.1903	1.1903		6,794.5066	6,794.5066	1.9524		6,843.3160
Total	**2.6884**	**33.4635**	**18.1322**	**0.0670**	**0.7528**	**1.2672**	**2.0199**	**0.4138**	**1.1903**	**1.6041**		**6,794.5066**	**6,794.5066**	**1.9524**		**6,843.3160**

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	0.0329	0.0243	0.2592	5.9000e-004	0.0559	4.6000e-004	0.0564	0.0148	4.3000e-004	0.0153		58.6824	58.6824	2.2200e-003		58.7379
Total	**0.0329**	**0.0243**	**0.2592**	**5.9000e-004**	**0.0559**	**4.6000e-004**	**0.0564**	**0.0148**	**4.3000e-004**	**0.0153**		**58.6824**	**58.6824**	**2.2200e-003**		**58.7379**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	2.6884	33.4635	18.1322	0.0670		1.2672	1.2672		1.1903	1.1903	0.0000	6,794.5066	6,794.5066	1.9524		6,843.3160
Total	**2.6884**	**33.4635**	**18.1322**	**0.0670**	**0.7528**	**1.2672**	**2.0199**	**0.4138**	**1.1903**	**1.6041**	**0.0000**	**6,794.5066**	**6,794.5066**	**1.9524**		**6,843.3160**

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	0.0329	0.0243	0.2592	5.9000e-004	0.0559	4.6000e-004	0.0564	0.0148	4.3000e-004	0.0153		58.6824	58.6824	2.2200e-003		58.7379
Total	**0.0329**	**0.0243**	**0.2592**	**5.9000e-004**	**0.0559**	**4.6000e-004**	**0.0564**	**0.0148**	**4.3000e-004**	**0.0153**		**58.6824**	**58.6824**	**2.2200e-003**		**58.7379**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
User Defined Industrial	16.60	8.40	6.90	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
User Defined Industrial	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
User Defined Industrial	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	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					

User Defined Industrial	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	5.2000e-004	5.0000e-005	5.4900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0116	0.0116	3.0000e-005		0.0124
Unmitigated	5.2000e-004	5.0000e-005	5.4900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0116	0.0116	3.0000e-005		0.0124

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2000e-004	5.0000e-005	5.4900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0116	0.0116	3.0000e-005		0.0124

Total	**5.2000e-004**	**5.0000e-005**	**5.4900e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0116**	**0.0116**	**3.0000e-005**		**0.0124**

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2000e-004	5.0000e-005	5.4900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0116	0.0116	3.0000e-005		0.0124
Total	**5.2000e-004**	**5.0000e-005**	**5.4900e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0116**	**0.0116**	**3.0000e-005**		**0.0124**

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

Wetlands Facility Construction - Restoration Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	16.10	1,000.00	0
Parking Lot	34.50	1000sqft	0.79	34,500.00	0
Other Non-Asphalt Surfaces	69.90	1000sqft	1.60	69,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acreage of area to be graded. Non-asphalt surface is sidewalk.

Construction Phase - Only paving, grading and building construction is relevant (grading construction used for pile driving).

Off-road Equipment - Estimates of sheet pile driving equipment

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Estimate of worker trips and vendor trips for sheet pile driving

Grading - Acreage to be graded

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	88.00
tblConstructionPhase	NumDays	30.00	132.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	PhaseEndDate	8/10/2018	7/13/2018
tblConstructionPhase	PhaseEndDate	6/4/2019	11/30/2018
tblConstructionPhase	PhaseEndDate	1/15/2019	1/31/2019
tblConstructionPhase	PhaseEndDate	4/7/2017	7/13/2018
tblConstructionPhase	PhaseStartDate	7/14/2018	6/16/2018
tblConstructionPhase	PhaseStartDate	2/1/2019	8/1/2018
tblConstructionPhase	PhaseStartDate	7/14/2018	8/1/2018
tblConstructionPhase	PhaseStartDate	2/11/2017	5/19/2018
tblGrading	AcresOfGrading	330.00	16.10
tblGrading	MaterialExported	0.00	37,000.00
tblLandUse	LotAcreage	0.02	16.10
tblOffRoadEquipment	HorsePower	171.00	275.00
tblOffRoadEquipment	LoadFactor	0.42	0.29
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	0.00	5.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	7.0978	73.4626	58.7652	0.0670	18.2675	3.6596	21.0233	9.9840	3.4159	12.5194	0.0000	6,695.9074	6,695.9074	1.7301	0.0000	6,732.2388
2018	7.2345	82.5973	59.5907	0.1076	7.1835	3.6519	10.8354	3.5979	3.3597	6.9576	0.0000	10,676.9591	10,676.9591	2.4803	0.0000	10,729.0447
2019	5.5182	62.1885	48.4283	0.0900	9.2128	2.6460	11.8588	4.0944	2.4344	6.5288	0.0000	8,773.8077	8,773.8077	1.9618	0.0000	8,815.0061
Total	**19.8504**	**218.2484**	**166.7842**	**0.2646**	**34.6638**	**9.9575**	**43.7175**	**17.6764**	**9.2100**	**26.0058**	**0.0000**	**26,146.6741**	**26,146.6741**	**6.1722**	**0.0000**	**26,276.2896**

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					
2017	7.0978	73.4626	58.7652	0.0670	18.2675	3.6596	21.0233	9.9840	3.4159	12.5194	0.0000	6,695.9074	6,695.9074	1.7301	0.0000	6,732.2388
2018	7.2345	82.5973	59.5907	0.1076	7.1835	3.6519	10.8354	3.5979	3.3597	6.9576	0.0000	10,676.9590	10,676.9590	2.4803	0.0000	10,729.0447
2019	5.5182	62.1885	48.4283	0.0900	9.2128	2.6460	11.8588	4.0944	2.4344	6.5288	0.0000	8,773.8077	8,773.8077	1.9618	0.0000	8,815.0061
Total	**19.8504**	**218.2484**	**166.7842**	**0.2646**	**34.6638**	**9.9575**	**43.7175**	**17.6764**	**9.2100**	**26.0058**	**0.0000**	**26,146.6741**	**26,146.6741**	**6.1722**	**0.0000**	**26,276.2896**

	ROG	**NOx**	**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	2.0943	1.0000e-004	0.0109	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0231	0.0231	6.0000e-005		0.0244
Energy	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Mobile	0.0363	0.1228	0.4514	9.2000e-004	0.0654	1.9100e-003	0.0673	0.0175	1.7500e-003	0.0192		85.0513	85.0513	3.9100e-003		85.1333
Total	**2.1312**	**0.1279**	**0.4665**	**9.5000e-004**	**0.0654**	**2.3300e-003**	**0.0677**	**0.0175**	**2.1700e-003**	**0.0197**		**91.1372**	**91.1372**	**4.0900e-003**	**1.1000e-004**	**91.2575**

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	2.0943	1.0000e-004	0.0109	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0231	0.0231	6.0000e-005		0.0244
Energy	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Mobile	0.0363	0.1228	0.4514	9.2000e-004	0.0654	1.9100e-003	0.0673	0.0175	1.7500e-003	0.0192		85.0513	85.0513	3.9100e-003		85.1333
Total	**2.1312**	**0.1279**	**0.4665**	**9.5000e-004**	**0.0654**	**2.3300e-003**	**0.0677**	**0.0175**	**2.1700e-003**	**0.0197**		**91.1372**	**91.1372**	**4.0900e-003**	**1.1000e-004**	**91.2575**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	5	10	
3	Paving	Paving	5/19/2018	7/13/2018	5	40	
4	Architectural Coating	Architectural Coating	6/16/2018	7/13/2018	5	20	
5	Grading	Grading	8/1/2018	1/31/2019	5	132	
6	Building Construction	Building Construction	8/1/2018	11/30/2018	5	88	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 16.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,500; Non-Residential Outdoor: 500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40

Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Other Construction Equipment	1	7.00	275	0.29
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	9	23.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,625.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	7.0098	73.3436	57.5236	0.0639		3.6575	3.6575		3.4140	3.4140		6,449.1494	6,449.1494	1.7171		6,485.2088
Total	**7.0098**	**73.3436**	**57.5236**	**0.0639**		**3.6575**	**3.6575**		**3.4140**	**3.4140**		**6,449.1494**	**6,449.1494**	**1.7171**		**6,485.2088**

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	0.0880	0.1190	1.2415	3.0500e-003	0.2571	2.0700e-003	0.2592	0.0682	1.9100e-003	0.0701		246.7580	246.7580	0.0130		247.0300
Total	**0.0880**	**0.1190**	**1.2415**	**3.0500e-003**	**0.2571**	**2.0700e-003**	**0.2592**	**0.0682**	**1.9100e-003**	**0.0701**		**246.7580**	**246.7580**	**0.0130**		**247.0300**

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	7.0098	73.3436	57.5236	0.0639		3.6575	3.6575		3.4140	3.4140	0.0000	6,449.1494	6,449.1494	1.7171		6,485.2088
Total	**7.0098**	**73.3436**	**57.5236**	**0.0639**		**3.6575**	**3.6575**		**3.4140**	**3.4140**	**0.0000**	**6,449.1494**	**6,449.1494**	**1.7171**		**6,485.2088**

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	0.0880	0.1190	1.2415	3.0500e-003	0.2571	2.0700e-003	0.2592	0.0682	1.9100e-003	0.0701		246.7580	246.7580	0.0130		247.0300
Total	**0.0880**	**0.1190**	**1.2415**	**3.0500e-003**	**0.2571**	**2.0700e-003**	**0.2592**	**0.0682**	**1.9100e-003**	**0.0701**		**246.7580**	**246.7580**	**0.0130**		**247.0300**

3.3 Site Preparation - 2017

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

3.4 Paving - 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	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6632**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

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	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6632**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

3.5 Architectural Coating - 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					
Archit. Coating	1.1588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**1.4574**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

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

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	1.1588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**1.4574**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

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

3.6 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					6.1831	0.0000	6.1831	3.3290	0.0000	3.3290			0.0000			0.0000
Off-Road	5.2895	59.5338	42.3068	0.0617		2.7880	2.7880		2.5650	2.5650		6,212.8042	6,212.8042	1.9341		6,253.4209
Total	**5.2895**	**59.5338**	**42.3068**	**0.0617**	**6.1831**	**2.788**	**8.9712**	**3.329**	**2.565**	**5.894**		**6,212.8042**	**6,212.8042**	**1.9341**		**6,253.4209**

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	0.5804	8.4598	7.3661	0.0257	0.7084	0.1395	0.8479	0.1912	0.1283	0.3195		2,512.5524	2,512.5524	0.0186		2,512.9431
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0688	0.0939	0.9769	2.6500e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6200e-003	0.0609		206.5601	206.5601	0.0105		206.7796
Total	**0.6491**	**8.5536**	**8.3430**	**0.0284**	**0.9320**	**0.1412**	**1.0732**	**0.2505**	**0.1299**	**0.3804**		**2,719.1125**	**2,719.1125**	**0.0291**		**2,719.7227**

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					6.1831	0.0000	6.1831	3.3290	0.0000	3.3290			0.0000			0.0000
Off-Road	5.2895	59.5338	42.3068	0.0617		2.7880	2.7880		2.5650	2.5650	0.0000	6,212.8041	6,212.8041	1.9341		6,253.4209
Total	**5.2895**	**59.5338**	**42.3068**	**0.0617**	**6.1831**	**2.7880**	**8.9712**	**3.3290**	**2.5650**	**5.8940**	**0.0000**	**6,212.8041**	**6,212.8041**	**1.9341**		**6,253.4209**

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	0.5804	8.4598	7.3661	0.0257	0.7084	0.1395	0.8479	0.1912	0.1283	0.3195		2,512.5524	2,512.5524	0.0186		2,512.9431
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0688	0.0939	0.9769	2.6500e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6200e-003	0.0609		206.5601	206.5601	0.0105		206.7796
Total	**0.6491**	**8.5536**	**8.3430**	**0.0284**	**0.9320**	**0.1412**	**1.0732**	**0.2505**	**0.1299**	**0.3804**		**2,719.1125**	**2,719.1125**	**0.0291**		**2,719.7227**

3.6 Grading - 2019

Unmitigated Construction On-Site

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

Category	lb/day										lb/day					
Fugitive Dust					6.1831	0.0000	6.1831	3.3290	0.0000	3.3290			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.1831**	**2.5049**	**8.6881**	**3.3290**	**2.3045**	**5.6335**		**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

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	0.5637	7.9046	7.2442	0.0256	2.8061	0.1394	2.9455	0.7061	0.1282	0.8344		2,463.7987	2,463.7987	0.0185		2,464.1871
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0861	0.8953	2.6500e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		198.6968	198.6968	9.7800e-003		198.9023
Total	**0.6270**	**7.9907**	**8.1395**	**0.0283**	**3.0297**	**0.1411**	**3.1708**	**0.7654**	**0.1298**	**0.8952**		**2,662.4956**	**2,662.4956**	**0.0283**		**2,663.0894**

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					6.1831	0.0000	6.1831	3.3290	0.0000	3.3290			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045	0.0000	6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.1831**	**2.5049**	**8.6881**	**3.3290**	**2.3045**	**5.6335**	**0.0000**	**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

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	0.5637	7.9046	7.2442	0.0256	2.8061	0.1394	2.9455	0.7061	0.1282	0.8344		2,463.7987	2,463.7987	0.0185		2,464.1871
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0861	0.8953	2.6500e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		198.6968	198.6968	9.7800e-003		198.9023
Total	**0.6270**	**7.9907**	**8.1395**	**0.0283**	**3.0297**	**0.1411**	**3.1708**	**0.7654**	**0.1298**	**0.8952**		**2,662.4956**	**2,662.4956**	**0.0283**		**2,663.0894**

3.7 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	1.2631	14.3387	8.4789	0.0164		0.7198	0.7198		0.6622	0.6622		1,651.5782	1,651.5782	0.5142		1,662.3755
Total	**1.2631**	**14.3387**	**8.4789**	**0.0164**		**0.7198**	**0.7198**		**0.6622**	**0.6622**		**1,651.5782**	**1,651.5782**	**0.5142**		**1,662.3755**

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	0.0156	0.1477	0.2178	4.3000e-004	0.0125	2.4100e-003	0.0149	3.5600e-003	2.2200e-003	5.7800e-003		41.8243	41.8243	3.1000e-004		41.8307
Worker	0.0172	0.0235	0.2442	6.6000e-004	0.0559	4.4000e-004	0.0563	0.0148	4.0000e-004	0.0152		51.6400	51.6400	2.6100e-003		51.6949
Total	**0.0328**	**0.1712**	**0.4620**	**1.0900e-003**	**0.0684**	**2.8500e-003**	**0.0713**	**0.0184**	**2.6200e-003**	**0.0210**		**93.4643**	**93.4643**	**2.9200e-003**		**93.5256**

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	1.2631	14.3387	8.4789	0.0164		0.7198	0.7198		0.6622	0.6622	0.0000	1,651.5782	1,651.5782	0.5142		1,662.3755
Total	**1.2631**	**14.3387**	**8.4789**	**0.0164**		**0.7198**	**0.7198**		**0.6622**	**0.6622**	**0.0000**	**1,651.5782**	**1,651.5782**	**0.5142**		**1,662.3755**

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	0.0156	0.1477	0.2178	4.3000e-004	0.0125	2.4100e-003	0.0149	3.5600e-003	2.2200e-003	5.7800e-003		41.8243	41.8243	3.1000e-004		41.8307
Worker	0.0172	0.0235	0.2442	6.6000e-004	0.0559	4.4000e-004	0.0563	0.0148	4.0000e-004	0.0152		51.6400	51.6400	2.6100e-003		51.6949

Total	**0.0328**	**0.1712**	**0.4620**	**1.0900e-003**	**0.0684**	**2.8500e-003**	**0.0713**	**0.0184**	**2.6200e-003**	**0.0210**		**93.4643**	**93.4643**	**2.9200e-003**		**93.5256**

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	0.0363	0.1228	0.4514	9.2000e-004	0.0654	1.9100e-003	0.0673	0.0175	1.7500e-003	0.0192		85.0513	85.0513	3.9100e-003		85.1333
Unmitigated	0.0363	0.1228	0.4514	9.2000e-004	0.0654	1.9100e-003	0.0673	0.0175	1.7500e-003	0.0192		85.0513	85.0513	3.9100e-003		85.1333

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	6.97	1.32	0.68	23,312	23,312
Total	6.97	1.32	0.68	23,312	23,312

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515683	0.060583	0.179994	0.140474	0.041721	0.006653	0.015053	0.028382	0.001919	0.002521	0.004323	0.000600	0.002094

5.0 Energy Detail

4.4 Fleet Mix

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	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
NaturalGas Unmitigated	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998

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	51.5342	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Total		**5.6000e-004**	**5.0500e-003**	**4.2400e-003**	**3.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**		**6.0629**	**6.0629**	**1.2000e-004**	**1.1000e-004**	**6.0998**

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	0.0515342	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Total		**5.6000e-004**	**5.0500e-003**	**4.2400e-003**	**3.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**		**6.0629**	**6.0629**	**1.2000e-004**	**1.1000e-004**	**6.0998**

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	2.0943	1.0000e-004	0.0109	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0231	0.0231	6.0000e-005		0.0244
Unmitigated	2.0943	1.0000e-004	0.0109	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0231	0.0231	6.0000e-005		0.0244

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	6.3500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Landscaping	1.0300e-003	1.0000e-004	0.0109	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0231	0.0231	6.0000e-005		0.0244
Total	**2.0943**	**1.0000e-004**	**0.0109**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0231**	**0.0231**	**6.0000e-005**		**0.0244**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.3500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0300e-003	1.0000e-004	0.0109	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0231	0.0231	6.0000e-005		0.0244
Total	**2.0943**	**1.0000e-004**	**0.0109**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0231**	**0.0231**	**6.0000e-005**		**0.0244**

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 Vegetation

Wetlands Facility Construction - Office/Warehouse/Parking Lot Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.20	1000sqft	0.12	5,200.00	0
Unrefrigerated Warehouse-No Rail	9.75	1000sqft	0.22	9,750.00	0
Parking Lot	47.00	Space	0.42	18,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Grading, demolition, and site preparation have already been covered in other analyses.
Building schedule based on SPEC

Grading -

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	150.00
tblConstructionPhase	PhaseEndDate	8/16/2017	4/27/2018

tblConstructionPhase	PhaseStartDate	5/5/2018	5/7/2018
tblConstructionPhase	PhaseStartDate	1/19/2017	10/2/2017
tblConstructionPhase	PhaseStartDate	4/28/2018	4/30/2018
tblProjectCharacteristics	OperationalYear	2014	2018

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					
2017	1.3775	13.2294	9.4762	0.0145	0.8645	0.8643	1.5920	0.4434	0.7951	1.1372	0.0000	1,437.3481	1,437.3481	0.3641	0.0000	1,444.9940
2018	72.2163	11.4666	9.0612	0.0145	0.2012	0.7140	0.9080	0.0534	0.6569	0.7090	0.0000	1,410.3136	1,410.3136	0.3632	0.0000	1,417.9411
Total	**73.5939**	**24.6961**	**18.5374**	**0.0290**	**1.0657**	**1.5782**	**2.5000**	**0.4968**	**1.4520**	**1.8463**	**0.0000**	**2,847.6616**	**2,847.6616**	**0.7273**	**0.0000**	**2,862.9351**

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					
2017	1.3775	13.2294	9.4762	0.0145	0.8645	0.8643	1.5920	0.4434	0.7951	1.1372	0.0000	1,437.3481	1,437.3481	0.3641	0.0000	1,444.9940
2018	72.2163	11.4666	9.0612	0.0145	0.2012	0.7140	0.9080	0.0534	0.6569	0.7090	0.0000	1,410.3136	1,410.3136	0.3632	0.0000	1,417.9411
Total	**73.5939**	**24.6961**	**18.5374**	**0.0290**	**1.0657**	**1.5782**	**2.5000**	**0.4968**	**1.4520**	**1.8463**	**0.0000**	**2,847.6616**	**2,847.6616**	**0.7273**	**0.0000**	**2,862.9351**

	ROG	NOx	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	0.7674	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143
Energy	1.9400e-003	0.0177	0.0148	1.1000e-004		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003		21.1792	21.1792	4.1000e-004	3.9000e-004	21.3081
Mobile	0.2833	0.8638	3.2303	8.8200e-003	0.6208	0.0128	0.6335	0.1659	0.0118	0.1776		729.8411	729.8411	0.0277		730.4228
Total	**1.0526**	**0.8815**	**3.2515**	**8.9300e-003**	**0.6208**	**0.0141**	**0.6349**	**0.1659**	**0.0131**	**0.1790**		**751.0338**	**751.0338**	**0.0282**	**3.9000e-004**	**751.7452**

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	0.7674	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143
Energy	1.9400e-003	0.0177	0.0148	1.1000e-004		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003		21.1792	21.1792	4.1000e-004	3.9000e-004	21.3081
Mobile	0.2833	0.8638	3.2303	8.8200e-003	0.6208	0.0128	0.6335	0.1659	0.0118	0.1776		729.8411	729.8411	0.0277		730.4228
Total	**1.0526**	**0.8815**	**3.2515**	**8.9300e-003**	**0.6208**	**0.0141**	**0.6349**	**0.1659**	**0.0131**	**0.1790**		**751.0338**	**751.0338**	**0.0282**	**3.9000e-004**	**751.7452**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/13/2017	5	10	
2	Site Preparation	Site Preparation	1/14/2017	1/16/2017	5	1	
3	Grading	Grading	1/17/2017	1/18/2017	5	2	
4	Building Construction	Building Construction	10/2/2017	4/27/2018	5	150	
5	Paving	Paving	4/30/2018	5/4/2018	5	5	
6	Architectural Coating	Architectural Coating	5/7/2018	5/11/2018	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 23,271; Non-Residential Outdoor: 7,757 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38

Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	14.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930		1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**		**0.7266**	**0.7266**		**0.6930**	**0.6930**		**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

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	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930	0.0000	1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**		**0.7266**	**0.7266**		**0.6930**	**0.6930**	**0.0000**	**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089		955.8663	955.8663	0.2929		962.0167
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**		**955.8663**	**955.8663**	**0.2929**		**962.0167**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022

Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089	0.0000	955.8663	955.8663	0.2929		962.0167
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**	**0.0000**	**955.8663**	**955.8663**	**0.2929**		**962.0167**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930		1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**	**0.7528**	**0.7266**	**1.4794**	**0.4138**	**0.6930**	**1.1068**		**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930	0.0000	1,183.8131	1,183.8131	0.2333		1,188.7118

Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**	**0.7528**	**0.7266**	**1.4794**	**0.4138**	**0.6930**	**1.1068**	**0.0000**	**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

3.5 Building Construction - 2017

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	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869		1,159.5310	1,159.5310	0.3553		1,166.9919
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**		**1,159.5310**	**1,159.5310**	**0.3553**		**1,166.9919**

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	0.0500	0.4831	0.6810	1.2900e-003	0.0375	7.6800e-003	0.0452	0.0107	7.0700e-003	0.0178		127.6165	127.6165	9.3000e-004		127.6360
Worker	0.0535	0.0724	0.7557	1.8600e-003	0.1565	1.2600e-003	0.1578	0.0415	1.1600e-003	0.0427		150.2005	150.2005	7.8800e-003		150.3661
Total	**0.1036**	**0.5556**	**1.4367**	**3.1500e-003**	**0.1940**	**8.9400e-003**	**0.2030**	**0.0522**	**8.2300e-003**	**0.0604**		**277.8170**	**277.8170**	**8.8100e-003**		**278.0021**

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	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869	0.0000	1,159.5310	1,159.5310	0.3553		1,166.9919
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**	**0.0000**	**1,159.5310**	**1,159.5310**	**0.3553**		**1,166.9919**

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	0.0500	0.4831	0.6810	1.2900e-003	0.0375	7.6800e-003	0.0452	0.0107	7.0700e-003	0.0178		127.6165	127.6165	9.3000e-004		127.6360

Worker	0.0535	0.0724	0.7557	1.8600e-003	0.1565	1.2600e-003	0.1578	0.0415	1.1600e-003	0.0427		150.2005	150.2005	7.8800e-003		150.3661
Total	**0.1036**	**0.5556**	**1.4367**	**3.1500e-003**	**0.1940**	**8.9400e-003**	**0.2030**	**0.0522**	**8.2300e-003**	**0.0604**		**277.8170**	**277.8170**	**8.8100e-003**		**278.0021**

3.5 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	1.0786	10.9578	7.7239	0.0113		0.7055	0.7055		0.6491	0.6491		1,140.2487	1,140.2487	0.3550		1,147.7032
Total	**1.0786**	**10.9578**	**7.7239**	**0.0113**		**0.7055**	**0.7055**		**0.6491**	**0.6491**		**1,140.2487**	**1,140.2487**	**0.3550**		**1,147.7032**

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	0.0467	0.4432	0.6535	1.2900e-003	0.0375	7.2400e-003	0.0448	0.0107	6.6600e-003	0.0173		125.4728	125.4728	9.3000e-004		125.4922
Worker	0.0482	0.0657	0.6838	1.8600e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		144.5921	144.5921	7.3200e-003		144.7457
Total	**0.0949**	**0.5089**	**1.3373**	**3.1500e-003**	**0.1940**	**8.4600e-003**	**0.2025**	**0.0522**	**7.7900e-003**	**0.0600**		**270.0648**	**270.0648**	**8.2500e-003**		**270.2379**

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	1.0786	10.9578	7.7239	0.0113		0.7055	0.7055		0.6491	0.6491	0.0000	1,140.2487	1,140.2487	0.3550		1,147.7032
Total	**1.0786**	**10.9578**	**7.7239**	**0.0113**		**0.7055**	**0.7055**		**0.6491**	**0.6491**	**0.0000**	**1,140.2487**	**1,140.2487**	**0.3550**		**1,147.7032**

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	0.0467	0.4432	0.6535	1.2900e-003	0.0375	7.2400e-003	0.0448	0.0107	6.6600e-003	0.0173		125.4728	125.4728	9.3000e-004		125.4922
Worker	0.0482	0.0657	0.6838	1.8600e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		144.5921	144.5921	7.3200e-003		144.7457
Total	**0.0949**	**0.5089**	**1.3373**	**3.1500e-003**	**0.1940**	**8.4600e-003**	**0.2025**	**0.0522**	**7.7900e-003**	**0.0600**		**270.0648**	**270.0648**	**8.2500e-003**		**270.2379**

3.6 Paving - 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	0.9092	8.6233	7.1255	0.0111		0.5050	0.5050		0.4681	0.4681		1,054.2145	1,054.2145	0.2968		1,060.4462

Paving	0.2201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1293**	**8.6233**	**7.1255**	**0.0111**		**0.5050**	**0.5050**		**0.4681**	**0.4681**		**1,054.2145**	**1,054.2145**	**0.2968**		**1,060.4462**

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	0.0619	0.0845	0.8792	2.3900e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4600e-003	0.0548		185.9041	185.9041	9.4100e-003		186.1016
Total	**0.0619**	**0.0845**	**0.8792**	**2.3900e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4600e-003**	**0.0548**		**185.9041**	**185.9041**	**9.4100e-003**		**186.1016**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9092	8.6233	7.1255	0.0111		0.5050	0.5050		0.4681	0.4681	0.0000	1,054.2145	1,054.2145	0.2968		1,060.4462
Paving	0.2201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1293**	**8.6233**	**7.1255**	**0.0111**		**0.5050**	**0.5050**		**0.4681**	**0.4681**	**0.0000**	**1,054.2145**	**1,054.2145**	**0.2968**		**1,060.4462**

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	0.0619	0.0845	0.8792	2.3900e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4600e-003	0.0548		185.9041	185.9041	9.4100e-003		186.1016
Total	**0.0619**	**0.0845**	**0.8792**	**2.3900e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4600e-003**	**0.0548**		**185.9041**	**185.9041**	**9.4100e-003**		**186.1016**

3.7 Architectural Coating - 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					
Archit. Coating	71.9074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**72.2060**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	0.0103	0.0141	0.1465	4.0000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1400e-003		30.9840	30.9840	1.5700e-003		31.0169
Total	**0.0103**	**0.0141**	**0.1465**	**4.0000e-004**	**0.0335**	**2.6000e-004**	**0.0338**	**8.8900e-003**	**2.4000e-004**	**9.1400e-003**		**30.9840**	**30.9840**	**1.5700e-003**		**31.0169**

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	71.9074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**72.2060**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	0.0103	0.0141	0.1465	4.0000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1400e-003		30.9840	30.9840	1.5700e-003		31.0169
Total	**0.0103**	**0.0141**	**0.1465**	**4.0000e-004**	**0.0335**	**2.6000e-004**	**0.0338**	**8.8900e-003**	**2.4000e-004**	**9.1400e-003**		**30.9840**	**30.9840**	**1.5700e-003**		**31.0169**

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	0.2833	0.8638	3.2303	8.8200e-003	0.6208	0.0128	0.6335	0.1659	0.0118	0.1776		729.8411	729.8411	0.0277		730.4228
Unmitigated	0.2833	0.8638	3.2303	8.8200e-003	0.6208	0.0128	0.6335	0.1659	0.0118	0.1776		729.8411	729.8411	0.0277		730.4228

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	57.25	12.32	5.10	139,756	139,756
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	25.25	25.25	25.25	108,225	108,225
Total	82.50	37.58	30.35	247,981	247,981

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511172	0.060004	0.180590	0.138995	0.042398	0.006681	0.016070	0.032568	0.001938	0.002493	0.004370	0.000586	0.002135

5.0 Energy Detail

4.4 Fleet Mix

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	1.9400e-003	0.0177	0.0148	1.1000e-004		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003		21.1792	21.1792	4.1000e-004	3.9000e-004	21.3081
NaturalGas Unmitigated	1.9400e-003	0.0177	0.0148	1.1000e-004		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003		21.1792	21.1792	4.1000e-004	3.9000e-004	21.3081

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 Office Building	155.715	1.6800e-003	0.0153	0.0128	9.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003		18.3194	18.3194	3.5000e-004	3.4000e-004	18.4309
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	24.3082	2.6000e-004	2.3800e-003	2.0000e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		2.8598	2.8598	5.0000e-005	5.0000e-005	2.8772
Total		**1.9400e-003**	**0.0177**	**0.0148**	**1.0000e-004**		**1.3400e-003**	**1.3400e-003**		**1.3400e-003**	**1.3400e-003**		**21.1792**	**21.1792**	**4.0000e-004**	**3.9000e-004**	**21.3081**

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.0243082	2.6000e-004	2.3800e-003	2.0000e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		2.8598	2.8598	5.0000e-005	5.0000e-005	2.8772
General Office Building	0.155715	1.6800e-003	0.0153	0.0128	9.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003		18.3194	18.3194	3.5000e-004	3.4000e-004	18.4309
Total		**1.9400e-003**	**0.0177**	**0.0148**	**1.0000e-004**		**1.3400e-003**	**1.3400e-003**		**1.3400e-003**	**1.3400e-003**		**21.1792**	**21.1792**	**4.0000e-004**	**3.9000e-004**	**21.3081**

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	0.7674	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143
Unmitigated	0.7674	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143

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	0.0985					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	0.6683					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.1000e-004	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143
Total	**0.7674**	**6.0000e-005**	**6.4100e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0136**	**0.0136**	**4.0000e-005**		**0.0143**

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	0.0985					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6683					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.1000e-004	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143
Total	**0.7674**	**6.0000e-005**	**6.4100e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0136**	**0.0136**	**4.0000e-005**		**0.0143**

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 Vegetation

Wetlands - Pumpkin Patch Operations Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.20	1000sqft	0.12	5,200.00	0
Unrefrigerated Warehouse-No Rail	9.75	1000sqft	0.22	9,750.00	0
Parking Lot	47.00	Space	0.42	18,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Energy Use - All electricity will be generated on-site

Operational Off-Road Equipment - Forklift and crane will be needed to off-load flatbed trucks with piping and other supplies.

Water And Wastewater - Operations will require 10,000 gallons per day, or 5,000 gallons per day per each site (Pumpkin Patch and LCWA).

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	4.29	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	2.23	0.00
tblEnergyUse	NT24E	4.62	0.00

tblEnergyUse	NT24E	1.34	0.00
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	5.62	0.00
tblEnergyUse	T24E	0.79	0.00
tblEnergyUse	T24NG	10.54	0.00
tblEnergyUse	T24NG	0.88	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	100.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	100.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.29	0.29
tblOperationalOffRoadEquipment	OperLoadFactor	0.20	0.20
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblWater	IndoorWaterUseRate	2,254,687.50	0.00
tblWater	OutdoorWaterUseRate	566,454.65	1,825,000.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	72.2512	13.2294	9.4762	0.0145	0.8645	0.8643	1.5920	0.4434	0.7951	1.1372	0.0000	1,437.3481	1,437.3481	0.3641	0.0000	1,444.9940
Total	**72.2512**	**13.2294**	**9.4762**	**0.0145**	**0.8645**	**0.8643**	**1.5920**	**0.4434**	**0.7951**	**1.1372**	**0.0000**	**1,437.3481**	**1,437.3481**	**0.3641**	**0.0000**	**1,444.9940**

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					
2017	72.2512	13.2294	9.4762	0.0145	0.8645	0.8643	1.5920	0.4434	0.7951	1.1372	0.0000	1,437.3481	1,437.3481	0.3641	0.0000	1,444.9940
Total	**72.2512**	**13.2294**	**9.4762**	**0.0145**	**0.8645**	**0.8643**	**1.5920**	**0.4434**	**0.7951**	**1.1372**	**0.0000**	**1,437.3481**	**1,437.3481**	**0.3641**	**0.0000**	**1,444.9940**

	ROG	**NOx**	**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	0.7674	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.2833	0.8638	3.2303	8.8200e-003	0.6208	0.0128	0.6335	0.1659	0.0118	0.1776		729.8411	729.8411	0.0277		730.4228
Offroad	0.3669	4.1059	1.8342	3.5700e-003		0.2066	0.2066		0.1901	0.1901		359.4329	359.4329	0.1119		361.7827
Total	**1.4175**	**4.9697**	**5.0709**	**0.0124**	**0.6208**	**0.2194**	**0.8402**	**0.1659**	**0.2019**	**0.3677**		**1,089.2875**	**1,089.2875**	**0.1396**	**0.0000**	**1,092.2198**

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	0.7674	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.2833	0.8638	3.2303	8.8200e-003	0.6208	0.0128	0.6335	0.1659	0.0118	0.1776		729.8411	729.8411	0.0277		730.4228
Offroad	0.3669	4.1059	1.8342	3.5700e-003		0.2066	0.2066		0.1901	0.1901		359.4329	359.4329	0.1119		361.7827
Total	**1.4175**	**4.9697**	**5.0709**	**0.0124**	**0.6208**	**0.2194**	**0.8402**	**0.1659**	**0.2019**	**0.3677**		**1,089.2875**	**1,089.2875**	**0.1396**	**0.0000**	**1,092.2198**

	ROG	**NOx**	**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	**25.88**	**82.62**	**36.17**	**28.81**	**0.00**	**94.17**	**24.59**	**0.00**	**94.16**	**51.69**	**0.00**	**33.00**	**33.00**	**80.13**	**0.00**	**33.12**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/13/2017	5	10	
2	Site Preparation	Site Preparation	1/14/2017	1/16/2017	5	1	
3	Grading	Grading	1/17/2017	1/18/2017	5	2	
4	Building Construction	Building Construction	1/19/2017	6/7/2017	5	100	
5	Paving	Paving	6/8/2017	6/14/2017	5	5	
6	Architectural Coating	Architectural Coating	6/15/2017	6/21/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 23,271; Non-Residential Outdoor: 7,757 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	14.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930		1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**		**0.7266**	**0.7266**		**0.6930**	**0.6930**		**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

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	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930	0.0000	1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**		**0.7266**	**0.7266**		**0.6930**	**0.6930**	**0.0000**	**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000

Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089		955.8663	955.8663	0.2929		962.0167
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**		**955.8663**	**955.8663**	**0.2929**		**962.0167**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089	0.0000	955.8663	955.8663	0.2929		962.0167
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**	**0.0000**	**955.8663**	**955.8663**	**0.2929**		**962.0167**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930		1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**	**0.7528**	**0.7266**	**1.4794**	**0.4138**	**0.6930**	**1.1068**		**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930	0.0000	1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**	**0.7528**	**0.7266**	**1.4794**	**0.4138**	**0.6930**	**1.1068**	**0.0000**	**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

3.5 Building Construction - 2017

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	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869		1,159.5310	1,159.5310	0.3553		1,166.9919
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**		**1,159.5310**	**1,159.5310**	**0.3553**		**1,166.9919**

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	0.0500	0.4831	0.6810	1.2900e-003	0.0375	7.6800e-003	0.0452	0.0107	7.0700e-003	0.0178		127.6165	127.6165	9.3000e-004		127.6360
Worker	0.0535	0.0724	0.7557	1.8600e-003	0.1565	1.2600e-003	0.1578	0.0415	1.1600e-003	0.0427		150.2005	150.2005	7.8800e-003		150.3661
Total	**0.1036**	**0.5556**	**1.4367**	**3.1500e-003**	**0.1940**	**8.9400e-003**	**0.2030**	**0.0522**	**8.2300e-003**	**0.0604**		**277.8170**	**277.8170**	**8.8100e-003**		**278.0021**

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	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869	0.0000	1,159.5310	1,159.5310	0.3553		1,166.9919
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**	**0.0000**	**1,159.5310**	**1,159.5310**	**0.3553**		**1,166.9919**

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	0.0500	0.4831	0.6810	1.2900e-003	0.0375	7.6800e-003	0.0452	0.0107	7.0700e-003	0.0178		127.6165	127.6165	9.3000e-004		127.6360
Worker	0.0535	0.0724	0.7557	1.8600e-003	0.1565	1.2600e-003	0.1578	0.0415	1.1600e-003	0.0427		150.2005	150.2005	7.8800e-003		150.3661
Total	**0.1036**	**0.5556**	**1.4367**	**3.1500e-003**	**0.1940**	**8.9400e-003**	**0.2030**	**0.0522**	**8.2300e-003**	**0.0604**		**277.8170**	**277.8170**	**8.8100e-003**		**278.0021**

3.6 Paving - 2017

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	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572		1,068.9366	1,068.9366	0.2968		1,075.1698
Paving	0.2201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2607**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**		**1,068.9366**	**1,068.9366**	**0.2968**		**1,075.1698**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

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	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572	0.0000	1,068.9366	1,068.9366	0.2968		1,075.1698
Paving	0.2201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2607**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**	**0.0000**	**1,068.9366**	**1,068.9366**	**0.2968**		**1,075.1698**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

3.7 Architectural Coating - 2017

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	71.9074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**72.2397**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0115	0.0155	0.1619	4.0000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		32.1858	32.1858	1.6900e-003		32.2213
Total	**0.0115**	**0.0155**	**0.1619**	**4.0000e-004**	**0.0335**	**2.7000e-004**	**0.0338**	**8.8900e-003**	**2.5000e-004**	**9.1400e-003**		**32.1858**	**32.1858**	**1.6900e-003**		**32.2213**

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	71.9074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**72.2397**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0115	0.0155	0.1619	4.0000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		32.1858	32.1858	1.6900e-003		32.2213
Total	**0.0115**	**0.0155**	**0.1619**	**4.0000e-004**	**0.0335**	**2.7000e-004**	**0.0338**	**8.8900e-003**	**2.5000e-004**	**9.1400e-003**		**32.1858**	**32.1858**	**1.6900e-003**		**32.2213**

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	0.2833	0.8638	3.2303	8.8200e-003	0.6208	0.0128	0.6335	0.1659	0.0118	0.1776		729.8411	729.8411	0.0277		730.4228
Unmitigated	0.2833	0.8638	3.2303	8.8200e-003	0.6208	0.0128	0.6335	0.1659	0.0118	0.1776		729.8411	729.8411	0.0277		730.4228

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	57.25	12.32	5.10	139,756	139,756
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	25.25	25.25	25.25	108,225	108,225
Total	82.50	37.58	30.35	247,981	247,981

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511172	0.060004	0.180590	0.138995	0.042398	0.006681	0.016070	0.032568	0.001938	0.002493	0.004370	0.000586	0.002135

5.0 Energy Detail

4.4 Fleet Mix

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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 Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	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 Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Unrefrigerated Warehouse-No Rail	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.7674	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143
Unmitigated	0.7674	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143

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	0.0985					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6683					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.1000e-004	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143
Total	**0.7674**	**6.0000e-005**	**6.4100e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0136**	**0.0136**	**4.0000e-005**		**0.0143**

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	0.0985					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6683					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.1000e-004	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143
Total	**0.7674**	**6.0000e-005**	**6.4100e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0136**	**0.0136**	**4.0000e-005**		**0.0143**

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
Cranes	1	4.00	100	226	0.29	Diesel
Forklifts	1	4.00	100	89	0.20	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					

Forklifts	0.0895	0.7912	0.6086	7.7000e-004		0.0631	0.0631		0.0581	0.0581		77.2783	77.2783	0.0241		77.7835
Cranes	0.2774	3.3147	1.2256	2.8000e-003		0.1435	0.1435		0.1320	0.1320		282.1546	282.1546	0.0878		283.9993
Total	**0.3669**	**4.1059**	**1.8342**	**3.5700e-003**		**0.2066**	**0.2066**		**0.1901**	**0.1901**		**359.4329**	**359.4329**	**0.1119**		**361.7827**

10.0 Vegetation

Wetlands - Visitor Center - Operations Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	3.35	1000sqft	0.08	3,350.00	0
Parking Lot	45.00	Space	0.41	18,000.00	0
City Park	73.00	Acre	73.00	3,179,880.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - CalEEMod land use selections are poor for this type of use.
Government office building used for visitor center,
and City Park used for wetlands restoration area.

Consumer Products - No "consumer products" used in the wetlands preserve.

Energy Use - All electricity will be generated on-site

Water And Wastewater - Wetlands (City Park) water usage eliminated.

Operational Off-Road Equipment - Forklift and crane will be needed to off-load flatbed trucks with piping and other supplies.

Area Coating - Estimate of visitor center area.

Table Name	Column Name	Default Value	New Value

tblAreaCoating	Area_Nonresidential_Exterior	1591885	36000
tblAreaCoating	Area_Nonresidential_Interior	4775655	36000
tblProjectCharacteristics	OperationalYear	2014	2018

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	11.3805	68.3459	140.3552	0.3181	18.3050	2.7898	20.6344	9.9840	2.5666	12.1617	0.0000	27,469.6441	27,469.6441	1.9446	0.0000	27,510.4803
2019	10.4675	62.4903	132.5845	0.3172	18.3053	2.0015	20.3068	4.9191	1.8682	6.7872	0.0000	26,698.3554	26,698.3554	1.3649	0.0000	26,727.0191
2020	9.7588	55.6220	126.4665	0.3171	18.3056	1.7774	20.0830	4.9192	1.6587	6.5779	0.0000	25,874.8932	25,874.8932	1.3201	0.0000	25,902.6148
2021	9.1969	48.8242	121.4915	0.3174	18.3056	1.5707	19.8763	4.9192	1.4652	6.3844	0.0000	25,671.2175	25,671.2175	1.2873	0.0000	25,698.2497
2022	8.7238	44.2671	116.8958	0.3172	18.3057	1.4159	19.7216	4.9192	1.3204	6.2395	0.0000	25,453.0877	25,453.0877	1.2596	0.0000	25,479.5393
2023	984.6532	37.8954	112.0117	0.3166	18.3057	1.3006	19.6062	4.9192	1.2121	6.1313	0.0000	25,212.9750	25,212.9750	1.2254	0.0000	25,238.7084
Total	**1,034.1806**	**317.4449**	**749.8052**	**1.9035**	**109.8329**	**10.8558**	**120.2283**	**34.5798**	**10.0911**	**44.2820**	**0.0000**	**156,380.1730**	**156,380.1730**	**8.4018**	**0.0000**	**156,556.6115**

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	11.3805	68.3459	140.3552	0.3181	18.3050	2.7898	20.6344	9.9840	2.5666	12.1617	0.0000	27,469.6441	27,469.6441	1.9446	0.0000	27,510.4803
2019	10.4675	62.4903	132.5845	0.3172	18.3053	2.0015	20.3068	4.9191	1.8682	6.7872	0.0000	26,698.3554	26,698.3554	1.3649	0.0000	26,727.0191
2020	9.7588	55.6220	126.4665	0.3171	18.3056	1.7774	20.0830	4.9192	1.6587	6.5779	0.0000	25,874.8932	25,874.8932	1.3201	0.0000	25,902.6148
2021	9.1969	48.8242	121.4915	0.3174	18.3056	1.5707	19.8763	4.9192	1.4652	6.3844	0.0000	25,671.2175	25,671.2175	1.2873	0.0000	25,698.2497
2022	8.7238	44.2671	116.8958	0.3172	18.3057	1.4159	19.7216	4.9192	1.3204	6.2395	0.0000	25,453.0877	25,453.0877	1.2596	0.0000	25,479.5393
2023	984.6532	37.8954	112.0117	0.3166	18.3057	1.3006	19.6062	4.9192	1.2121	6.1313	0.0000	25,212.9750	25,212.9750	1.2254	0.0000	25,238.7084
Total	**1,034.1806**	**317.4449**	**749.8052**	**1.9035**	**109.8329**	**10.8558**	**120.2283**	**34.5798**	**10.0911**	**44.2820**	**0.0000**	**156,380.1730**	**156,380.1730**	**8.4018**	**0.0000**	**156,556.6115**

	ROG	NOx	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	0.2298	1.2000e-004	0.0126	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0266	0.0266	7.0000e-005		0.0281
Energy	1.0800e-003	9.8300e-003	8.2600e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004		11.8019	11.8019	2.3000e-004	2.2000e-004	11.8738
Mobile	1.0777	2.7288	10.7607	0.0267	1.8618	0.0392	1.9009	0.4975	0.0361	0.5336		2,209.9289	2,209.9289	0.0856		2,211.7267
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**1.3085**	**2.7387**	**10.7815**	**0.0268**	**1.8618**	**0.0400**	**1.9017**	**0.4975**	**0.0369**	**0.5344**		**2,221.7574**	**2,221.7574**	**0.0859**	**2.2000e-004**	**2,223.6286**

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	0.2298	1.2000e-004	0.0126	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0266	0.0266	7.0000e-005		0.0281
Energy	1.0800e-003	9.8300e-003	8.2600e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004		11.8019	11.8019	2.3000e-004	2.2000e-004	11.8738
Mobile	1.0777	2.7288	10.7607	0.0267	1.8618	0.0392	1.9009	0.4975	0.0361	0.5336		2,209.9289	2,209.9289	0.0856		2,211.7267
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**1.3085**	**2.7387**	**10.7815**	**0.0268**	**1.8618**	**0.0400**	**1.9017**	**0.4975**	**0.0369**	**0.5344**		**2,221.7574**	**2,221.7574**	**0.0859**	**2.2000e-004**	**2,223.6286**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2018	4/6/2018	5	70	
2	Site Preparation	Site Preparation	4/7/2018	6/1/2018	5	40	
3	Grading	Grading	6/2/2018	11/2/2018	5	110	
4	Building Construction	Building Construction	11/3/2018	2/3/2023	5	1110	
5	Paving	Paving	2/4/2023	5/19/2023	5	75	
6	Architectural Coating	Architectural Coating	5/20/2023	9/1/2023	5	75	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,775,655; Non-Residential Outdoor: 1,591,885 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Building Construction	9	1,344.00	525.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	269.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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	3.5606	36.8310	31.7250	0.0399		1.8090	1.8090		1.6856	1.6856		3,983.3282	3,983.3282	1.1015		4,006.4585
Total	**3.5606**	**36.8310**	**31.7250**	**0.0399**		**1.8090**	**1.8090**		**1.6856**	**1.6856**		**3,983.3282**	**3,983.3282**	**1.1015**		**4,006.4585**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

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	3.5606	36.8310	31.7250	0.0399		1.8090	1.8090		1.6856	1.6856	0.0000	3,983.3282	3,983.3282	1.1015		4,006.4585
Total	**3.5606**	**36.8310**	**31.7250**	**0.0399**		**1.8090**	**1.8090**		**1.6856**	**1.6856**	**0.0000**	**3,983.3282**	**3,983.3282**	**1.1015**		**4,006.4585**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

3.3 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.2921	45.6088	36.2346	0.0391		2.3654	2.3654		2.1762	2.1762		3,939.7731	3,939.7731	1.2265		3,965.5297
Total	**4.2921**	**45.6088**	**36.2346**	**0.0391**	**18.0663**	**2.3654**	**20.4317**	**9.9307**	**2.1762**	**12.1069**		**3,939.7731**	**3,939.7731**	**1.2265**		**3,965.5297**

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	0.0619	0.0845	0.8792	2.3900e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4600e-003	0.0548		185.9041	185.9041	9.4100e-003		186.1016
Total	**0.0619**	**0.0845**	**0.8792**	**2.3900e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4600e-003**	**0.0548**		**185.9041**	**185.9041**	**9.4100e-003**		**186.1016**

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.2921	45.6088	36.2346	0.0391		2.3654	2.3654		2.1762	2.1762	0.0000	3,939.7731	3,939.7731	1.2265		3,965.5297
Total	**4.2921**	**45.6088**	**36.2346**	**0.0391**	**18.0663**	**2.3654**	**20.4317**	**9.9307**	**2.1762**	**12.1069**	**0.0000**	**3,939.7731**	**3,939.7731**	**1.2265**		**3,965.5297**

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	0.0619	0.0845	0.8792	2.3900e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4600e-003	0.0548		185.9041	185.9041	9.4100e-003		186.1016
Total	**0.0619**	**0.0845**	**0.8792**	**2.3900e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4600e-003**	**0.0548**		**185.9041**	**185.9041**	**9.4100e-003**		**186.1016**

3.4 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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	5.2895	59.5338	42.3068	0.0617		2.7880	2.7880		2.5650	2.5650		6,212.8042	6,212.8042	1.9341		6,253.4209
Total	**5.2895**	**59.5338**	**42.3068**	**0.0617**	**8.6733**	**2.7880**	**11.4614**	**3.5965**	**2.5650**	**6.1615**		**6,212.8042**	**6,212.8042**	**1.9341**		**6,253.4209**

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	0.0688	0.0939	0.9769	2.6500e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6200e-003	0.0609		206.5601	206.5601	0.0105		206.7796
Total	**0.0688**	**0.0939**	**0.9769**	**2.6500e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6200e-003**	**0.0609**		**206.5601**	**206.5601**	**0.0105**		**206.7796**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	5.2895	59.5338	42.3068	0.0617		2.7880	2.7880		2.5650	2.5650	0.0000	6,212.8041	6,212.8041	1.9341		6,253.4209
Total	**5.2895**	**59.5338**	**42.3068**	**0.0617**	**8.6733**	**2.7880**	**11.4614**	**3.5965**	**2.5650**	**6.1615**	**0.0000**	**6,212.8041**	**6,212.8041**	**1.9341**		**6,253.4209**

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	0.0688	0.0939	0.9769	2.6500e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6200e-003	0.0609		206.5601	206.5601	0.0105		206.7796

Total	**0.0688**	**0.0939**	**0.9769**	**2.6500e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6200e-003**	**0.0609**		**206.5601**	**206.5601**	**0.0105**		**206.7796**

3.5 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	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

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	4.0897	38.7783	57.1769	0.1131	3.2823	0.6335	3.9158	0.9349	0.5827	1.5176		10,978.8670	10,978.8670	0.0810		10,980.5677
Worker	4.6221	6.3068	65.6456	0.1782	15.0228	0.1176	15.1403	3.9841	0.1088	4.0929		13,880.8382	13,880.8382	0.7024		13,895.5887
Total	**8.7118**	**45.0850**	**122.8225**	**0.2913**	**18.3050**	**0.7511**	**19.0561**	**4.9190**	**0.6915**	**5.6105**		**24,859.7052**	**24,859.7052**	**0.7834**		**24,876.1564**

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	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

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	4.0897	38.7783	57.1769	0.1131	3.2823	0.6335	3.9158	0.9349	0.5827	1.5176		10,978.8670	10,978.8670	0.0810		10,980.5677
Worker	4.6221	6.3068	65.6456	0.1782	15.0228	0.1176	15.1403	3.9841	0.1088	4.0929		13,880.8382	13,880.8382	0.7024		13,895.5887
Total	**8.7118**	**45.0850**	**122.8225**	**0.2913**	**18.3050**	**0.7511**	**19.0561**	**4.9190**	**0.6915**	**5.6105**		**24,859.7052**	**24,859.7052**	**0.7834**		**24,876.1564**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

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	3.8654	35.7421	55.2984	0.1126	3.2826	0.6009	3.8835	0.9350	0.5528	1.4878		10,765.1664	10,765.1664	0.0795		10,766.8361
Worker	4.2504	5.7832	60.1658	0.1778	15.0228	0.1155	15.1383	3.9841	0.1071	4.0912		13,352.4273	13,352.4273	0.6575		13,366.2351
Total	**8.1158**	**41.5253**	**115.4642**	**0.2904**	**18.3053**	**0.7164**	**19.0217**	**4.9191**	**0.6599**	**5.5789**		**24,117.5937**	**24,117.5937**	**0.7370**		**24,133.0712**

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

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	3.8654	35.7421	55.2984	0.1126	3.2826	0.6009	3.8835	0.9350	0.5528	1.4878		10,765.1664	10,765.1664	0.0795		10,766.8361
Worker	4.2504	5.7832	60.1658	0.1778	15.0228	0.1155	15.1383	3.9841	0.1071	4.0912		13,352.4273	13,352.4273	0.6575		13,366.2351
Total	**8.1158**	**41.5253**	**115.4642**	**0.2904**	**18.3053**	**0.7164**	**19.0217**	**4.9191**	**0.6599**	**5.5789**		**24,117.5937**	**24,117.5937**	**0.7370**		**24,133.0712**

3.5 Building Construction - 2020

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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

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	3.6648	31.1793	53.6930	0.1125	3.2828	0.5498	3.8327	0.9351	0.5058	1.4409		10,522.5450	10,522.5450	0.0779		10,524.1815

Worker	3.9827	5.3588	55.9651	0.1777	15.0228	0.1148	15.1375	3.9841	0.1064	4.0905		12,809.8683	12,809.8683	0.6227		12,822.9453
Total	**7.6475**	**36.5381**	**109.6581**	**0.2903**	**18.3056**	**0.6646**	**18.9702**	**4.9192**	**0.6123**	**5.5314**		**23,332.4133**	**23,332.4133**	**0.7006**		**23,347.1268**

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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

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	3.6648	31.1793	53.6930	0.1125	3.2828	0.5498	3.8327	0.9351	0.5058	1.4409		10,522.5450	10,522.5450	0.0779		10,524.1815
Worker	3.9827	5.3588	55.9651	0.1777	15.0228	0.1148	15.1375	3.9841	0.1064	4.0905		12,809.8683	12,809.8683	0.6227		12,822.9453
Total	**7.6475**	**36.5381**	**109.6581**	**0.2903**	**18.3056**	**0.6646**	**18.9702**	**4.9192**	**0.6123**	**5.5314**		**23,332.4133**	**23,332.4133**	**0.7006**		**23,347.1268**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

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	3.5359	26.4749	52.4078	0.1124	3.2829	0.5009	3.7837	0.9351	0.4608	1.3959		10,517.8158	10,517.8158	0.0786		10,519.4663
Worker	3.7679	5.0090	52.5461	0.1781	15.0228	0.1149	15.1377	3.9841	0.1066	4.0907		12,610.6199	12,610.6199	0.5961		12,623.1372
Total	**7.3038**	**31.4839**	**104.9538**	**0.2905**	**18.3056**	**0.6158**	**18.9214**	**4.9192**	**0.5674**	**5.4866**		**23,128.4357**	**23,128.4357**	**0.6747**		**23,142.6035**

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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

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	3.5359	26.4749	52.4078	0.1124	3.2829	0.5009	3.7837	0.9351	0.4608	1.3959		10,517.8158	10,517.8158	0.0786		10,519.4663
Worker	3.7679	5.0090	52.5461	0.1781	15.0228	0.1149	15.1377	3.9841	0.1066	4.0907		12,610.6199	12,610.6199	0.5961		12,623.1372
Total	**7.3038**	**31.4839**	**104.9538**	**0.2905**	**18.3056**	**0.6158**	**18.9214**	**4.9192**	**0.5674**	**5.4866**		**23,128.4357**	**23,128.4357**	**0.6747**		**23,142.6035**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

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	3.4564	24.0340	51.1810	0.1123	3.2829	0.4954	3.7783	0.9351	0.4557	1.3908		10,508.3883	10,508.3883	0.0803		10,510.0754
Worker	3.5682	4.6967	49.3873	0.1780	15.0228	0.1148	15.1376	3.9841	0.1065	4.0906		12,400.9498	12,400.9498	0.5707		12,412.9352
Total	**7.0246**	**28.7307**	**100.5683**	**0.2904**	**18.3057**	**0.6102**	**18.9158**	**4.9192**	**0.5622**	**5.4814**		**22,909.3381**	**22,909.3381**	**0.6511**		**22,923.0106**

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	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

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	3.4564	24.0340	51.1810	0.1123	3.2829	0.4954	3.7783	0.9351	0.4557	1.3908		10,508.3883	10,508.3883	0.0803		10,510.0754
Worker	3.5682	4.6967	49.3873	0.1780	15.0228	0.1148	15.1376	3.9841	0.1065	4.0906		12,400.9498	12,400.9498	0.5707		12,412.9352
Total	**7.0246**	**28.7307**	**100.5683**	**0.2904**	**18.3057**	**0.6102**	**18.9158**	**4.9192**	**0.5622**	**5.4814**		**22,909.3381**	**22,909.3381**	**0.6511**		**22,923.0106**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557		2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**		**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

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	3.2127	19.1635	49.2977	0.1118	3.2829	0.4891	3.7720	0.9351	0.4500	1.3851		10,458.6782	10,458.6782	0.0726		10,460.2036
Worker	3.3807	4.4192	46.5048	0.1780	15.0228	0.1148	15.1375	3.9841	0.1065	4.0906		12,209.6706	12,209.6706	0.5483		12,221.1857
Total	**6.5935**	**23.5827**	**95.8025**	**0.2898**	**18.3057**	**0.6038**	**18.9095**	**4.9192**	**0.5564**	**5.4756**		**22,668.3488**	**22,668.3488**	**0.6210**		**22,681.3893**

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	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**	**0.0000**	**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

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	3.2127	19.1635	49.2977	0.1118	3.2829	0.4891	3.7720	0.9351	0.4500	1.3851		10,458.6782	10,458.6782	0.0726		10,460.2036
Worker	3.3807	4.4192	46.5048	0.1780	15.0228	0.1148	15.1375	3.9841	0.1065	4.0906		12,209.6706	12,209.6706	0.5483		12,221.1857
Total	**6.5935**	**23.5827**	**95.8025**	**0.2898**	**18.3057**	**0.6038**	**18.9095**	**4.9192**	**0.5564**	**5.4756**		**22,668.3488**	**22,668.3488**	**0.6210**		**22,681.3893**

3.6 Paving - 2023

Unmitigated Construction On-Site

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

Category	lb/day										lb/day					
Off-Road	1.0128	9.9983	14.2850	0.0223		0.5010	0.5010		0.4609	0.4609		2,160.6139	2,160.6139	0.6988		2,175.2884
Paving	0.0143					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0271**	**9.9983**	**14.2850**	**0.0223**		**0.5010**	**0.5010**		**0.4609**	**0.4609**		**2,160.6139**	**2,160.6139**	**0.6988**		**2,175.2884**

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	0.0377	0.0493	0.5190	1.9900e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		136.2686	136.2686	6.1200e-003		136.3972
Total	**0.0377**	**0.0493**	**0.5190**	**1.9900e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**136.2686**	**136.2686**	**6.1200e-003**		**136.3972**

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	1.0128	9.9983	14.2850	0.0223		0.5010	0.5010		0.4609	0.4609	0.0000	2,160.6139	2,160.6139	0.6988		2,175.2884
Paving	0.0143					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0271**	**9.9983**	**14.2850**	**0.0223**		**0.5010**	**0.5010**		**0.4609**	**0.4609**	**0.0000**	**2,160.6139**	**2,160.6139**	**0.6988**		**2,175.2884**

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	0.0377	0.0493	0.5190	1.9900e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		136.2686	136.2686	6.1200e-003		136.3972
Total	**0.0377**	**0.0493**	**0.5190**	**1.9900e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**136.2686**	**136.2686**	**6.1200e-003**		**136.3972**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	983.7849					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8017
Total	**983.9766**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8017**

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	0.6767	0.8845	9.3079	0.0356	3.0068	0.0230	3.0298	0.7974	0.0213	0.8187		2,443.7510	2,443.7510	0.1098		2,446.0558
Total	**0.6767**	**0.8845**	**9.3079**	**0.0356**	**3.0068**	**0.0230**	**3.0298**	**0.7974**	**0.0213**	**0.8187**		**2,443.7510**	**2,443.7510**	**0.1098**		**2,446.0558**

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	983.7849					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8017
Total	**983.9766**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8017**

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	0.6767	0.8845	9.3079	0.0356	3.0068	0.0230	3.0298	0.7974	0.0213	0.8187		2,443.7510	2,443.7510	0.1098		2,446.0558

Total	**0.6767**	**0.8845**	**9.3079**	**0.0356**	**3.0068**	**0.0230**	**3.0298**	**0.7974**	**0.0213**	**0.8187**		**2,443.7510**	**2,443.7510**	**0.1098**		**2,446.0558**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0777	2.7288	10.7607	0.0267	1.8618	0.0392	1.9009	0.4975	0.0361	0.5336		2,209.9289	2,209.9289	0.0856		2,211.7267
Unmitigated	1.0777	2.7288	10.7607	0.0267	1.8618	0.0392	1.9009	0.4975	0.0361	0.5336		2,209.9289	2,209.9289	0.0856		2,211.7267

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	116.07	116.07	116.07	333,996	333,996
Government Office Building	230.92	0.00	0.00	388,394	388,394
Parking Lot	0.00	0.00	0.00		
Total	346.99	116.07	116.07	722,390	722,390

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Government Office Building	16.60	8.40	6.90	33.00	62.00	5.00	50	34	16
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH

0.511172	0.060004	0.180590	0.138995	0.042398	0.006681	0.016070	0.032568	0.001938	0.002493	0.004370	0.000586	0.002135	

5.0 Energy Detail

4.4 Fleet Mix

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	1.0800e-003	9.8300e-003	8.2600e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004		11.8019	11.8019	2.3000e-004	2.2000e-004	11.8738
NaturalGas Unmitigated	1.0800e-003	9.8300e-003	8.2600e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004		11.8019	11.8019	2.3000e-004	2.2000e-004	11.8738

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	100.316	1.0800e-003	9.8300e-003	8.2600e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004		11.8019	11.8019	2.3000e-004	2.2000e-004	11.8738
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		**1.0800e-003**	**9.8300e-003**	**8.2600e-003**	**6.0000e-005**		**7.5000e-004**	**7.5000e-004**		**7.5000e-004**	**7.5000e-004**		**11.8019**	**11.8019**	**2.3000e-004**	**2.2000e-004**	**11.8738**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	0.100316	1.0800e-003	9.8300e-003	8.2600e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004		11.8019	11.8019	2.3000e-004	2.2000e-004	11.8738
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		**1.0800e-003**	**9.8300e-003**	**8.2600e-003**	**6.0000e-005**		**7.5000e-004**	**7.5000e-004**		**7.5000e-004**	**7.5000e-004**		**11.8019**	**11.8019**	**2.3000e-004**	**2.2000e-004**	**11.8738**

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	0.2298	1.2000e-004	0.0126	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0266	0.0266	7.0000e-005		0.0281
Unmitigated	0.2298	1.2000e-004	0.0126	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0266	0.0266	7.0000e-005		0.0281

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	0.2286					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2000e-003	1.2000e-004	0.0126	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0266	0.0266	7.0000e-005		0.0281
Total	**0.2298**	**1.2000e-004**	**0.0126**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0266**	**0.0266**	**7.0000e-005**		**0.0281**

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	0.2286					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2000e-003	1.2000e-004	0.0126	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0266	0.0266	7.0000e-005		0.0281
Total	**0.2298**	**1.2000e-004**	**0.0126**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0266**	**0.0266**	**7.0000e-005**		**0.0281**

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
Cranes	0	8.00	260	226	0.29	Diesel

Forklifts	0	8.00	260	89	0.20	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Cranes	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

10.0 Vegetation

Wetlands - LCWA Site - Operations Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.00	1000sqft	0.12	5,200.00	0
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	0.02	1,000.00	0
Parking Lot	0.00	Space	0.42	18,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Some storage will occur on-site, so a minimal amount of warehouse is included even though there is no building.

Energy Use - All electricity will be generated on-site

Operational Off-Road Equipment - Forklift and crane will be needed to off-load flatbed trucks with piping and other supplies.

Water And Wastewater - Operations will require 10,000 gallons per day, or 5,000 gallons per day per each site (Pumpkin Patch and LCWA).

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	4.29	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	2.23	0.00
tblEnergyUse	NT24E	4.62	0.00

tblEnergyUse	NT24E	1.34	0.00
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	5.62	0.00
tblEnergyUse	T24E	0.79	0.00
tblEnergyUse	T24NG	10.54	0.00
tblEnergyUse	T24NG	0.88	0.00
tblLandUse	LandUseSquareFeet	0.00	5,200.00
tblLandUse	LandUseSquareFeet	0.00	18,800.00
tblLandUse	LotAcreage	0.00	0.12
tblLandUse	LotAcreage	0.00	0.42
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	100.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	100.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.29	0.29
tblOperationalOffRoadEquipment	OperLoadFactor	0.20	0.20
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblWater	OutdoorWaterUseRate	0.00	1,825,000.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

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

2017	31.6911	13.0477	9.1223	0.0135	0.8645	0.8614	1.5920	0.4434	0.7925	1.1372	0.0000	1,351.8948	1,351.8948	0.3615	0.0000	1,359.4869
Total	**31.6911**	**13.0477**	**9.1223**	**0.0135**	**0.8645**	**0.8614**	**1.5920**	**0.4434**	**0.7925**	**1.1372**	**0.0000**	**1,351.8948**	**1,351.8948**	**0.3615**	**0.0000**	**1,359.4869**

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					
2017	31.6911	13.0477	9.1223	0.0135	0.8645	0.8614	1.5920	0.4434	0.7925	1.1372	0.0000	1,351.8948	1,351.8948	0.3615	0.0000	1,359.4869
Total	**31.6911**	**13.0477**	**9.1223**	**0.0135**	**0.8645**	**0.8614**	**1.5920**	**0.4434**	**0.7925**	**1.1372**	**0.0000**	**1,351.8948**	**1,351.8948**	**0.3615**	**0.0000**	**1,359.4869**

	ROG	**NOx**	**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	0.5380	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	9.5100e-003	0.0320	0.1167	3.3000e-004	0.0235	4.8000e-004	0.0240	6.2900e-003	4.4000e-004	6.7300e-003		27.5677	27.5677	1.0400e-003		27.5895

Offroad	0.3669	4.1059	1.8342	3.5700e-003		0.2066	0.2066		0.1901	0.1901		359.4329	359.4329	0.1119		361.7827
Total	**0.9144**	**4.1379**	**1.9510**	**3.9000e-003**	**0.0235**	**0.2071**	**0.2306**	**6.2900e-003**	**0.1905**	**0.1968**		**387.0008**	**387.0008**	**0.1129**	**0.0000**	**389.3724**

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	0.5380	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	9.5100e-003	0.0320	0.1167	3.3000e-004	0.0235	4.8000e-004	0.0240	6.2900e-003	4.4000e-004	6.7300e-003		27.5677	27.5677	1.0400e-003		27.5895
Offroad	0.3669	4.1059	1.8342	3.5700e-003		0.2066	0.2066		0.1901	0.1901		359.4329	359.4329	0.1119		361.7827
Total	**0.9144**	**4.1379**	**1.9510**	**3.9000e-003**	**0.0235**	**0.2071**	**0.2306**	**6.2900e-003**	**0.1905**	**0.1968**		**387.0008**	**387.0008**	**0.1129**	**0.0000**	**389.3724**

	ROG	**NOx**	**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	**40.12**	**99.23**	**94.01**	**91.54**	**0.00**	**99.77**	**89.59**	**0.00**	**99.77**	**96.58**	**0.00**	**92.88**	**92.88**	**99.08**	**0.00**	**92.91**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/13/2017	5	10	
2	Site Preparation	Site Preparation	1/14/2017	1/16/2017	5	1	
3	Grading	Grading	1/17/2017	1/18/2017	5	2	
4	Building Construction	Building Construction	1/19/2017	6/7/2017	5	100	
5	Paving	Paving	6/8/2017	6/14/2017	5	5	

6	Architectural Coating	Architectural Coating	6/15/2017	6/21/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,146; Non-Residential Outdoor: 3,382 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930		1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**		**0.7266**	**0.7266**		**0.6930**	**0.6930**		**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

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	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930	0.0000	1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**		**0.7266**	**0.7266**		**0.6930**	**0.6930**	**0.0000**	**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

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

Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089		955.8663	955.8663	0.2929		962.0167
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**		**955.8663**	**955.8663**	**0.2929**		**962.0167**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089	0.0000	955.8663	955.8663	0.2929		962.0167
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**	**0.0000**	**955.8663**	**955.8663**	**0.2929**		**962.0167**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930		1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**	**0.7528**	**0.7266**	**1.4794**	**0.4138**	**0.6930**	**1.1068**		**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930	0.0000	1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**	**0.7528**	**0.7266**	**1.4794**	**0.4138**	**0.6930**	**1.1068**	**0.0000**	**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043

Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

3.5 Building Construction - 2017

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	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869		1,159.5310	1,159.5310	0.3553		1,166.9919
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**		**1,159.5310**	**1,159.5310**	**0.3553**		**1,166.9919**

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	0.0333	0.3221	0.4540	8.6000e-004	0.0250	5.1200e-003	0.0301	7.1200e-003	4.7100e-003	0.0118		85.0777	85.0777	6.2000e-004		85.0907
Worker	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0716**	**0.3738**	**0.9938**	**2.1900e-003**	**0.1368**	**6.0200e-003**	**0.1428**	**0.0368**	**5.5400e-003**	**0.0423**		**192.3638**	**192.3638**	**6.2500e-003**		**192.4950**

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	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869	0.0000	1,159.5310	1,159.5310	0.3553		1,166.9919
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**	**0.0000**	**1,159.5310**	**1,159.5310**	**0.3553**		**1,166.9919**

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	0.0333	0.3221	0.4540	8.6000e-004	0.0250	5.1200e-003	0.0301	7.1200e-003	4.7100e-003	0.0118		85.0777	85.0777	6.2000e-004		85.0907
Worker	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0716**	**0.3738**	**0.9938**	**2.1900e-003**	**0.1368**	**6.0200e-003**	**0.1428**	**0.0368**	**5.5400e-003**	**0.0423**		**192.3638**	**192.3638**	**6.2500e-003**		**192.4950**

3.6 Paving - 2017

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	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572		1,068.9366	1,068.9366	0.2968		1,075.1698
Paving	0.2201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Total	**1.2607**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**		**1,068.9366**	**1,068.9366**	**0.2968**		**1,075.1698**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

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	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572	0.0000	1,068.9366	1,068.9366	0.2968		1,075.1698
Paving	0.2201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2607**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**	**0.0000**	**1,068.9366**	**1,068.9366**	**0.2968**		**1,075.1698**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

3.7 Architectural Coating - 2017

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	31.3511					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**31.6835**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	7.6500e-003	0.0104	0.1080	2.7000e-004	0.0224	1.8000e-004	0.0225	5.9300e-003	1.7000e-004	6.0900e-003		21.4572	21.4572	1.1300e-003		21.4809
Total	**7.6500e-003**	**0.0104**	**0.1080**	**2.7000e-004**	**0.0224**	**1.8000e-004**	**0.0225**	**5.9300e-003**	**1.7000e-004**	**6.0900e-003**		**21.4572**	**21.4572**	**1.1300e-003**		**21.4809**

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	31.3511					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**31.6835**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	7.6500e-003	0.0104	0.1080	2.7000e-004	0.0224	1.8000e-004	0.0225	5.9300e-003	1.7000e-004	6.0900e-003		21.4572	21.4572	1.1300e-003		21.4809
Total	**7.6500e-003**	**0.0104**	**0.1080**	**2.7000e-004**	**0.0224**	**1.8000e-004**	**0.0225**	**5.9300e-003**	**1.7000e-004**	**6.0900e-003**		**21.4572**	**21.4572**	**1.1300e-003**		**21.4809**

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	9.5100e-003	0.0320	0.1167	3.3000e-004	0.0235	4.8000e-004	0.0240	6.2900e-003	4.4000e-004	6.7300e-003		27.5677	27.5677	1.0400e-003		27.5895
Unmitigated	9.5100e-003	0.0320	0.1167	3.3000e-004	0.0235	4.8000e-004	0.0240	6.2900e-003	4.4000e-004	6.7300e-003		27.5677	27.5677	1.0400e-003		27.5895

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	2.59	2.59	2.59	11,100	11,100
Total	2.59	2.59	2.59	11,100	11,100

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511172	0.060004	0.180590	0.138995	0.042398	0.006681	0.016070	0.032568	0.001938	0.002493	0.004370	0.000586	0.002135

5.0 Energy Detail

4.4 Fleet Mix

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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 Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	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 Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.5380	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.5380	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.5380**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.5380**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Cranes	1	4.00	100	226	0.29	Diesel
Forklifts	1	4.00	100	89	0.20	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.0895	0.7912	0.6086	7.7000e-004		0.0631	0.0631		0.0581	0.0581		77.2783	77.2783	0.0241		77.7835
Cranes	0.2774	3.3147	1.2256	2.8000e-003		0.1435	0.1435		0.1320	0.1320		282.1546	282.1546	0.0878		283.9993
Total	**0.3669**	**4.1059**	**1.8342**	**3.5700e-003**		**0.2066**	**0.2066**		**0.1901**	**0.1901**		**359.4329**	**359.4329**	**0.1119**		**361.7827**

10.0 Vegetation

Wetlands - Operation - Employee Travel Only Existing

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.20	1000sqft	0.12	5,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Off-road Equipment -

Vehicle Trips - Based on 15 workers per day and a trip to and from site each day.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	100.00	0.00
tblAreaCoating	Area_EF_Parking	100	0
tblProjectCharacteristics	OperationalYear	2018	2017
tblVehicleTrips	WD_TR	11.03	5.77

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					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	3.5826	0.0000	0.0000	3.3625	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.5826**	**0.0000**	**0.0000**	**3.3625**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	3.5826	0.0000	0.0000	3.3625	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.5826**	**0.0000**	**0.0000**	**3.3625**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1162	1.0000e-005	5.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1400e-003	1.1400e-003	0.0000		1.2200e-003
Energy	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5317	17.5317	3.4000e-004	3.2000e-004	17.6359
Mobile	0.0761	0.3585	0.9885	2.6700e-003	0.2055	3.7000e-003	0.2092	0.0550	3.4900e-003	0.0585		270.3827	270.3827	0.0165		270.7947
Total	**0.1939**	**0.3732**	**1.0013**	**2.7600e-003**	**0.2055**	**4.8100e-003**	**0.2103**	**0.0550**	**4.6000e-003**	**0.0596**		**287.9155**	**287.9155**	**0.0168**	**3.2000e-004**	**288.4318**

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	0.1162	1.0000e-005	5.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1400e-003	1.1400e-003	0.0000		1.2200e-003
Energy	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5317	17.5317	3.4000e-004	3.2000e-004	17.6359
Mobile	0.0761	0.3585	0.9885	2.6700e-003	0.2055	3.7000e-003	0.2092	0.0550	3.4900e-003	0.0585		270.3827	270.3827	0.0165		270.7947
Total	**0.1939**	**0.3732**	**1.0013**	**2.7600e-003**	**0.2055**	**4.8100e-003**	**0.2103**	**0.0550**	**4.6000e-003**	**0.0596**		**287.9155**	**287.9155**	**0.0168**	**3.2000e-004**	**288.4318**

	ROG	**NOx**	**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	Architectural Coating	Architectural Coating	1/17/2017	1/16/2017	5	5	
2	Building Construction	Building Construction	1/17/2017	1/16/2017	5	100	
3	Demolition	Demolition	1/17/2017	1/16/2017	5	10	
4	Grading	Grading	1/17/2017	1/16/2017	5	2	
5	Paving	Paving	1/17/2017	1/16/2017	5	5	
6	Site Preparation	Site Preparation	1/17/2017	1/16/2017	5	1	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,800; Non-Residential Outdoor: 2,600; Striped Parking Area: 0 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

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

3.3 Building Construction - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.4 Demolition - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

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

Mitigated Construction Off-Site

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

3.5 Grading - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

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

3.6 Paving - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.7 Site Preparation - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0761	0.3585	0.9885	2.6700e-003	0.2055	3.7000e-003	0.2092	0.0550	3.4900e-003	0.0585		270.3827	270.3827	0.0165		270.7947
Unmitigated	0.0761	0.3585	0.9885	2.6700e-003	0.2055	3.7000e-003	0.2092	0.0550	3.4900e-003	0.0585		270.3827	270.3827	0.0165		270.7947

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	30.00	12.79	5.46	77,440	77,440
Total	30.00	12.79	5.46	77,440	77,440

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.544524	0.045551	0.198447	0.129336	0.019135	0.005878	0.019261	0.027434	0.001914	0.002222	0.004531	0.000699	0.001069

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	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5317	17.5317	3.4000e-004	3.2000e-004	17.6359
NaturalGas Unmitigated	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5317	17.5317	3.4000e-004	3.2000e-004	17.6359

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 Office Building	149.019	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5317	17.5317	3.4000e-004	3.2000e-004	17.6359
Total		**1.6100e-003**	**0.0146**	**0.0123**	**9.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**		**17.5317**	**17.5317**	**3.4000e-004**	**3.2000e-004**	**17.6359**

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 Office Building	0.149019	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5317	17.5317	3.4000e-004	3.2000e-004	17.6359
Total		**1.6100e-003**	**0.0146**	**0.0123**	**9.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**		**17.5317**	**17.5317**	**3.4000e-004**	**3.2000e-004**	**17.6359**

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	0.1162	1.0000e-005	5.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1400e-003	1.1400e-003	0.0000		1.2200e-003
Unmitigated	0.1162	1.0000e-005	5.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1400e-003	1.1400e-003	0.0000		1.2200e-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	lb/day										lb/day					
Architectural Coating	0.0132					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1030					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	1.0000e-005	5.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1400e-003	1.1400e-003	0.0000		1.2200e-003
Total	**0.1162**	**1.0000e-005**	**5.4000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.1400e-003**	**1.1400e-003**	**0.0000**		**1.2200e-003**

Mitigated

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

SubCategory	lb/day										lb/day					
Architectural Coating	0.0132					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1030					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	1.0000e-005	5.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1400e-003	1.1400e-003	0.0000		1.2200e-003
Total	**0.1162**	**1.0000e-005**	**5.4000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.1400e-003**	**1.1400e-003**	**0.0000**		**1.2200e-003**

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

Wetlands - Operation - Employee Travel Only Future

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.20	1000sqft	0.12	5,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Off-road Equipment -

Vehicle Trips - Based on 25 workers per day and a trip to and from site each day.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	100.00	0.00
tblAreaCoating	Area_EF_Parking	100	0
tblProjectCharacteristics	OperationalYear	2018	2019
tblVehicleTrips	WD_TR	11.03	9.62

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					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	3.5826	0.0000	0.0000	3.3625	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.5826**	**0.0000**	**0.0000**	**3.3625**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	3.5826	0.0000	0.0000	3.3625	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.5826**	**0.0000**	**0.0000**	**3.3625**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1162	0.0000	5.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1400e-003	1.1400e-003	0.0000		1.2200e-003
Energy	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5317	17.5317	3.4000e-004	3.2000e-004	17.6359
Mobile	0.1027	0.5219	1.3333	4.2400e-003	0.3423	5.0200e-003	0.3474	0.0916	4.7200e-003	0.0963		429.9921	429.9921	0.0236		430.5824
Total	**0.2206**	**0.5365**	**1.3462**	**4.3300e-003**	**0.3423**	**6.1300e-003**	**0.3485**	**0.0916**	**5.8300e-003**	**0.0974**		**447.5250**	**447.5250**	**0.0240**	**3.2000e-004**	**448.2195**

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	0.1162	0.0000	5.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1400e-003	1.1400e-003	0.0000		1.2200e-003
Energy	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5317	17.5317	3.4000e-004	3.2000e-004	17.6359
Mobile	0.1027	0.5219	1.3333	4.2400e-003	0.3423	5.0200e-003	0.3474	0.0916	4.7200e-003	0.0963		429.9921	429.9921	0.0236		430.5824
Total	**0.2206**	**0.5365**	**1.3462**	**4.3300e-003**	**0.3423**	**6.1300e-003**	**0.3485**	**0.0916**	**5.8300e-003**	**0.0974**		**447.5250**	**447.5250**	**0.0240**	**3.2000e-004**	**448.2195**

	ROG	NOx	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	Architectural Coating	Architectural Coating	1/17/2017	1/16/2017	5	5	
2	Building Construction	Building Construction	1/17/2017	1/16/2017	5	100	
3	Demolition	Demolition	1/17/2017	1/16/2017	5	10	
4	Grading	Grading	1/17/2017	1/16/2017	5	2	
5	Paving	Paving	1/17/2017	1/16/2017	5	5	
6	Site Preparation	Site Preparation	1/17/2017	1/16/2017	5	1	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,800; Non-Residential Outdoor: 2,600; Striped Parking Area: 0 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

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

3.3 Building Construction - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.4 Demolition - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

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

Mitigated Construction Off-Site

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

3.5 Grading - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

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

3.6 Paving - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.7 Site Preparation - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1027	0.5219	1.3333	4.2400e-003	0.3423	5.0200e-003	0.3474	0.0916	4.7200e-003	0.0963		429.9921	429.9921	0.0236		430.5824
Unmitigated	0.1027	0.5219	1.3333	4.2400e-003	0.3423	5.0200e-003	0.3474	0.0916	4.7200e-003	0.0963		429.9921	429.9921	0.0236		430.5824

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	50.00	12.79	5.46	123,447	123,447
Total	50.00	12.79	5.46	123,447	123,447

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989

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	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5317	17.5317	3.4000e-004	3.2000e-004	17.6359
NaturalGas Unmitigated	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5317	17.5317	3.4000e-004	3.2000e-004	17.6359

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 Office Building	149.019	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5317	17.5317	3.4000e-004	3.2000e-004	17.6359
Total		**1.6100e-003**	**0.0146**	**0.0123**	**9.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**		**17.5317**	**17.5317**	**3.4000e-004**	**3.2000e-004**	**17.6359**

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 Office Building	0.149019	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.5317	17.5317	3.4000e-004	3.2000e-004	17.6359
Total		**1.6100e-003**	**0.0146**	**0.0123**	**9.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**		**17.5317**	**17.5317**	**3.4000e-004**	**3.2000e-004**	**17.6359**

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	0.1162	0.0000	5.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1400e-003	1.1400e-003	0.0000		1.2200e-003
Unmitigated	0.1162	0.0000	5.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1400e-003	1.1400e-003	0.0000		1.2200e-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	lb/day										lb/day					
Architectural Coating	0.0132					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1030					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	5.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1400e-003	1.1400e-003	0.0000		1.2200e-003
Total	**0.1162**	**0.0000**	**5.4000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.1400e-003**	**1.1400e-003**	**0.0000**		**1.2200e-003**

Mitigated

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

SubCategory	lb/day										lb/day					
Architectural Coating	0.0132					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1030					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	5.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1400e-003	1.1400e-003	0.0000		1.2200e-003
Total	**0.1162**	**0.0000**	**5.4000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.1400e-003**	**1.1400e-003**	**0.0000**		**1.2200e-003**

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

BOMP - Operational Emissions - Drilling Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	53.00	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 53 Wells

Construction Phase - Two rigs operating for the full year.

Off-road Equipment - One workover rig at each site, 500 hp, 12 hours per day

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	0.00	365.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblOffRoadEquipment	HorsePower	221.00	500.00
tblOffRoadEquipment	HorsePower	221.00	500.00
tblOffRoadEquipment	LoadFactor	0.50	0.73

tblOffRoadEquipment	LoadFactor	0.50	0.73
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	3.3409	48.4936	22.1839	0.0927	0.0559	1.4962	1.5521	0.0148	1.3765	1.3914	0.0000	9,615.2978	9,615.2978	2.8847	0.0000	9,687.4147
2017	3.2364	45.7460	21.8681	0.0931	0.0559	1.6429	1.4529	0.0148	1.5288	1.3000	0.0000	9,511.3995	9,511.3995	2.8985	0.0000	9,583.8624
Maximum	**3.3409**	**48.4936**	**22.1839**	**0.0931**	**0.0559**	**1.6429**	**1.5521**	**0.0148**	**1.5288**	**1.3914**	**0.0000**	**9,615.2978**	**9,615.2978**	**2.8985**	**0.0000**	**9,687.4147**

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					
2016	3.3409	48.4936	22.1839	0.0927	0.0559	1.4962	1.5521	0.0148	1.3765	1.3914	0.0000	9,615.2978	9,615.2978	2.8847	0.0000	9,687.4147
2017	3.2364	45.7460	21.8681	0.0931	0.0559	1.6429	1.4529	0.0148	1.5288	1.3000	0.0000	9,511.3995	9,511.3995	2.8985	0.0000	9,583.8624
Maximum	**3.3409**	**48.4936**	**22.1839**	**0.0931**	**0.0559**	**1.6429**	**1.5521**	**0.0148**	**1.5288**	**1.3914**	**0.0000**	**9,615.2978**	**9,615.2978**	**2.8985**	**0.0000**	**9,687.4147**

	ROG	NOx	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	5.2000e-004	5.0000e-005	5.4900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0116	0.0116	3.0000e-005		0.0124
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**5.2000e-004**	**5.0000e-005**	**5.4900e-003**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**		**0.0116**	**0.0116**	**3.0000e-005**	**0.0000**	**0.0124**

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	5.2000e-004	5.0000e-005	5.4900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0116	0.0116	3.0000e-005		0.0124
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**5.2000e-004**	**5.0000e-005**	**5.4900e-003**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**		**0.0116**	**0.0116**	**3.0000e-005**	**0.0000**	**0.0124**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/8/2016	12/7/2016	5	0	
2	Site Preparation	Site Preparation	12/8/2016	12/7/2016	5	0	
3	Grading	Grading	12/8/2016	12/7/2017	7	365	
4	Building Construction	Building Construction	12/8/2017	12/7/2017	5	0	
5	Paving	Paving	12/8/2017	12/7/2017	5	0	
6	Architectural Coating	Architectural Coating	12/8/2017	12/7/2017	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42

Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Bore/Drill Rigs	1	12.00	500	0.73
Grading	Bore/Drill Rigs	1	12.00	500	0.73
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Rubber Tired Dozers	0	1.00	247	0.40

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
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

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

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.3038	48.4658	21.8884	0.0921		1.4958	1.4958		1.3761	1.3761		9,555.0606	9,555.0606	2.8822		9,627.1142
Total	**3.3038**	**48.4658**	**21.8884**	**0.0921**	**0.0000**	**1.4958**	**1.4958**	**0.0000**	**1.3761**	**1.3761**		**9,555.0606**	**9,555.0606**	**2.8822**		**9,627.1142**

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	0.0371	0.0279	0.2955	6.1000e-004	0.0559	4.8000e-004	0.0564	0.0148	4.5000e-004	0.0153		60.2373	60.2373	2.5300e-003		60.3005
Total	**0.0371**	**0.0279**	**0.2955**	**6.1000e-004**	**0.0559**	**4.8000e-004**	**0.0564**	**0.0148**	**4.5000e-004**	**0.0153**		**60.2373**	**60.2373**	**2.5300e-003**		**60.3005**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.3038	48.4658	21.8884	0.0921		1.4958	1.4958		1.3761	1.3761	0.0000	9,555.0605	9,555.0605	2.8822		9,627.1142
Total	**3.3038**	**48.4658**	**21.8884**	**0.0921**	**0.0000**	**1.4958**	**1.4958**	**0.0000**	**1.3761**	**1.3761**	**0.0000**	**9,555.0605**	**9,555.0605**	**2.8822**		**9,627.1142**

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	0.0371	0.0279	0.2955	6.1000e-004	0.0559	4.8000e-004	0.0564	0.0148	4.5000e-004	0.0153		60.2373	60.2373	2.5300e-003		60.3005
Total	**0.0371**	**0.0279**	**0.2955**	**6.1000e-004**	**0.0559**	**4.8000e-004**	**0.0564**	**0.0148**	**4.5000e-004**	**0.0153**		**60.2373**	**60.2373**	**2.5300e-003**		**60.3005**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.2035	45.7217	21.6089	0.0925		1.3965	1.3965		1.2848	1.2848		9,452.7171	9,452.7171	2.8963		9,525.1245

Total	**3.2035**	**45.7217**	**21.6089**	**0.0925**	**0.0000**	**1.3965**	**1.3965**	**0.0000**	**1.2848**	**1.2848**		**9,452.7171**	**9,452.7171**	**2.8963**		**9,525.1245**

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	0.0329	0.0243	0.2592	5.9000e-004	0.0559	4.6000e-004	0.0564	0.0148	4.3000e-004	0.0153		58.6824	58.6824	2.2200e-003		58.7379
Total	**0.0329**	**0.0243**	**0.2592**	**5.9000e-004**	**0.0559**	**4.6000e-004**	**0.0564**	**0.0148**	**4.3000e-004**	**0.0153**		**58.6824**	**58.6824**	**2.2200e-003**		**58.7379**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.2035	45.7217	21.6089	0.0925		1.3965	1.3965		1.2848	1.2848	0.0000	9,452.7171	9,452.7171	2.8963		9,525.1245
Total	**3.2035**	**45.7217**	**21.6089**	**0.0925**	**0.0000**	**1.3965**	**1.3965**	**0.0000**	**1.2848**	**1.2848**	**0.0000**	**9,452.7171**	**9,452.7171**	**2.8963**		**9,525.1245**

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	0.0329	0.0243	0.2592	5.9000e-004	0.0559	4.6000e-004	0.0564	0.0148	4.3000e-004	0.0153		58.6824	58.6824	2.2200e-003		58.7379
Total	**0.0329**	**0.0243**	**0.2592**	**5.9000e-004**	**0.0559**	**4.6000e-004**	**0.0564**	**0.0148**	**4.3000e-004**	**0.0153**		**58.6824**	**58.6824**	**2.2200e-003**		**58.7379**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.6 Paving - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.7 Architectural Coating - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		

Total	0.00	0.00	0.00		

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
User Defined Industrial	16.60	8.40	6.90	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
User Defined Industrial	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
User Defined Industrial	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	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					
User Defined Industrial	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	5.2000e-004	5.0000e-005	5.4900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0116	0.0116	3.0000e-005		0.0124
Unmitigated	5.2000e-004	5.0000e-005	5.4900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0116	0.0116	3.0000e-005		0.0124

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2000e-004	5.0000e-005	5.4900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0116	0.0116	3.0000e-005		0.0124
Total	**5.2000e-004**	**5.0000e-005**	**5.4900e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0116**	**0.0116**	**3.0000e-005**		**0.0124**

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2000e-004	5.0000e-005	5.4900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0116	0.0116	3.0000e-005		0.0124
Total	**5.2000e-004**	**5.0000e-005**	**5.4900e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0116**	**0.0116**	**3.0000e-005**		**0.0124**

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

Estimated Power Island Emissions

Vireo Energy - Long Beach, CA

Estimated using data available as of October 27, 2016

(1) Mars 100-16000S with HRSG, SCR, and CO Catalyst Emission Control System		**Plant Total**
Ambient Temperature	°F	59.0
Turbine Inlet Temperature (inlet cooling in service)	°F	55.0
Gross Power Output	kW	10,983
Fuel Type	Natural Gas	
Assumed Fuel Sulfur Content	lbm/MMBtu*	0.0034
Gas Turbine Exhaust Flow	lbm/hr	336,400
Stack Exhaust Flow	lbm/hr	336,400
Flue Gas Temperature Leaving Gas Turbine	°F	912
Flue Gas Temperature At Stack	°F	316
Heat Input to Gas Turbine	MMBtu/hr*	130.0
PM10/PM2.5 Particulates from Gas Turbine	lbm/MMBtu*	0.015
Turbine Exhaust Gas Analysis		
H2O, assumes 60% relative humidity	% vol	6.3%
N_2	% vol	75.4%
CO_2	% vol	3.0%
O_2	% vol	14.5%
SO_2	% vol	0.0%
Argon	% vol	0.9%
Gas Turbine Exhaust Emissions		
NOx	ppm@15%O2	15
	lbm/hr	7.06
CO	ppm@15%O2	25
	lbm/hr	7.16
UHC	ppm@15%O2	25
	lbm/hr	4.09
$PM_{10}/PM_{2.5}$	lbm/hr	1.95
SO_2	lbm/hr	0.443
CO_2	lbm/hr	15,400

(1) Mars 100-16000S with HRSG, SCR, and CO Catalyst Emission Control System		**Plant Total**
Exhaust Emissions At Stack		
NOx (assumes 87% reduction SCR)	ppm@15%O2	2.0
	lbm/MMBtu*	0.00723
	lbm/hr	0.942
	short tons/yr	4.12
CO (assumes 76% reduction CO catalyst)	ppm@15%O2	6.0
	lbm/MMBtu*	0.0132
	lbm/hr	1.72
	short tons/yr	7.53
UHC	ppm@15%O2	25.0
	lbm/MMBtu*	0.0315
	lbm/hr	4.09
	short tons/yr	17.9
VOC	ppm@15%O2	2.0
	lbm/MMBtu*	0.00629
	lbm/hr	0.819
	short tons/yr	3.59
$PM_{10}/PM_{2.5}$	lbm/hr	1.95
	lbm/MMBtu*	0.015
	short tons/yr	8.55
SO_2	lbm/hr	0.443
	lbm/MMBtu*	0.0034
	short tons/yr	1.94
SCR Ammonia Slip	ppm@15%O2	5
SCR Reduction Efficiency	%	87%
CO Catalyst Reduction Efficiency	%	76%
VOC Catalyst Reduction Efficiency	%	N/A
CO_2	lbm/MMBtu*	119
	lbm/hr	15,400
	short tons/yr	67,600.0
	tonne/year	61,300

*HHV

Emissions Notes:

1. This document is for initial emissions estimates only. For air permit applications, Solar can provide appropriate site-specific turbine emissions documentation.

2. Fuels must comply with Solar specification ES 9-98. Actual emissions may vary due to site fuel characteristics. Zero fuel bound nitrogen is assumed for gaseous fuels, and less than 0.02% for liquid fuels.

3. Turbine "ppm" values are applicable for operation at ambient temperatures between 0 and 120°F.

4. The table below gives the load ranges to which the turbine ppm emissions listed above apply. Mass based estimates are valid at ambient temperature and operating load noted.

Pollutant	Load Range
NOx	50 to 100%
CO	50 to 100%
UHC	50 to 100%

5. SO2 emissions depend upon the fuel's sulfur content. The SO2 estimate is based upon EPA's AP-42 document (Tables 3.1-2a. and 3.1-2b. April 2000).

6. Annual estimates shown above assume 8760 hours/year operation.

Contact: Adam Robinson, (858)694-6606, arobinson@solarturbines.com
Caterpillar Confidential: Do not disclose without Solar's approval

Solar Turbines
A Caterpillar Company

Solar Turbines Incorporated

9330 Sky Park Court
San Diego, CA 92123
Tel: (858) 694-1616

Submitted Electronically

November 8, 2016

Fred Greve
Greve & Associates
fred@greveandassociates.com

RE: PM10/2.5 Emissions Estimates

Dear Mr. Greve:

Particulate Matter, specifically $PM_{10/2.5}$ can be very difficult to measure from natural gas fired turbines. Nearly all particulate matter from gas turbine exhaust is less than one micrometer (micron) in diameter. Thus the emission rates of TSP, PM_{10}, and $PM_{2.5}$ from gas turbines are theoretically equivalent although source testing will show variation due to test method detection levels and processes.

Historical customer particulate matter source test data show that there is significant variability from test to test. The source test results support the common industry argument that particulate matter from natural gas fired combustion sources is difficult to measure accurately. Over the past few years, source test firms are gaining experience in measuring particulate matter and the variability that we've seen historically from test to test and the emissions levels measured has decreased.

Due to increased testing expertise, Solar has been able to lower the warranty level over the years. However, our warranty level still contains significant margin for the cases where our recommended testing protocol is not followed and/or the test firm/lab is not experienced. As I explained on the phone, our standard $PM_{10/2.5}$ warranty level is 0.015 lb/MMBtu (HHV).

I have a subset of customer source test data that I've collected over the years for which I know the $PM_{10/2.5}$ testing was done properly. The data are summarized in the table on the next page. Provided your particulate matter testing is done by a reputable firm and follows our recommend protocol the $PM_{10/2.5}$ a level of 0.004 lb/MMBtu (HHV) should be attainable in the field. Solar will not warrant the 0.004 lb/MMBtu (HHV) level.

To achieve good results, Solar's recommends that EPA Methods 201/201A[1] be used to measure the "front half". EPA Method 202[2] (with nitrogen purge and field blanks) should be used to measure the "back half". EPA Method 5[3], which measures the front and back halves may be substituted (e.g. where exhaust temperatures do not allow the use of Method 202). The turbine should have a minimum of 300 operating hours prior to conducting particulate matter source testing. The turbine should be running for 3-4 hours prior to conducting a particulate matter source test so that the turbine and auxiliary equipment is in a sustained "typical" operating mode prior to gathering samples. Testing should include three 4-hour test runs.

Run#	Test Data lb/MMBtu (HHV)	Source
Test 1	0.003	**NG-43**
Test 2	0.004	**NG-43**
Test 3	0.005	**NG-43**
Test 1	0.005	**NG-44**
Test 2	0.005	**NG-44**
Test 3	0.006	**NG-44**
Test 1	0.002	**NG-46**
Test 2	0.002	**NG-46**
Test 3	0.001	**NG-46**
Test 1	0.001	**NG-48**
Test 2	0.002	**NG-48**
Test 3	0.001	**NG-48**
Test 1	0.004	**NG-47**
Test 2	0.002	**NG-47**
Test 3	0.002	**NG-47**

average	**0.003**
95% CI upper	**0.004**

Please feel free to contact me at 858.694.6609 if you have any questions or need any additional information.

Sincerely,
Solar Turbines Incorporated
Leslie Witherspoon
Manager Environmental Programs
witherspoon_leslie_h@solarturbines.com

Turbine Calculations								
Data provided by Solar Turbines dated November 7, 2016								
Based on the use of 4 Mercury 50 turbines								
Output Power (kWe)	Load		4 Turbines					
4,477	100%		17,908					
NOx	lb/hr	lb/day	lb/day					
Lean-Premix	0.812	19.5	78.0	From 100% Load and has 60% reduction SCR				
CO								
Lean-Premix	0.989	23.7	94.9					
VOC								
Uncontrolled	0.565	13.6	54.2					
SO2								
Uncontrolled	0.153	3.7	14.7					
PM10 (condensible)								
Uncontrolled	0.520	12.5	25.0	Emission based on Solar Turbines claim of 0.004 lb/MMBtu				
PM2.5 (filterable)								
Uncontrolled	0.520	12.5	25.0	Emission based on Solar Turbines claim of 0.004 lb/MMBtu				
Greenhouse Gases								
CO2	lb/hr	lb/day	4 Turbines	MT/Yr				
100% Load	5,310	127,440	509,760	84,397				
CO2	4370	104,880	419,520	69,456	**67,581**			
Average Load (77.84%)				80% Load	**77.84% Load**			

Boilers for Heating Non-Cogen				
Gas Consumption (mscfd)	Gas Consumption (scf/day)			
480	480,000			
	EF (lb/106 scf)	Emissions (lb/day)	Emissions (MT/Yr)	GWP
VOC	5.5	2.6		
NOx	50	24.0		
CO	84	40.3		
SOx	0.6	0.3		
PM10	7.6	3.6		
PM2.5	5.7	2.7		
CO2	120,000	57,600	**9,536**	1
CH4	2.3	1.1	**0.18**	28
CO2EQ			**9,541**	
Assumptions:				
1. Small boiler with low NOx burners				
2. Emission factors from AP-42, Section 1.4				

BOMP - Oil Truck Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	100.00	1000sqft	2.30	100,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Vehicle Trips - Adjusting defaults to give 40 truck trips per day with a one-way trip length of 16 miles.

Fleet Mix - All HDD trucks

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	250.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	250.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	100.00
tblFleetMix	HHD	0.03	1.00
tblFleetMix	LDA	0.54	0.00

tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblVehicleTrips	CC_TL	8.40	32.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TL	6.90	32.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	16.60	32.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.32	0.40
tblVehicleTrips	SU_TR	0.68	0.40
tblVehicleTrips	WD_TR	6.97	0.40

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					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	7.3540	0.0000	0.0000	6.8725	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**7.3540**	**0.0000**	**0.0000**	**6.8725**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	7.3540	0.0000	0.0000	6.8725	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**7.3540**	**0.0000**	**0.0000**	**6.8725**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

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

Area	2.2350	1.0000e-004	0.0104	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0234
Energy	0.0537	0.4878	0.4097	2.9300e-003		0.0371	0.0371		0.0371	0.0371		585.3344	585.3344	0.0112	0.0107	588.8128
Mobile	0.5122	17.5330	3.5202	0.0475	1.1170	0.0747	1.1918	0.3060	0.0715	0.3775		5,117.3246	5,117.3246	0.3341		5,125.6764
Total	**2.8008**	**18.0209**	**3.9402**	**0.0504**	**1.1170**	**0.1119**	**1.2289**	**0.3060**	**0.1086**	**0.4146**		**5,702.6809**	**5,702.6809**	**0.3454**	**0.0107**	**5,714.5125**

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	2.2350	1.0000e-004	0.0104	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0234
Energy	0.0537	0.4878	0.4097	2.9300e-003		0.0371	0.0371		0.0371	0.0371		585.3344	585.3344	0.0112	0.0107	588.8128
Mobile	0.5122	17.5330	3.5202	0.0475	1.1170	0.0747	1.1918	0.3060	0.0715	0.3775		5,117.3246	5,117.3246	0.3341		5,125.6764
Total	**2.8008**	**18.0209**	**3.9402**	**0.0504**	**1.1170**	**0.1119**	**1.2289**	**0.3060**	**0.1086**	**0.4146**		**5,702.6809**	**5,702.6809**	**0.3454**	**0.0107**	**5,714.5125**

	ROG	**NOx**	**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	Architectural Coating	Architectural Coating	12/15/2016	12/14/2016	5	10	
2	Building Construction	Building Construction	12/15/2016	12/14/2016	5	220	
3	Demolition	Demolition	12/15/2016	12/14/2016	5	20	

4	Grading	Grading	12/15/2016	12/14/2016	5	6	
5	Paving	Paving	12/15/2016	12/14/2016	5	10	
6	Site Preparation	Site Preparation	12/15/2016	12/14/2016	5	3	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	42.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2016

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

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

3.3 Building Construction - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.4 Demolition - 2016

Unmitigated Construction On-Site

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

Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.5 Grading - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

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

3.6 Paving - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.7 Site Preparation - 2016

Unmitigated Construction On-Site

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

Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5122	17.5330	3.5202	0.0475	1.1170	0.0747	1.1918	0.3060	0.0715	0.3775		5,117.3246	5,117.3246	0.3341		5,125.6764
Unmitigated	0.5122	17.5330	3.5202	0.0475	1.1170	0.0747	1.1918	0.3060	0.0715	0.3775		5,117.3246	5,117.3246	0.3341		5,125.6764

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	40.00	40.00	40.00	465,920	465,920
Total	40.00	40.00	40.00	465,920	465,920

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	32.00	32.00	32.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

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	0.0537	0.4878	0.4097	2.9300e-003		0.0371	0.0371		0.0371	0.0371		585.3344	585.3344	0.0112	0.0107	588.8128
NaturalGas Unmitigated	0.0537	0.4878	0.4097	2.9300e-003		0.0371	0.0371		0.0371	0.0371		585.3344	585.3344	0.0112	0.0107	588.8128

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	4975.34	0.0537	0.4878	0.4097	2.9300e-003		0.0371	0.0371		0.0371	0.0371		585.3344	585.3344	0.0112	0.0107	588.8128
Total		**0.0537**	**0.4878**	**0.4097**	**2.9300e-003**		**0.0371**	**0.0371**		**0.0371**	**0.0371**		**585.3344**	**585.3344**	**0.0112**	**0.0107**	**588.8128**

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	4.97534	0.0537	0.4878	0.4097	2.9300e-003		0.0371	0.0371		0.0371	0.0371		585.3344	585.3344	0.0112	0.0107	588.8128
Total		**0.0537**	**0.4878**	**0.4097**	**2.9300e-003**		**0.0371**	**0.0371**		**0.0371**	**0.0371**		**585.3344**	**585.3344**	**0.0112**	**0.0107**	**588.8128**

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	2.2350	1.0000e-004	0.0104	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0234
Unmitigated	2.2350	1.0000e-004	0.0104	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0234

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	0.2540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9800					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.9000e-004	1.0000e-004	0.0104	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0234
Total	**2.2350**	**1.0000e-004**	**0.0104**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0219**	**0.0219**	**6.0000e-005**		**0.0234**

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	0.2540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9800					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.9000e-004	1.0000e-004	0.0104	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0234

Total	**2.2350**	**1.0000e-004**	**0.0104**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0219**	**0.0219**	**6.0000e-005**		**0.0234**

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

Wetlands Facility Construction - Off-Site Construction Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0
Other Asphalt Surfaces	47.10	1000sqft	1.08	47,100.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per SPEC schedule
Only Grading and Paving are relevant

Off-road Equipment -

Off-road Equipment - Per SPEC equipment schedule

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment - Equipment per SPEC

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Per SPEC

Demolition -

Grading - Per SPEC

Architectural Coating -

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	72150	1500
tblConstructionPhase	NumDays	4.00	87.00
tblConstructionPhase	NumDays	10.00	87.00
tblConstructionPhase	PhaseEndDate	11/8/2017	6/21/2017
tblConstructionPhase	PhaseEndDate	10/24/2017	10/25/2017
tblConstructionPhase	PhaseEndDate	10/20/2017	10/31/2017
tblConstructionPhase	PhaseEndDate	3/1/2018	10/31/2017
tblConstructionPhase	PhaseEndDate	1/31/2017	1/17/2017
tblConstructionPhase	PhaseStartDate	10/26/2017	6/15/2017
tblConstructionPhase	PhaseStartDate	1/18/2017	1/19/2017
tblConstructionPhase	PhaseStartDate	6/22/2017	7/3/2017
tblConstructionPhase	PhaseStartDate	11/1/2017	7/3/2017
tblConstructionPhase	PhaseStartDate	1/28/2017	1/14/2017
tblGrading	AcresOfGrading	65.25	1.00
tblGrading	AcresOfGrading	1.00	0.50
tblGrading	MaterialExported	0.00	872.00
tblGrading	MaterialImported	0.00	3,000.00
tblOffRoadEquipment	HorsePower	97.00	95.00
tblOffRoadEquipment	HorsePower	78.00	100.00
tblOffRoadEquipment	HorsePower	208.00	240.00
tblOffRoadEquipment	HorsePower	162.00	270.00
tblOffRoadEquipment	HorsePower	89.00	90.00
tblOffRoadEquipment	HorsePower	84.00	125.00

tblOffRoadEquipment	HorsePower	84.00	25.00
tblOffRoadEquipment	HorsePower	199.00	115.00
tblOffRoadEquipment	HorsePower	46.00	50.00
tblOffRoadEquipment	UsageHours	6.00	1.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2018

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					
2017	114.9171	85.6156	63.7663	0.1133	5.8251	5.0668	9.6598	3.0022	4.8132	6.5792	0.0000	10,814.6102	10,814.6102	2.2263	0.0000	10,861.3623
Total	**114.9171**	**85.6156**	**63.7663**	**0.1133**	**5.8251**	**5.0668**	**9.6598**	**3.0022**	**4.8132**	**6.5792**	**0.0000**	**10,814.6102**	**10,814.6102**	**2.2263**	**0.0000**	**10,861.3623**

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					
2017	114.9171	85.6156	63.7663	0.1133	5.8251	5.0668	9.6598	3.0022	4.8132	6.5792	0.0000	10,814.6102	10,814.6102	2.2263	0.0000	10,861.3623
Total	**114.9171**	**85.6156**	**63.7663**	**0.1133**	**5.8251**	**5.0668**	**9.6598**	**3.0022**	**4.8132**	**6.5792**	**0.0000**	**10,814.6102**	**10,814.6102**	**2.2263**	**0.0000**	**10,861.3623**

	ROG	NOx	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	1.0340	5.0000e-005	4.9800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0105	0.0105	3.0000e-005		0.0111
Energy	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Mobile	0.0259	0.0887	0.3220	9.3000e-004	0.0655	1.3300e-003	0.0668	0.0175	1.2300e-003	0.0187		76.6069	76.6069	2.8800e-003		76.6673
Total	**1.0604**	**0.0938**	**0.3313**	**9.6000e-004**	**0.0655**	**1.7300e-003**	**0.0672**	**0.0175**	**1.6300e-003**	**0.0191**		**82.6803**	**82.6803**	**3.0300e-003**	**1.1000e-004**	**82.7782**

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	1.0340	5.0000e-005	4.9800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0105	0.0105	3.0000e-005		0.0111
Energy	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Mobile	0.0259	0.0887	0.3220	9.3000e-004	0.0655	1.3300e-003	0.0668	0.0175	1.2300e-003	0.0187		76.6069	76.6069	2.8800e-003		76.6673

Total	**1.0604**	**0.0938**	**0.3313**	**9.6000e-004**	**0.0655**	**1.7300e-003**	**0.0672**	**0.0175**	**1.6300e-003**	**0.0191**		**82.6803**	**82.6803**	**3.0300e-003**	**1.1000e-004**	**82.7782**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/14/2017	1/17/2017	5	2	
3	Building Construction	Building Construction	1/19/2017	10/25/2017	5	200	
4	Architectural Coating	Architectural Coating	6/15/2017	6/21/2017	5	10	
5	Grading	Grading	7/3/2017	10/31/2017	5	87	
6	Paving	Paving	7/3/2017	10/31/2017	5	87	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 72,150; Non-Residential Outdoor: 24,050 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41

Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Air Compressors	1	6.00	78	0.48
Grading	Air Compressors	1	6.00	100	0.48
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Crawler Tractors	1	6.00	240	0.43
Grading	Excavators	2	6.00	270	0.38
Grading	Forklifts	1	6.00	90	0.20
Grading	Generator Sets	1	6.00	125	0.74
Grading	Generator Sets	2	2.00	25	0.74
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Loaders	2	6.00	115	0.36
Grading	Tractors/Loaders/Backhoes	1	6.00	95	0.37
Grading	Welders	4	4.00	50	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	20.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	19	48.00	0.00	484.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	4.4928	44.0393	34.5609	0.0396		2.5257	2.5257		2.3727	2.3727		3,960.1415	3,960.1415	0.9545		3,980.1857
Total	**4.4928**	**44.0393**	**34.5609**	**0.0396**		**2.5257**	**2.5257**		**2.3727**	**2.3727**		**3,960.1415**	**3,960.1415**	**0.9545**		**3,980.1857**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278

Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

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	4.4928	44.0393	34.5609	0.0396		2.5257	2.5257		2.3727	2.3727	0.0000	3,960.1415	3,960.1415	0.9545		3,980.1857
Total	**4.4928**	**44.0393**	**34.5609**	**0.0396**		**2.5257**	**2.5257**		**2.3727**	**2.3727**	**0.0000**	**3,960.1415**	**3,960.1415**	**0.9545**		**3,980.1857**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

3.3 Site Preparation - 2017

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					5.5345	0.0000	5.5345	2.9251	0.0000	2.9251			0.0000			0.0000
Off-Road	2.3109	24.2288	15.9299	0.0171		1.3067	1.3067		1.2022	1.2022		1,752.1239	1,752.1239	0.5369		1,763.3977
Total	**2.3109**	**24.2288**	**15.9299**	**0.0171**	**5.5345**	**1.3067**	**6.8412**	**2.9251**	**1.2022**	**4.1273**		**1,752.1239**	**1,752.1239**	**0.5369**		**1,763.3977**

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	0.0306	0.0414	0.4318	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		85.8289	85.8289	4.5000e-003		85.9235
Total	**0.0306**	**0.0414**	**0.4318**	**1.0600e-003**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**85.8289**	**85.8289**	**4.5000e-003**		**85.9235**

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					5.5345	0.0000	5.5345	2.9251	0.0000	2.9251			0.0000			0.0000
Off-Road	2.3109	24.2288	15.9299	0.0171		1.3067	1.3067		1.2022	1.2022	0.0000	1,752.1239	1,752.1239	0.5369		1,763.3977

Total	**2.3109**	**24.2288**	**15.9299**	**0.0171**	**5.5345**	**1.3067**	**6.8412**	**2.9251**	**1.2022**	**4.1273**	**0.0000**	**1,752.1239**	**1,752.1239**	**0.5369**		**1,763.3977**

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	0.0306	0.0414	0.4318	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		85.8289	85.8289	4.5000e-003		85.9235
Total	**0.0306**	**0.0414**	**0.4318**	**1.0600e-003**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**85.8289**	**85.8289**	**4.5000e-003**		**85.9235**

3.4 Building Construction - 2017

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	2.9546	19.1088	14.3110	0.0220		1.2257	1.2257		1.1823	1.1823		2,034.2860	2,034.2860	0.4268		2,043.2497
Total	**2.9546**	**19.1088**	**14.3110**	**0.0220**		**1.2257**	**1.2257**		**1.1823**	**1.1823**		**2,034.2860**	**2,034.2860**	**0.4268**		**2,043.2497**

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	0.0667	0.6442	0.9080	1.7300e-003	0.0500	0.0103	0.0603	0.0143	9.4200e-003	0.0237		170.1553	170.1553	1.2400e-003		170.1814
Worker	0.0765	0.1035	1.0796	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5722	214.5722	0.0113		214.8087
Total	**0.1432**	**0.7477**	**1.9876**	**4.3800e-003**	**0.2736**	**0.0121**	**0.2856**	**0.0735**	**0.0111**	**0.0846**		**384.7275**	**384.7275**	**0.0125**		**384.9901**

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	2.9546	19.1088	14.3110	0.0220		1.2257	1.2257		1.1823	1.1823	0.0000	2,034.2860	2,034.2860	0.4268		2,043.2497
Total	**2.9546**	**19.1088**	**14.3110**	**0.0220**		**1.2257**	**1.2257**		**1.1823**	**1.1823**	**0.0000**	**2,034.2860**	**2,034.2860**	**0.4268**		**2,043.2497**

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	0.0667	0.6442	0.9080	1.7300e-003	0.0500	0.0103	0.0603	0.0143	9.4200e-003	0.0237		170.1553	170.1553	1.2400e-003		170.1814
Worker	0.0765	0.1035	1.0796	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5722	214.5722	0.0113		214.8087
Total	**0.1432**	**0.7477**	**1.9876**	**4.3800e-003**	**0.2736**	**0.0121**	**0.2856**	**0.0735**	**0.0111**	**0.0846**		**384.7275**	**384.7275**	**0.0125**		**384.9901**

3.5 Architectural Coating - 2017

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	111.4718					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**111.8041**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0153	0.0207	0.2159	5.3000e-004	0.0447	3.6000e-004	0.0451	0.0119	3.3000e-004	0.0122		42.9144	42.9144	2.2500e-003		42.9617
Total	**0.0153**	**0.0207**	**0.2159**	**5.3000e-004**	**0.0447**	**3.6000e-004**	**0.0451**	**0.0119**	**3.3000e-004**	**0.0122**		**42.9144**	**42.9144**	**2.2500e-003**		**42.9617**

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	111.4718					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**111.8041**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0153	0.0207	0.2159	5.3000e-004	0.0447	3.6000e-004	0.0451	0.0119	3.3000e-004	0.0122		42.9144	42.9144	2.2500e-003		42.9617
Total	**0.0153**	**0.0207**	**0.2159**	**5.3000e-004**	**0.0447**	**3.6000e-004**	**0.0451**	**0.0119**	**3.3000e-004**	**0.0122**		**42.9144**	**42.9144**	**2.2500e-003**		**42.9617**

3.6 Grading - 2017

Unmitigated Construction On-Site

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

Category	lb/day										lb/day					
Fugitive Dust					0.7700	0.0000	0.7700	0.4159	0.0000	0.4159			0.0000			0.0000
Off-Road	6.2009	51.8971	33.9506	0.0614		3.0682	3.0682		2.9189	2.9189		5,987.8171	5,987.8171	1.3444		6,016.0502
Total	**6.2009**	**51.8971**	**33.9506**	**0.0614**	**0.7700**	**3.0682**	**3.8381**	**0.4159**	**2.9189**	**3.3348**		**5,987.8171**	**5,987.8171**	**1.3444**		**6,016.0502**

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	0.0946	1.4484	1.1935	4.0900e-003	0.0970	0.0222	0.1191	0.0266	0.0204	0.0470		405.6770	405.6770	2.9200e-003		405.7382
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1836	0.2484	2.5910	6.3700e-003	0.5365	4.3100e-003	0.5408	0.1423	3.9800e-003	0.1463		514.9732	514.9732	0.0270		515.5408
Total	**0.2782**	**1.6968**	**3.7845**	**0.0105**	**0.6335**	**0.0265**	**0.6600**	**0.1688**	**0.0244**	**0.1932**		**920.6502**	**920.6502**	**0.0300**		**921.2791**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7700	0.0000	0.7700	0.4159	0.0000	0.4159			0.0000			0.0000
Off-Road	6.2009	51.8971	33.9506	0.0614		3.0682	3.0682		2.9189	2.9189	0.0000	5,987.8171	5,987.8171	1.3444		6,016.0502
Total	**6.2009**	**51.8971**	**33.9506**	**0.0614**	**0.7700**	**3.0682**	**3.8381**	**0.4159**	**2.9189**	**3.3348**	**0.0000**	**5,987.8171**	**5,987.8171**	**1.3444**		**6,016.0502**

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	0.0946	1.4484	1.1935	4.0900e-003	0.0970	0.0222	0.1191	0.0266	0.0204	0.0470		405.6770	405.6770	2.9200e-003		405.7382
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1836	0.2484	2.5910	6.3700e-003	0.5365	4.3100e-003	0.5408	0.1423	3.9800e-003	0.1463		514.9732	514.9732	0.0270		515.5408
Total	**0.2782**	**1.6968**	**3.7845**	**0.0105**	**0.6335**	**0.0265**	**0.6600**	**0.1688**	**0.0244**	**0.1932**		**920.6502**	**920.6502**	**0.0300**		**921.2791**

3.7 Paving - 2017

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	1.1857	12.0981	9.0308	0.0133		0.7333	0.7333		0.6755	0.6755		1,347.6575	1,347.6575	0.4052		1,356.1677
Paving	0.0325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2182**	**12.0981**	**9.0308**	**0.0133**		**0.7333**	**0.7333**		**0.6755**	**0.6755**		**1,347.6575**	**1,347.6575**	**0.4052**		**1,356.1677**

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	0.0497	0.0673	0.7017	1.7200e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.4719	139.4719	7.3200e-003		139.6256
Total	**0.0497**	**0.0673**	**0.7017**	**1.7200e-003**	**0.1453**	**1.1700e-003**	**0.1465**	**0.0385**	**1.0800e-003**	**0.0396**		**139.4719**	**139.4719**	**7.3200e-003**		**139.6256**

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	1.1857	12.0981	9.0308	0.0133		0.7333	0.7333		0.6755	0.6755	0.0000	1,347.6575	1,347.6575	0.4052		1,356.1677
Paving	0.0325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2182**	**12.0981**	**9.0308**	**0.0133**		**0.7333**	**0.7333**		**0.6755**	**0.6755**	**0.0000**	**1,347.6575**	**1,347.6575**	**0.4052**		**1,356.1677**

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	0.0497	0.0673	0.7017	1.7200e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.4719	139.4719	7.3200e-003		139.6256

Total	**0.0497**	**0.0673**	**0.7017**	**1.7200e-003**	**0.1453**	**1.1700e-003**	**0.1465**	**0.0385**	**1.0800e-003**	**0.0396**		**139.4719**	**139.4719**	**7.3200e-003**		**139.6256**

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	0.0259	0.0887	0.3220	9.3000e-004	0.0655	1.3300e-003	0.0668	0.0175	1.2300e-003	0.0187		76.6069	76.6069	2.8800e-003		76.6673
Unmitigated	0.0259	0.0887	0.3220	9.3000e-004	0.0655	1.3300e-003	0.0668	0.0175	1.2300e-003	0.0187		76.6069	76.6069	2.8800e-003		76.6673

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	6.97	1.32	0.68	23,312	23,312
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	6.97	1.32	0.68	23,312	23,312

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511172	0.060004	0.180590	0.138995	0.042398	0.006681	0.016070	0.032568	0.001938	0.002493	0.004370	0.000586	0.002135

5.0 Energy Detail

4.4 Fleet Mix

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	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
NaturalGas Unmitigated	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998

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	51.5342	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Other 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
Total		**5.6000e-004**	**5.0500e-003**	**4.2400e-003**	**3.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**		**6.0629**	**6.0629**	**1.2000e-004**	**1.1000e-004**	**6.0998**

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					
Other 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
General Light Industry	0.0515342	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Total		**5.6000e-004**	**5.0500e-003**	**4.2400e-003**	**3.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**		**6.0629**	**6.0629**	**1.2000e-004**	**1.1000e-004**	**6.0998**

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	1.0340	5.0000e-005	4.9800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0105	0.0105	3.0000e-005		0.0111
Unmitigated	1.0340	5.0000e-005	4.9800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0105	0.0105	3.0000e-005		0.0111

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	0.0811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	5.0000e-005	4.9800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0105	0.0105	3.0000e-005		0.0111
Total	**1.0340**	**5.0000e-005**	**4.9800e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0105**	**0.0105**	**3.0000e-005**		**0.0111**

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	0.0811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	5.0000e-005	4.9800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0105	0.0105	3.0000e-005		0.0111
Total	**1.0340**	**5.0000e-005**	**4.9800e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0105**	**0.0105**	**3.0000e-005**		**0.0111**

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 Vegetation

Turbine Commissioning Emissions

Emissions Per Star-Up and Shut-Down for One Mercury 50 Turbine

Event	Emissions (lb/event)				
	NOx	CO	UHC	VOC	CO2
Start Up	1	5	3	0.5	363
Shut Down	1	4	2	0.5	322
Total	2	9	5	1.0	685

Scenario 1: Dynamic Testing includes 5 start ups and 5 shut downs per day per turbine

Operation Mode	Emissions (lb/day)				
	NOx	CO	UHC	VOC	CO2
Start Up/Shut Down Emissions - Uncontrolled	10.00	45.00	25.00	5.00	3,425.00
SCR Control Efficiency	0.50	0.40	0.00	0.00	0.00
Start Up/Shut Down Emissions - Controlled	5.00	27.00	25.00	5.00	3,425.00
Daily Operational Emissions - Controlled	7.15	13.05	12.43	2.49	117,700.00
Daily Emissions per Turbine - Uncontrolled Start-Ups	17.15	58.05	37.43	7.49	121,125.00
Daily Emissions per Turbine - Controlled Start-Ups	12.15	40.05	37.43	7.49	121,125.00
Total Daily Emissions for 4 Turbines - Uncontrolled	68.60	232.18	149.72	29.94	484,500.00
Total Daily Emissions for 4 Turbines - Controlled	48.60	160.18	149.72	29.94	484,500.00

- Daily Operation Emissions assume maximum of 22 hours of normal operation during commissioning

Scenario 2: Dynamic Testing includes 10 start ups and 10 shut downs per day per turbine

Operation Mode	Emissions (lb/day)							
	NOx	CO	UHC	VOC	CO2	PM10	PM2.5	SOx
Start Up/Shut Down Emissions - Uncontrolled	20.00	90.00	50.00	10.00	6,850.00			
SCR Control Efficiency	0.50	0.40	0.00	0.00	0.00			
Start Up/Shut Down Emissions - Controlled	10.00	54.00	50.00	10.00	6,850.00			
Daily Operational Emissions - Controlled	6.50	11.86	11.30	2.26	107,000.00			
Daily Emissions per Turbine - Uncontrolled Start-Ups	26.50	101.86	61.30	12.26	113,850.00			
Daily Emissions per Turbine - Controlled Start-Ups	16.50	65.86	61.30	12.26	113,850.00	10.4	10.4	3.06
Total Daily Emissions for 4 Turbines - Uncontrolled	106.00	407.44	245.20	49.04	455,400.00			
Total Daily Emissions for 4 Turbines - Controlled	66.00	263.44	245.20	49.04	455,400.00			

- Daily Operation Emissions assume maximum of 20 hours of normal operation during commissioning

PM emissions based on Solar Turbine emission rates of 0,520 lb/hr and 20 hours per day

BOMP - Landfill Excavation - Construction Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	7.00	Acre	7.00	304,920.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction per email.

Off-road Equipment - No painting phase.

Off-road Equipment - No drilling or pumping.

Off-road Equipment - No drilling or pumping needed.

Off-road Equipment - Equipment per email.

Off-road Equipment - Equipment per emails.

Off-road Equipment - A grader wasn't included, but one must be needed for handling import.

Off-road Equipment - No paving phase.

Trips and VMT - Assume wet to Simi Valley Landfill and dry to Irwindale Landfill.

Import from 10 to 50 miles source (used 50).

Grading - Acreage of site.

Construction Off-road Equipment Mitigation - All Tier IV per mitigation requirements.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	65.00
tblConstructionPhase	NumDays	10.00	21.00

tblConstructionPhase	NumDaysWeek	5.00	7.00
tblGrading	AcresOfGrading	10.00	7.00
tblGrading	AcresOfGrading	0.00	7.00
tblGrading	MaterialExported	0.00	63,000.00
tblGrading	MaterialImported	0.00	45,000.00
tblOffRoadEquipment	HorsePower	247.00	200.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripLength	20.00	168.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripNumber	7,875.00	2,370.00
tblTripsAndVMT	HaulingTripNumber	5,625.00	3,750.00
tblTripsAndVMT	WorkerTripNumber	0.00	3.00
tblTripsAndVMT	WorkerTripNumber	15.00	5.00

tblTripsAndVMT	WorkerTripNumber	26.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.4688	129.4672	30.5153	0.3520	11.6483	1.7342	13.3825	4.8187	1.6081	6.4268			37,868.0617	2.6169	0.0000	37,933.4851
Maximum	**4.4688**	**129.4672**	**30.5153**	**0.3520**	**11.6483**	**1.7342**	**13.3825**	**4.8187**	**1.6081**	**6.4268**			**37,868.0617**	**2.6169**	**0.0000**	**37,933.4851**

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	3.7244	118.8790	30.7395	0.3520	8.4853	0.5611	9.0464	2.7818	0.5377	3.1514			37,868.0617	2.6169	0.0000	37,933.4851
Maximum	**3.7244**	**118.8790**	**30.7395**	**0.3520**	**8.4853**	**0.5611**	**9.0464**	**2.7818**	**0.5377**	**3.1514**			**37,868.0617**	**2.6169**	**0.0000**	**37,933.4851**

	ROG	**NOx**	**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	**16.66**	**8.18**	**-0.73**	**0.00**	**27.15**	**67.65**	**32.40**	**42.27**	**66.56**	**50.97**	**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	0.0158	1.0000e-005	7.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.5300e-003	0.0000		1.6400e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3133	1.6224	3.8788	0.0123	0.9744	0.0145	0.9890	0.2608	0.0137	0.2744			1,244.8872	0.0700		1,246.6361
Total	**0.3290**	**1.6225**	**3.8795**	**0.0123**	**0.9744**	**0.0145**	**0.9890**	**0.2608**	**0.0137**	**0.2744**			**1,244.8887**	**0.0700**	**0.0000**	**1,246.6378**

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	0.0158	1.0000e-005	7.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.5300e-003	0.0000		1.6400e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3133	1.6224	3.8788	0.0123	0.9744	0.0145	0.9890	0.2608	0.0137	0.2744			1,244.8872	0.0700		1,246.6361
Total	**0.3290**	**1.6225**	**3.8795**	**0.0123**	**0.9744**	**0.0145**	**0.9890**	**0.2608**	**0.0137**	**0.2744**			**1,244.8887**	**0.0700**	**0.0000**	**1,246.6378**

	ROG	**NOx**	**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	Drilling	Demolition	1/1/2018	1/19/2018	5	15	
2	Excavation	Site Preparation	1/20/2018	4/20/2018	5	65	
3	Dewatering	Site Preparation	4/21/2018	5/11/2018	7	21	
4	Final Grading & Import	Grading	5/12/2018	6/8/2018	5	20	
5	Paving	Paving	6/9/2018	6/8/2018	5	0	
6	Architectural Coating	Architectural Coating	6/9/2018	6/8/2018	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Drilling	Bore/Drill Rigs	0	7.00	221	0.50
Drilling	Concrete/Industrial Saws	0	8.00	81	0.73
Drilling	Excavators	0	8.00	158	0.38
Drilling	Rubber Tired Dozers	0	8.00	247	0.40
Excavation	Excavators	1	8.00	158	0.38
Excavation	Pumps	0	24.00	84	0.74
Excavation	Rubber Tired Dozers	1	8.00	200	0.40
Dewatering	Graders	0	8.00	187	0.41
Dewatering	Pumps	0	24.00	84	0.74
Dewatering	Rubber Tired Dozers	0	8.00	247	0.40
Dewatering	Rubber Tired Dozers	0	8.00	247	0.40
Dewatering	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Dewatering	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Final Grading & Import	Excavators	0	8.00	158	0.38
Final Grading & Import	Forklifts	0	8.00	89	0.20
Final Grading & Import	Generator Sets	0	8.00	84	0.74
Final Grading & Import	Graders	1	8.00	187	0.41
Final Grading & Import	Graders	0	8.00	187	0.41
Final Grading & Import	Off-Highway Trucks	1	4.00	402	0.38
Final Grading & Import	Rubber Tired Dozers	0	8.00	247	0.40
Final Grading & Import	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Final Grading & Import	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48
Excavation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Drilling	0	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation	6	5.00	0.00	2,370.00	14.70	6.90	168.00	LD_Mix	HDT_Mix	HHDT
Dewatering	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Dewatering	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Final Grading & Import	2	5.00	0.00	3,750.00	14.70	6.90	50.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Drilling - 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**		**0.0000**

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0176	0.0127	0.1362	3.4000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003			34.2204	1.1700e-003		34.2496
Total	**0.0176**	**0.0127**	**0.1362**	**3.4000e-004**	**0.0335**	**2.7000e-004**	**0.0338**	**8.8900e-003**	**2.5000e-004**	**9.1400e-003**			**34.2204**	**1.1700e-003**		**34.2496**

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0176	0.0127	0.1362	3.4000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003			34.2204	1.1700e-003		34.2496
Total	**0.0176**	**0.0127**	**0.1362**	**3.4000e-004**	**0.0335**	**2.7000e-004**	**0.0338**	**8.8900e-003**	**2.5000e-004**	**9.1400e-003**			**34.2204**	**1.1700e-003**		**34.2496**

3.3 Excavation - 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					6.2459	0.0000	6.2459	3.3392	0.0000	3.3392			0.0000			0.0000
Off-Road	2.2978	23.7848	16.1662	0.0245		1.3897	1.3897		1.2786	1.2786			2,467.1855	0.7681		2,486.3872
Total	**2.2978**	**23.7848**	**16.1662**	**0.0245**	**6.2459**	**1.3897**	**7.6356**	**3.3392**	**1.2786**	**4.6177**			**2,467.1855**	**0.7681**		**2,486.3872**

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	2.1092	68.5781	14.1221	0.2125	5.3465	0.3441	5.6905	1.4647	0.3292	1.7939			22,926.0713	1.2309		22,956.8425
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0293	0.0212	0.2271	5.7000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152			57.0340	1.9500e-003		57.0826
Total	**2.1385**	**68.5993**	**14.3491**	**0.2131**	**5.4024**	**0.3445**	**5.7469**	**1.4796**	**0.3296**	**1.8091**			**22,983.1052**	**1.2328**		**23,013.9252**

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					2.4359	0.0000	2.4359	1.3023	0.0000	1.3023			0.0000			0.0000
Off-Road	0.3001	1.3005	16.3904	0.0245		0.0400	0.0400		0.0400	0.0400			2,467.1855	0.7681		2,486.3872
Total	**0.3001**	**1.3005**	**16.3904**	**0.0245**	**2.4359**	**0.0400**	**2.4759**	**1.3023**	**0.0400**	**1.3423**			**2,467.1855**	**0.7681**		**2,486.3872**

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	2.1092	68.5781	14.1221	0.2125	5.3465	0.3441	5.6905	1.4647	0.3292	1.7939			22,926.0713	1.2309		22,956.8425
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0293	0.0212	0.2271	5.7000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152			57.0340	1.9500e-003		57.0826
Total	**2.1385**	**68.5993**	**14.3491**	**0.2131**	**5.4024**	**0.3445**	**5.7469**	**1.4796**	**0.3296**	**1.8091**			**22,983.1052**	**1.2328**		**23,013.9252**

3.4 Dewatering - 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**			**0.0000**	**0.0000**		**0.0000**

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

Mitigated Construction On-Site

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

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000

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

3.5 Final Grading & Import - 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					0.6256	0.0000	0.6256	0.0786	0.0000	0.0786			0.0000			0.0000
Off-Road	0.9064	11.2900	4.0155	0.0133		0.3836	0.3836		0.3529	0.3529			1,334.7434	0.4155		1,345.1315
Total	**0.9064**	**11.2900**	**4.0155**	**0.0133**	**0.6256**	**0.3836**	**1.0093**	**0.0786**	**0.3529**	**0.4316**			**1,334.7434**	**0.4155**		**1,345.1315**

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	3.5331	118.1560	23.9642	0.3382	8.1855	0.5391	8.7245	2.2427	0.5157	2.7585			36,476.2844	2.1995		36,531.2711
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0293	0.0212	0.2271	5.7000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152			57.0340	1.9500e-003		57.0826
Total	**3.5624**	**118.1772**	**24.1913**	**0.3388**	**8.2413**	**0.5395**	**8.7808**	**2.2576**	**0.5161**	**2.7737**			**36,533.3183**	**2.2014**		**36,588.3537**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2440	0.0000	0.2440	0.0307	0.0000	0.0307			0.0000			0.0000
Off-Road	0.1620	0.7018	5.9386	0.0133		0.0216	0.0216		0.0216	0.0216			1,334.7434	0.4155		1,345.1315
Total	**0.1620**	**0.7018**	**5.9386**	**0.0133**	**0.2440**	**0.0216**	**0.2656**	**0.0307**	**0.0216**	**0.0523**			**1,334.7434**	**0.4155**		**1,345.1315**

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	3.5331	118.1560	23.9642	0.3382	8.1855	0.5391	8.7245	2.2427	0.5157	2.7585			36,476.2844	2.1995		36,531.2711
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0293	0.0212	0.2271	5.7000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152			57.0340	1.9500e-003		57.0826
Total	**3.5624**	**118.1772**	**24.1913**	**0.3388**	**8.2413**	**0.5395**	**8.7808**	**2.2576**	**0.5161**	**2.7737**			**36,533.3183**	**2.2014**		**36,588.3537**

3.6 Paving - 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.7 Architectural Coating - 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					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3133	1.6224	3.8788	0.0123	0.9744	0.0145	0.9890	0.2608	0.0137	0.2744			1,244.8872	0.0700		1,246.6361
Unmitigated	0.3133	1.6224	3.8788	0.0123	0.9744	0.0145	0.9890	0.2608	0.0137	0.2744			1,244.8872	0.0700		1,246.6361

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	13.23	159.25	117.18	140,827	140,827
Total	13.23	159.25	117.18	140,827	140,827

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0158	1.0000e-005	7.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.5300e-003	0.0000		1.6400e-003
Unmitigated	0.0158	1.0000e-005	7.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.5300e-003	0.0000		1.6400e-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	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0157					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.5300e-003	0.0000		1.6400e-003
Total	**0.0158**	**1.0000e-005**	**7.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**1.5300e-003**	**0.0000**		**1.6400e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0157					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.5300e-003	0.0000		1.6400e-003
Total	**0.0158**	**1.0000e-005**	**7.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**1.5300e-003**	**0.0000**		**1.6400e-003**

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

Fugitive VOC Emissions

LCWA

Component Type	Number	Number w/ 20% Factor of Safety	THC EF (lb/hr-comp)	THC Emissions (lb/hr)	THC Emissions (lb/yr)	lb/day
Connectors	5,347	6,416	1.80E-05	1.15E-01	1,011.67	2.8
Flanges	2,057	2,469	5.10E-05	1.26E-01	1,103.05	3.0
Pump Seals	39	47	5.80E-04	2.73E-02	238.80	0.7
Valves	56	68	3.10E-05	2.11E-03	18.47	0.1
Total				**2.71E-01**	**2,371.99**	6.5

- Component numbers obtained from PFDs (March 8, 2017)

- Emission Factors from SCAQMD Guidelines for Reporting VOC Emissions from Component Leaks, Table IV-2c

TACs

Pollutant	CAS	Weight Fraction	Emissions (lb/hr)	Emissions (lb/yr)
Hexane	110-54-3	0.004	1.08E-03	9.49
Benzene	71-43-2	0.006	1.62E-03	14.23
Toluene	108-88-3	0.010	2.71E-03	23.72
Ethylbenzene	100-41-4	0.004	1.08E-03	9.49
Xylene	1330-20-7	0.014	3.79E-03	33.21
				90.14

- Speciation Profile from EPA TANKS 4.09d, Crude Oil

Pumpkin Patch

Component Type	Number	Number w/ 20% Factor of Safety	THC EF (lb/hr-comp)	THC Emissions (lb/hr)	THC Emissions (lb/yr)	lb/day
Connectors	2,767	3,321	1.80E-05	5.98E-02	523.66	1.4
Flanges	666	799	5.10E-05	4.07E-02	356.96	1.0
Pump Seals	8	10	5.80E-04	5.80E-03	50.81	0.1
Valves	7	9	3.10E-05	2.79E-04	2.44	0.0
Total				**1.07E-01**	**933.87**	2.6

- Component numbers obtained from PFDs (March 8, 2017)

- Emission Factors from SCAQMD Guidelines for Reporting VOC Emissions from Component Leaks, Table IV-2c

TACs

Pollutant	CAS	Weight Fraction	Emissions (lb/hr)	Emissions (lb/yr)
Hexane	110-54-3	0.004	4.26E-04	3.74
Benzene	71-43-2	0.006	6.40E-04	5.60
Toluene	108-88-3	0.01	1.07E-03	9.34
Ethylbenzene	100-41-4	0.004	4.26E-04	3.74
Xylene	1330-20-7	0.014	1.49E-03	13.07

- Speciation Profile from EPA TANKS 4.09d, Crude Oil

Wetlands Facility Construction - Tank Construction Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	9.78	1000sqft	0.22	9,777.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per SPEC schedule. Painting duration is estimate.

Off-road Equipment - Per SPEC equipment schedule

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment -

Off-road Equipment -

Architectural Coating - Surface area of all six tanks.

Construction Off-road Equipment Mitigation - Tier IV mitigaiton

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	4,889.00	43,078.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	14,666.00	0.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	5.00	20.00
tblLandUse	LandUseSquareFeet	9,780.00	9,777.00
tblProjectCharacteristics	OperationalYear	2014	2019

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	25.2604	14.7690	13.9266	0.0214	0.8645	0.9497	1.4794	0.4434	0.9165	1.0304	0.0000	2,033.4691	2,033.4691	0.3574	0.0000	2,040.9739
Total	**25.2604**	**14.7690**	**13.9266**	**0.0214**	**0.8645**	**0.9497**	**1.4794**	**0.4434**	**0.9165**	**1.0304**	**0.0000**	**2,033.4691**	**2,033.4691**	**0.3574**	**0.0000**	**2,040.9739**

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	24.9915	0.9765	12.9525	0.0214	0.8645	0.0292	0.8832	0.4434	0.0291	0.4620	0.0000	2,033.4691	2,033.4691	0.3574	0.0000	2,040.9739
Total	**24.9915**	**0.9765**	**12.9525**	**0.0214**	**0.8645**	**0.0292**	**0.8832**	**0.4434**	**0.0291**	**0.4620**	**0.0000**	**2,033.4691**	**2,033.4691**	**0.3574**	**0.0000**	**2,040.9739**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**1.06**	**93.39**	**6.99**	**0.00**	**0.00**	**96.93**	**40.30**	**0.00**	**96.83**	**55.17**	**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	0.2558	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1400e-003	2.1400e-003	1.0000e-005		2.2600e-003
Energy	5.4300e-003	0.0494	0.0415	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.2765	59.2765	1.1400e-003	1.0900e-003	59.6373
Mobile	0.2373	0.8109	2.9329	9.0500e-003	0.6403	0.0128	0.6531	0.1711	0.0118	0.1829		726.4386	726.4386	0.0264		726.9927
Total	**0.4985**	**0.8603**	**2.9754**	**9.3500e-003**	**0.6403**	**0.0166**	**0.6569**	**0.1711**	**0.0156**	**0.1867**		**785.7173**	**785.7173**	**0.0275**	**1.0900e-003**	**786.6322**

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	0.2558	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1400e-003	2.1400e-003	1.0000e-005		2.2600e-003
Energy	5.4300e-003	0.0494	0.0415	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.2765	59.2765	1.1400e-003	1.0900e-003	59.6373
Mobile	0.2373	0.8109	2.9329	9.0500e-003	0.6403	0.0128	0.6531	0.1711	0.0118	0.1829		726.4386	726.4386	0.0264		726.9927
Total	**0.4985**	**0.8603**	**2.9754**	**9.3500e-003**	**0.6403**	**0.0166**	**0.6569**	**0.1711**	**0.0156**	**0.1867**		**785.7173**	**785.7173**	**0.0275**	**1.0900e-003**	**786.6322**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2018	1/12/2018	5	10	
2	Site Preparation	Site Preparation	1/13/2018	1/15/2018	5	1	
3	Grading	Grading	1/16/2018	1/17/2018	5	2	

4	Building Construction	Building Construction	1/18/2018	6/6/2018	5	100	
5	Paving	Paving	6/7/2018	6/13/2018	5	5	
6	Architectural Coating	Architectural Coating	6/14/2018	7/11/2018	5	20	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 43,078 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	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
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	4.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Clean Paved Roads

3.2 Demolition - 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	1.7068	14.6987	13.1939	0.0194		0.9484	0.9484		0.9153	0.9153		1,878.5490	1,878.5490	0.3076		1,885.0082
Total	**1.7068**	**14.6987**	**13.1939**	**0.0194**		**0.9484**	**0.9484**		**0.9153**	**0.9153**		**1,878.5490**	**1,878.5490**	**0.3076**		**1,885.0082**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2091	0.9061	12.2198	0.0194		0.0279	0.0279		0.0279	0.0279	0.0000	1,878.5490	1,878.5490	0.3076		1,885.0082
Total	**0.2091**	**0.9061**	**12.2198**	**0.0194**		**0.0279**	**0.0279**		**0.0279**	**0.0279**	**0.0000**	**1,878.5490**	**1,878.5490**	**0.3076**		**1,885.0082**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847

Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

3.3 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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.0983	10.9398	7.0042	9.3200e-003		0.6535	0.6535		0.6012	0.6012		938.5863	938.5863	0.2922		944.7224
Total	**1.0983**	**10.9398**	**7.0042**	**9.3200e-003**	**0.5303**	**0.6535**	**1.1837**	**0.0573**	**0.6012**	**0.6584**		**938.5863**	**938.5863**	**0.2922**		**944.7224**

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	0.0172	0.0235	0.2442	6.6000e-004	0.0559	4.4000e-004	0.0563	0.0148	4.0000e-004	0.0152		51.6400	51.6400	2.6100e-003		51.6949
Total	**0.0172**	**0.0235**	**0.2442**	**6.6000e-004**	**0.0559**	**4.4000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**		**51.6400**	**51.6400**	**2.6100e-003**		**51.6949**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.1135	0.4917	6.9975	9.3200e-003		0.0151	0.0151		0.0151	0.0151	0.0000	938.5863	938.5863	0.2922		944.7224
Total	**0.1135**	**0.4917**	**6.9975**	**9.3200e-003**	**0.5303**	**0.0151**	**0.5454**	**0.0573**	**0.0151**	**0.0724**	**0.0000**	**938.5863**	**938.5863**	**0.2922**		**944.7224**

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	0.0172	0.0235	0.2442	6.6000e-004	0.0559	4.4000e-004	0.0563	0.0148	4.0000e-004	0.0152		51.6400	51.6400	2.6100e-003		51.6949
Total	**0.0172**	**0.0235**	**0.2442**	**6.6000e-004**	**0.0559**	**4.4000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**		**51.6400**	**51.6400**	**2.6100e-003**		**51.6949**

3.4 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					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.0530	9.3216	8.3495	0.0120		0.6139	0.6139		0.5862	0.5862		1,173.8565	1,173.8565	0.2268		1,178.6197

Total	**1.0530**	**9.3216**	**8.3495**	**0.0120**	**0.7528**	**0.6139**	**1.3667**	**0.4138**	**0.5862**	**1.0000**		**1,173.8565**	**1,173.8565**	**0.2268**		**1,178.6197**

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	0.0344	0.0469	0.4884	1.3300e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		103.2801	103.2801	5.2300e-003		103.3898
Total	**0.0344**	**0.0469**	**0.4884**	**1.3300e-003**	**0.1118**	**8.7000e-004**	**0.1127**	**0.0296**	**8.1000e-004**	**0.0305**		**103.2801**	**103.2801**	**5.2300e-003**		**103.3898**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.1330	0.5765	7.8665	0.0120		0.0177	0.0177		0.0177	0.0177	0.0000	1,173.8565	1,173.8565	0.2268		1,178.6197
Total	**0.1330**	**0.5765**	**7.8665**	**0.0120**	**0.7528**	**0.0177**	**0.7705**	**0.4138**	**0.0177**	**0.4315**	**0.0000**	**1,173.8565**	**1,173.8565**	**0.2268**		**1,178.6197**

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	0.0344	0.0469	0.4884	1.3300e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		103.2801	103.2801	5.2300e-003		103.3898
Total	**0.0344**	**0.0469**	**0.4884**	**1.3300e-003**	**0.1118**	**8.7000e-004**	**0.1127**	**0.0296**	**8.1000e-004**	**0.0305**		**103.2801**	**103.2801**	**5.2300e-003**		**103.3898**

3.5 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	1.0786	10.9578	7.7239	0.0113		0.7055	0.7055		0.6491	0.6491		1,140.2487	1,140.2487	0.3550		1,147.7032
Total	**1.0786**	**10.9578**	**7.7239**	**0.0113**		**0.7055**	**0.7055**		**0.6491**	**0.6491**		**1,140.2487**	**1,140.2487**	**0.3550**		**1,147.7032**

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	0.0156	0.1477	0.2178	4.3000e-004	0.0125	2.4100e-003	0.0149	3.5600e-003	2.2200e-003	5.7800e-003		41.8243	41.8243	3.1000e-004		41.8307
Worker	0.0138	0.0188	0.1954	5.3000e-004	0.0447	3.5000e-004	0.0451	0.0119	3.2000e-004	0.0122		41.3120	41.3120	2.0900e-003		41.3559
Total	**0.0293**	**0.1665**	**0.4132**	**9.6000e-004**	**0.0572**	**2.7600e-003**	**0.0600**	**0.0154**	**2.5400e-003**	**0.0180**		**83.1363**	**83.1363**	**2.4000e-003**		**83.1867**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1389	0.6019	7.6980	0.0113		0.0185	0.0185		0.0185	0.0185	0.0000	1,140.2487	1,140.2487	0.3550		1,147.7032
Total	**0.1389**	**0.6019**	**7.6980**	**0.0113**		**0.0185**	**0.0185**		**0.0185**	**0.0185**	**0.0000**	**1,140.2487**	**1,140.2487**	**0.3550**		**1,147.7032**

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	0.0156	0.1477	0.2178	4.3000e-004	0.0125	2.4100e-003	0.0149	3.5600e-003	2.2200e-003	5.7800e-003		41.8243	41.8243	3.1000e-004		41.8307
Worker	0.0138	0.0188	0.1954	5.3000e-004	0.0447	3.5000e-004	0.0451	0.0119	3.2000e-004	0.0122		41.3120	41.3120	2.0900e-003		41.3559
Total	**0.0293**	**0.1665**	**0.4132**	**9.6000e-004**	**0.0572**	**2.7600e-003**	**0.0600**	**0.0154**	**2.5400e-003**	**0.0180**		**83.1363**	**83.1363**	**2.4000e-003**		**83.1867**

3.6 Paving - 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	0.9092	8.6233	7.1255	0.0111		0.5050	0.5050		0.4681	0.4681		1,054.2145	1,054.2145	0.2968		1,060.4462
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9092**	**8.6233**	**7.1255**	**0.0111**		**0.5050**	**0.5050**		**0.4681**	**0.4681**		**1,054.2145**	**1,054.2145**	**0.2968**		**1,060.4462**

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	0.0619	0.0845	0.8792	2.3900e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4600e-003	0.0548		185.9041	185.9041	9.4100e-003		186.1016
Total	**0.0619**	**0.0845**	**0.8792**	**2.3900e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4600e-003**	**0.0548**		**185.9041**	**185.9041**	**9.4100e-003**		**186.1016**

Mitigated Construction On-Site

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

Category	lb/day										lb/day					
Off-Road	0.1100	0.4766	6.7829	0.0111		0.0147	0.0147		0.0147	0.0147	0.0000	1,054.2145	1,054.2145	0.2968		1,060.4462
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.1100**	**0.4766**	**6.7829**	**0.0111**		**0.0147**	**0.0147**		**0.0147**	**0.0147**	**0.0000**	**1,054.2145**	**1,054.2145**	**0.2968**		**1,060.4462**

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	0.0619	0.0845	0.8792	2.3900e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4600e-003	0.0548		185.9041	185.9041	9.4100e-003		186.1016
Total	**0.0619**	**0.0845**	**0.8792**	**2.3900e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4600e-003**	**0.0548**		**185.9041**	**185.9041**	**9.4100e-003**		**186.1016**

3.7 Architectural Coating - 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					
Archit. Coating	24.9583					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**25.2570**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	3.4400e-003	4.6900e-003	0.0488	1.3000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		10.3280	10.3280	5.2000e-004		10.3390
Total	**3.4400e-003**	**4.6900e-003**	**0.0488**	**1.3000e-004**	**0.0112**	**9.0000e-005**	**0.0113**	**2.9600e-003**	**8.0000e-005**	**3.0500e-003**		**10.3280**	**10.3280**	**5.2000e-004**		**10.3390**

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	24.9583					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**24.9880**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	3.4400e-003	4.6900e-003	0.0488	1.3000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		10.3280	10.3280	5.2000e-004		10.3390
Total	**3.4400e-003**	**4.6900e-003**	**0.0488**	**1.3000e-004**	**0.0112**	**9.0000e-005**	**0.0113**	**2.9600e-003**	**8.0000e-005**	**3.0500e-003**		**10.3280**	**10.3280**	**5.2000e-004**		**10.3390**

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	0.2373	0.8109	2.9329	9.0500e-003	0.6403	0.0128	0.6531	0.1711	0.0118	0.1829		726.4386	726.4386	0.0264		726.9927
Unmitigated	0.2373	0.8109	2.9329	9.0500e-003	0.6403	0.0128	0.6531	0.1711	0.0118	0.1829		726.4386	726.4386	0.0264		726.9927

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	68.17	12.91	6.65	227,989	227,989
Total	68.17	12.91	6.65	227,989	227,989

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.510142	0.059804	0.180842	0.139058	0.042603	0.006701	0.016107	0.033206	0.001939	0.002487	0.004384	0.000580	0.002146

5.0 Energy Detail

4.4 Fleet Mix

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	5.4300e-003	0.0494	0.0415	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.2765	59.2765	1.1400e-003	1.0900e-003	59.6373
NaturalGas Unmitigated	5.4300e-003	0.0494	0.0415	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.2765	59.2765	1.1400e-003	1.0900e-003	59.6373

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	503.85	5.4300e-003	0.0494	0.0415	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.2765	59.2765	1.1400e-003	1.0900e-003	59.6373
Total		**5.4300e-003**	**0.0494**	**0.0415**	**3.0000e-004**		**3.7500e-003**	**3.7500e-003**		**3.7500e-003**	**3.7500e-003**		**59.2765**	**59.2765**	**1.1400e-003**	**1.0900e-003**	**59.6373**

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	0.50385	5.4300e-003	0.0494	0.0415	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.2765	59.2765	1.1400e-003	1.0900e-003	59.6373
Total		**5.4300e-003**	**0.0494**	**0.0415**	**3.0000e-004**		**3.7500e-003**	**3.7500e-003**		**3.7500e-003**	**3.7500e-003**		**59.2765**	**59.2765**	**1.1400e-003**	**1.0900e-003**	**59.6373**

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	0.2558	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1400e-003	2.1400e-003	1.0000e-005		2.2600e-003
Unmitigated	0.2558	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1400e-003	2.1400e-003	1.0000e-005		2.2600e-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	lb/day										lb/day					
Architectural Coating	0.0621					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1936					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1400e-003	2.1400e-003	1.0000e-005		2.2600e-003
Total	**0.2558**	**1.0000e-005**	**1.0100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.1400e-003**	**2.1400e-003**	**1.0000e-005**		**2.2600e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0621					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1936					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1400e-003	2.1400e-003	1.0000e-005		2.2600e-003
Total	**0.2558**	**1.0000e-005**	**1.0100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.1400e-003**	**2.1400e-003**	**1.0000e-005**		**2.2600e-003**

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 Vegetation

Synergy - Remediation Truck Haul Trips Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	10.00	Acre	10.00	435,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Trips and VMT - Weighted average for Kettleman and Simi Valley Landfills

Grading - Synergy remediatiion

Construction Off-road Equipment Mitigation - Tier IV is required mitigation.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblGrading	AcresOfGrading	50.00	10.00
tblGrading	MaterialExported	0.00	17,600.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblTripsAndVMT	HaulingTripLength	20.00	68.20

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	7.9418	150.1436	54.4594	0.3310	18.2675	3.0631	20.8460	9.9840	2.8337	12.3563	0.0000	35,239.2413	35,239.2413	3.6158	0.0000	35,329.6370
2019	3.6229	29.8917	26.7695	0.0651	2.4999	1.3605	3.8604	0.6733	1.2797	1.9530	0.0000	6,518.1457	6,518.1457	0.8339	0.0000	6,538.9940
Maximum	**7.9418**	**150.1436**	**54.4594**	**0.3310**	**18.2675**	**3.0631**	**20.8460**	**9.9840**	**2.8337**	**12.3563**	**0.0000**	**35,239.2413**	**35,239.2413**	**3.6158**	**0.0000**	**35,329.6370**

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	3.6132	93.9218	52.3691	0.3310	9.3670	0.5309	9.8979	3.9263	0.5122	3.9899	0.0000	35,239.2413	35,239.2413	3.6158	0.0000	35,329.6370
2019	1.5896	11.0476	27.0660	0.0651	2.4999	0.1114	2.6113	0.6733	0.1078	0.7811	0.0000	6,518.1457	6,518.1457	0.8339	0.0000	6,538.9940
Maximum	**3.6132**	**93.9218**	**52.3691**	**0.3310**	**9.3670**	**0.5309**	**9.8979**	**3.9263**	**0.5122**	**3.9899**	**0.0000**	**35,239.2413**	**35,239.2413**	**3.6158**	**0.0000**	**35,329.6370**

	ROG	**NOx**	**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	**55.01**	**41.70**	**2.21**	**0.00**	**42.86**	**85.48**	**49.37**	**56.84**	**84.93**	**66.66**	**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	0.0225	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.4093	2.1516	5.0682	0.0171	1.3920	0.0178	1.4098	0.3725	0.0167	0.3892		1,737.7816	1,737.7816	0.0930		1,740.1067
Total	**0.4318**	**2.1516**	**5.0692**	**0.0171**	**1.3920**	**0.0178**	**1.4098**	**0.3725**	**0.0167**	**0.3892**		**1,737.7837**	**1,737.7837**	**0.0930**	**0.0000**	**1,740.1090**

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	0.0225	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.4093	2.1516	5.0682	0.0171	1.3920	0.0178	1.4098	0.3725	0.0167	0.3892		1,737.7816	1,737.7816	0.0930		1,740.1067
Total	**0.4318**	**2.1516**	**5.0692**	**0.0171**	**1.3920**	**0.0178**	**1.4098**	**0.3725**	**0.0167**	**0.3892**		**1,737.7837**	**1,737.7837**	**0.0930**	**0.0000**	**1,740.1090**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2018	6/28/2018	5	20	
2	Site Preparation	Site Preparation	6/29/2018	7/12/2018	5	10	
3	Grading	Grading	7/13/2018	8/9/2018	5	20	
4	Building Construction	Building Construction	8/10/2018	6/27/2019	5	230	
5	Paving	Paving	6/28/2019	7/25/2019	5	20	
6	Architectural Coating	Architectural Coating	7/26/2019	8/22/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

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

OffRoad Equipment

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

Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	37.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	183.00	71.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	2,200.00	14.70	6.90	68.20	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 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	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**		**1.9386**	**1.9386**		**1.8048**	**1.8048**		**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

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	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479
Total	**0.0879**	**0.0635**	**0.6811**	**1.7200e-003**	**0.1677**	**1.3400e-003**	**0.1690**	**0.0445**	**1.2300e-003**	**0.0457**		**171.1019**	**171.1019**	**5.8400e-003**		**171.2479**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**0.4623**	**2.0032**	**23.2798**	**0.0388**		**0.0616**	**0.0616**		**0.0616**	**0.0616**	**0.0000**	**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

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	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479
Total	**0.0879**	**0.0635**	**0.6811**	**1.7200e-003**	**0.1677**	**1.3400e-003**	**0.1690**	**0.0445**	**1.2300e-003**	**0.0457**		**171.1019**	**171.1019**	**5.8400e-003**		**171.2479**

3.3 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708		3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.0663**	**2.5769**	**20.6432**	**9.9307**	**2.3708**	**12.3014**		**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

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	0.1055	0.0762	0.8174	2.0600e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		205.3223	205.3223	7.0100e-003		205.4974
Total	**0.1055**	**0.0762**	**0.8174**	**2.0600e-003**	**0.2012**	**1.6000e-003**	**0.2028**	**0.0534**	**1.4800e-003**	**0.0548**		**205.3223**	**205.3223**	**7.0100e-003**		**205.4974**

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					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**0.4656**	**2.0175**	**20.8690**	**0.0380**	**7.0458**	**0.0621**	**7.1079**	**3.8730**	**0.0621**	**3.9351**	**0.0000**	**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

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	0.1055	0.0762	0.8174	2.0600e-003	0.2012	1.6000e-003	0.2028	0.0534	1.4800e-003	0.0548		205.3223	205.3223	7.0100e-003		205.4974
Total	**0.1055**	**0.0762**	**0.8174**	**2.0600e-003**	**0.2012**	**1.6000e-003**	**0.2028**	**0.0534**	**1.4800e-003**	**0.0548**		**205.3223**	**205.3223**	**7.0100e-003**		**205.4974**

3.4 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					6.6519	0.0000	6.6519	3.3826	0.0000	3.3826			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230		6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**6.6519**	**2.6337**	**9.2856**	**3.3826**	**2.4230**	**5.8056**		**6,244.4284**	**6,244.4284**	**1.9440**		**6,293.0278**

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	2.7345	90.5372	18.4618	0.2667	6.5493	0.4276	6.9768	1.7944	0.4091	2.2034		28,766.6771	28,766.6771	1.6641		28,808.2787
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1172	0.0846	0.9082	2.2900e-003	0.2236	1.7800e-003	0.2253	0.0593	1.6400e-003	0.0609		228.1358	228.1358	7.7800e-003		228.3305
Total	**2.8517**	**90.6218**	**19.3700**	**0.2690**	**6.7728**	**0.4293**	**7.2022**	**1.8537**	**0.4107**	**2.2644**		**28,994.8129**	**28,994.8129**	**1.6719**		**29,036.6092**

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					2.5942	0.0000	2.5942	1.3192	0.0000	1.3192			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0620		0.1015	0.1015		0.1015	0.1015	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**0.7616**	**3.3000**	**32.9991**	**0.0620**	**2.5942**	**0.1015**	**2.6958**	**1.3192**	**0.1015**	**1.4207**	**0.0000**	**6,244.4284**	**6,244.4284**	**1.9440**		**6,293.0278**

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	2.7345	90.5372	18.4618	0.2667	6.5493	0.4276	6.9768	1.7944	0.4091	2.2034		28,766.6771	28,766.6771	1.6641		28,808.2787
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1172	0.0846	0.9082	2.2900e-003	0.2236	1.7800e-003	0.2253	0.0593	1.6400e-003	0.0609		228.1358	228.1358	7.7800e-003		228.3305
Total	**2.8517**	**90.6218**	**19.3700**	**0.2690**	**6.7728**	**0.4293**	**7.2022**	**1.8537**	**0.4107**	**2.2644**		**28,994.8129**	**28,994.8129**	**1.6719**		**29,036.6092**

3.5 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	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883

Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**		**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

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	0.3153	8.6184	2.3786	0.0181	0.4544	0.0638	0.5183	0.1308	0.0611	0.1919		1,922.3707	1,922.3707	0.1447		1,925.9872
Worker	1.0721	0.7745	8.3099	0.0210	2.0455	0.0163	2.0618	0.5425	0.0150	0.5575		2,087.4429	2,087.4429	0.0712		2,089.2237
Total	**1.3874**	**9.3929**	**10.6885**	**0.0390**	**2.4999**	**0.0801**	**2.5801**	**0.6733**	**0.0761**	**0.7494**		**4,009.8137**	**4,009.8137**	**0.2159**		**4,015.2109**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**0.3278**	**2.2347**	**17.4603**	**0.0269**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

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	0.3153	8.6184	2.3786	0.0181	0.4544	0.0638	0.5183	0.1308	0.0611	0.1919		1,922.3707	1,922.3707	0.1447		1,925.9872
Worker	1.0721	0.7745	8.3099	0.0210	2.0455	0.0163	2.0618	0.5425	0.0150	0.5575		2,087.4429	2,087.4429	0.0712		2,089.2237
Total	**1.3874**	**9.3929**	**10.6885**	**0.0390**	**2.4999**	**0.0801**	**2.5801**	**0.6733**	**0.0761**	**0.7494**		**4,009.8137**	**4,009.8137**	**0.2159**		**4,015.2109**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

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	0.2860	8.1298	2.1872	0.0179	0.4544	0.0547	0.5091	0.1308	0.0523	0.1831		1,905.0455	1,905.0455	0.1394		1,908.5315
Worker	0.9758	0.6831	7.4185	0.0203	2.0455	0.0159	2.0614	0.5425	0.0147	0.5572		2,021.5200	2,021.5200	0.0632		2,023.0990
Total	**1.2618**	**8.8129**	**9.6058**	**0.0382**	**2.4999**	**0.0706**	**2.5705**	**0.6733**	**0.0670**	**0.7403**		**3,926.5655**	**3,926.5655**	**0.2026**		**3,931.6305**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**0.3278**	**2.2347**	**17.4603**	**0.0269**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

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	0.2860	8.1298	2.1872	0.0179	0.4544	0.0547	0.5091	0.1308	0.0523	0.1831		1,905.0455	1,905.0455	0.1394		1,908.5315
Worker	0.9758	0.6831	7.4185	0.0203	2.0455	0.0159	2.0614	0.5425	0.0147	0.5572		2,021.5200	2,021.5200	0.0632		2,023.0990
Total	**1.2618**	**8.8129**	**9.6058**	**0.0382**	**2.4999**	**0.0706**	**2.5705**	**0.6733**	**0.0670**	**0.7403**		**3,926.5655**	**3,926.5655**	**0.2026**		**3,931.6305**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4544**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**		**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

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	0.0800	0.0560	0.6081	1.6600e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		165.6984	165.6984	5.1800e-003		165.8278
Total	**0.0800**	**0.0560**	**0.6081**	**1.6600e-003**	**0.1677**	**1.3000e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**		**165.6984**	**165.6984**	**5.1800e-003**		**165.8278**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2805**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

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	0.0800	0.0560	0.6081	1.6600e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		165.6984	165.6984	5.1800e-003		165.8278
Total	**0.0800**	**0.0560**	**0.6081**	**1.6600e-003**	**0.1677**	**1.3000e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**		**165.6984**	**165.6984**	**5.1800e-003**		**165.8278**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

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

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	0.1973	0.1381	1.4999	4.1000e-003	0.4136	3.2200e-003	0.4168	0.1097	2.9700e-003	0.1127		408.7226	408.7226	0.0128		409.0419
Total	**0.1973**	**0.1381**	**1.4999**	**4.1000e-003**	**0.4136**	**3.2200e-003**	**0.4168**	**0.1097**	**2.9700e-003**	**0.1127**		**408.7226**	**408.7226**	**0.0128**		**409.0419**

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**0.0297**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

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	0.1973	0.1381	1.4999	4.1000e-003	0.4136	3.2200e-003	0.4168	0.1097	2.9700e-003	0.1127		408.7226	408.7226	0.0128		409.0419
Total	**0.1973**	**0.1381**	**1.4999**	**4.1000e-003**	**0.4136**	**3.2200e-003**	**0.4168**	**0.1097**	**2.9700e-003**	**0.1127**		**408.7226**	**408.7226**	**0.0128**		**409.0419**

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	0.4093	2.1516	5.0682	0.0171	1.3920	0.0178	1.4098	0.3725	0.0167	0.3892		1,737.7816	1,737.7816	0.0930		1,740.1067
Unmitigated	0.4093	2.1516	5.0682	0.0171	1.3920	0.0178	1.4098	0.3725	0.0167	0.3892		1,737.7816	1,737.7816	0.0930		1,740.1067

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	18.90	227.50	167.40	201,181	201,181

Total	18.90	227.50	167.40	201,181	201,181

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0225	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-003
Unmitigated	0.0225	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-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	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0224					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-003
Total	**0.0225**	**1.0000e-005**	**1.0300e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.1900e-003**	**2.1900e-003**	**1.0000e-005**		**2.3400e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0224					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-003
Total	**0.0225**	**1.0000e-005**	**1.0300e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.1900e-003**	**2.1900e-003**	**1.0000e-005**		**2.3400e-003**

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

Wetlands Facility Construction - Restoration Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	16.10	1,000.00	0
Other Non-Asphalt Surfaces	69.90	1000sqft	1.60	69,900.00	0
Parking Lot	34.50	1000sqft	0.79	34,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acreage of area to be graded. Non-asphalt surface is sidewalk.

Construction Phase - Only paving, grading and building construction is relevant (grading construction used for pile driving).

Off-road Equipment - Estimates of sheet pile driving equipment

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Estimate of worker trips and vendor trips for sheet pile driving

Grading - Acreage to be graded

Construction Off-road Equipment Mitigation - Tier IV for mitigation.

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	35,968.00	500.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	107,903.00	1,500.00
tblAreaCoating	Area_Nonresidential_Interior	107903	1500
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	300.00	88.00
tblConstructionPhase	NumDays	30.00	132.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	PhaseEndDate	8/10/2018	7/13/2018
tblConstructionPhase	PhaseEndDate	6/4/2019	11/30/2018
tblConstructionPhase	PhaseEndDate	1/15/2019	1/31/2019
tblConstructionPhase	PhaseEndDate	4/7/2017	7/13/2018
tblConstructionPhase	PhaseStartDate	7/14/2018	6/16/2018
tblConstructionPhase	PhaseStartDate	2/1/2019	8/1/2018
tblConstructionPhase	PhaseStartDate	7/14/2018	8/1/2018
tblConstructionPhase	PhaseStartDate	2/11/2017	5/19/2018
tblGrading	AcresOfGrading	330.00	16.10
tblGrading	MaterialExported	0.00	37,000.00
tblLandUse	LotAcreage	0.02	16.10
tblOffRoadEquipment	HorsePower	171.00	275.00
tblOffRoadEquipment	LoadFactor	0.42	0.29
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	VendorTripNumber	17.00	2.00
tblTripsAndVMT	WorkerTripNumber	9.00	0.00
tblTripsAndVMT	WorkerTripNumber	44.00	5.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	7.0978	73.4626	58.7652	0.0670	18.2675	3.6596	21.0233	9.9840	3.4159	12.5194	0.0000	6,695.9074	6,695.9074	1.7301	0.0000	6,732.2388
2018	7.2345	82.5973	59.5907	0.1076	7.1835	3.6519	10.8354	3.5979	3.3597	6.9576	0.0000	10,676.9591	10,676.9591	2.4803	0.0000	10,729.0447
2019	5.5182	62.1885	48.4283	0.0900	9.2128	2.6460	11.8588	4.0944	2.4344	6.5288	0.0000	8,773.8077	8,773.8077	1.9618	0.0000	8,815.0061
Total	**19.8504**	**218.2484**	**166.7842**	**0.2646**	**34.6638**	**9.9575**	**43.7175**	**17.6764**	**9.2100**	**26.0058**	**0.0000**	**26,146.6741**	**26,146.6741**	**6.1722**	**0.0000**	**26,276.2896**

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					
2017	0.8403	3.3791	36.8414	0.0670	18.2675	0.1024	18.3325	9.9840	0.1022	10.0490	0.0000	6,695.9074	6,695.9074	1.7301	0.0000	6,732.2388
2018	1.6393	12.8736	52.6151	0.1076	7.1835	0.2717	7.4552	3.5979	0.2602	3.8581	0.0000	10,676.9590	10,676.9590	2.4803	0.0000	10,729.0447
2019	1.3834	11.2685	42.9182	0.0900	9.2128	0.2420	9.4548	4.0944	0.2307	4.3251	0.0000	8,773.8077	8,773.8077	1.9618	0.0000	8,815.0061
Total	**3.8630**	**27.5212**	**132.3747**	**0.2646**	**34.6638**	**0.6161**	**35.2425**	**17.6764**	**0.5931**	**18.2321**	**0.0000**	**26,146.6741**	**26,146.6741**	**6.1722**	**0.0000**	**26,276.2896**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**80.54**	**87.39**	**20.63**	**0.00**	**0.00**	**93.81**	**19.39**	**0.00**	**93.56**	**29.89**	**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	2.2069	1.0000e-004	0.0109	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0231	0.0231	6.0000e-005		0.0244
Energy	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Mobile	0.0243	0.0829	0.2999	9.3000e-004	0.0655	1.3100e-003	0.0668	0.0175	1.2100e-003	0.0187		74.2780	74.2780	2.7000e-003		74.3346
Total	**2.2317**	**0.0881**	**0.3150**	**9.6000e-004**	**0.0655**	**1.7300e-003**	**0.0672**	**0.0175**	**1.6300e-003**	**0.0191**		**80.3639**	**80.3639**	**2.8800e-003**	**1.1000e-004**	**80.4588**

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	2.2069	1.0000e-004	0.0109	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0231	0.0231	6.0000e-005		0.0244
Energy	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Mobile	0.0243	0.0829	0.2999	9.3000e-004	0.0655	1.3100e-003	0.0668	0.0175	1.2100e-003	0.0187		74.2780	74.2780	2.7000e-003		74.3346
Total	**2.2317**	**0.0881**	**0.3150**	**9.6000e-004**	**0.0655**	**1.7300e-003**	**0.0672**	**0.0175**	**1.6300e-003**	**0.0191**		**80.3639**	**80.3639**	**2.8800e-003**	**1.1000e-004**	**80.4588**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	5	10	
3	Paving	Paving	5/19/2018	7/13/2018	5	40	
4	Architectural Coating	Architectural Coating	6/16/2018	7/13/2018	5	20	
5	Grading	Grading	8/1/2018	1/31/2019	5	132	
6	Building Construction	Building Construction	8/1/2018	11/30/2018	5	88	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 16.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,500; Non-Residential Outdoor: 500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40

Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Other Construction Equipment	1	7.00	275	0.29
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	9	23.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,625.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Clean Paved Roads

3.2 Demolition - 2017

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	7.0098	73.3436	57.5236	0.0639		3.6575	3.6575		3.4140	3.4140		6,449.1494	6,449.1494	1.7171		6,485.2088
Total	**7.0098**	**73.3436**	**57.5236**	**0.0639**		**3.6575**	**3.6575**		**3.4140**	**3.4140**		**6,449.1494**	**6,449.1494**	**1.7171**		**6,485.2088**

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	0.0880	0.1190	1.2415	3.0500e-003	0.2571	2.0700e-003	0.2592	0.0682	1.9100e-003	0.0701		246.7580	246.7580	0.0130		247.0300
Total	**0.0880**	**0.1190**	**1.2415**	**3.0500e-003**	**0.2571**	**2.0700e-003**	**0.2592**	**0.0682**	**1.9100e-003**	**0.0701**		**246.7580**	**246.7580**	**0.0130**		**247.0300**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7523	3.2601	35.5999	0.0639		0.1003	0.1003		0.1003	0.1003	0.0000	6,449.1494	6,449.1494	1.7171		6,485.2088
Total	**0.7523**	**3.2601**	**35.5999**	**0.0639**		**0.1003**	**0.1003**		**0.1003**	**0.1003**	**0.0000**	**6,449.1494**	**6,449.1494**	**1.7171**		**6,485.2088**

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	0.0880	0.1190	1.2415	3.0500e-003	0.2571	2.0700e-003	0.2592	0.0682	1.9100e-003	0.0701		246.7580	246.7580	0.0130		247.0300
Total	**0.0880**	**0.1190**	**1.2415**	**3.0500e-003**	**0.2571**	**2.0700e-003**	**0.2592**	**0.0682**	**1.9100e-003**	**0.0701**		**246.7580**	**246.7580**	**0.0130**		**247.0300**

3.3 Site Preparation - 2017

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.4757	2.0615	21.2415	0.0391		0.0634	0.0634		0.0634	0.0634	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**0.4757**	**2.0615**	**21.2415**	**0.0391**	**18.0663**	**0.0634**	**18.1297**	**9.9307**	**0.0634**	**9.9941**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

3.4 Paving - 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	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6632**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

Mitigated Construction On-Site

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

Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0223		0.0366	0.0366		0.0366	0.0366	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3263**	**1.1895**	**16.9276**	**0.0223**		**0.0366**	**0.0366**		**0.0366**	**0.0366**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

3.5 Architectural Coating - 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					
Archit. Coating	1.1588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**1.4574**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

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

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	1.1588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**1.1885**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

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

3.6 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					6.1831	0.0000	6.1831	3.3290	0.0000	3.3290			0.0000			0.0000
Off-Road	5.2895	59.5338	42.3068	0.0617		2.7880	2.7880		2.5650	2.5650		6,212.8042	6,212.8042	1.9341		6,253.4209
Total	**5.2895**	**59.5338**	**42.3068**	**0.0617**	**6.1831**	**2.7880**	**8.9712**	**3.3290**	**2.5650**	**5.8940**		**6,212.8042**	**6,212.8042**	**1.9341**		**6,253.4209**

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	0.5804	8.4598	7.3661	0.0257	0.7084	0.1395	0.8479	0.1912	0.1283	0.3195		2,512.5524	2,512.5524	0.0186		2,512.9431
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0688	0.0939	0.9769	2.6500e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6200e-003	0.0609		206.5601	206.5601	0.0105		206.7796

Total	**0.6491**	**8.5536**	**8.3430**	**0.0284**	**0.9320**	**0.1412**	**1.0732**	**0.2505**	**0.1299**	**0.3804**		**2,719.1125**	**2,719.1125**	**0.0291**		**2,719.7227**

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					6.1831	0.0000	6.1831	3.3290	0.0000	3.3290			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.1009	0.1009		0.1009	0.1009	0.0000	6,212.8041	6,212.8041	1.9341		6,253.4209
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**6.1831**	**0.1009**	**6.2840**	**3.3290**	**0.1009**	**3.4299**	**0.0000**	**6,212.8041**	**6,212.8041**	**1.9341**		**6,253.4209**

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	0.5804	8.4598	7.3661	0.0257	0.7084	0.1395	0.8479	0.1912	0.1283	0.3195		2,512.5524	2,512.5524	0.0186		2,512.9431
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0688	0.0939	0.9769	2.6500e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6200e-003	0.0609		206.5601	206.5601	0.0105		206.7796
Total	**0.6491**	**8.5536**	**8.3430**	**0.0284**	**0.9320**	**0.1412**	**1.0732**	**0.2505**	**0.1299**	**0.3804**		**2,719.1125**	**2,719.1125**	**0.0291**		**2,719.7227**

3.6 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1831	0.0000	6.1831	3.3290	0.0000	3.3290			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**6.1831**	**2.5049**	**8.6881**	**3.3290**	**2.3045**	**5.6335**		**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

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	0.5637	7.9046	7.2442	0.0256	2.8061	0.1394	2.9455	0.7061	0.1282	0.8344		2,463.7987	2,463.7987	0.0185		2,464.1871
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0861	0.8953	2.6500e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		198.6968	198.6968	9.7800e-003		198.9023
Total	**0.6270**	**7.9907**	**8.1395**	**0.0283**	**3.0297**	**0.1411**	**3.1708**	**0.7654**	**0.1298**	**0.8952**		**2,662.4956**	**2,662.4956**	**0.0283**		**2,663.0894**

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					6.1831	0.0000	6.1831	3.3290	0.0000	3.3290			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.1009	0.1009		0.1009	0.1009	0.0000	6,111.3121	6,111.3121	1.9336		6,151.9167

Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**6.1831**	**0.1009**	**6.2840**	**3.3290**	**0.1009**	**3.4299**	**0.0000**	**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

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	0.5637	7.9046	7.2442	0.0256	2.8061	0.1394	2.9455	0.7061	0.1282	0.8344		2,463.7987	2,463.7987	0.0185		2,464.1871
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0861	0.8953	2.6500e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		198.6968	198.6968	9.7800e-003		198.9023
Total	**0.6270**	**7.9907**	**8.1395**	**0.0283**	**3.0297**	**0.1411**	**3.1708**	**0.7654**	**0.1298**	**0.8952**		**2,662.4956**	**2,662.4956**	**0.0283**		**2,663.0894**

3.7 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	1.2631	14.3387	8.4789	0.0164		0.7198	0.7198		0.6622	0.6622		1,651.5782	1,651.5782	0.5142		1,662.3755
Total	**1.2631**	**14.3387**	**8.4789**	**0.0164**		**0.7198**	**0.7198**		**0.6622**	**0.6622**		**1,651.5782**	**1,651.5782**	**0.5142**		**1,662.3755**

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	0.0156	0.1477	0.2178	4.3000e-004	0.0125	2.4100e-003	0.0149	3.5600e-003	2.2200e-003	5.7800e-003		41.8243	41.8243	3.1000e-004		41.8307
Worker	0.0172	0.0235	0.2442	6.6000e-004	0.0559	4.4000e-004	0.0563	0.0148	4.0000e-004	0.0152		51.6400	51.6400	2.6100e-003		51.6949
Total	**0.0328**	**0.1712**	**0.4620**	**1.0900e-003**	**0.0684**	**2.8500e-003**	**0.0713**	**0.0184**	**2.6200e-003**	**0.0210**		**93.4643**	**93.4643**	**2.9200e-003**		**93.5256**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2010	0.8710	9.0314	0.0164		0.0268	0.0268		0.0268	0.0268	0.0000	1,651.5782	1,651.5782	0.5142		1,662.3755
Total	**0.2010**	**0.8710**	**9.0314**	**0.0164**		**0.0268**	**0.0268**		**0.0268**	**0.0268**	**0.0000**	**1,651.5782**	**1,651.5782**	**0.5142**		**1,662.3755**

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	0.0156	0.1477	0.2178	4.3000e-004	0.0125	2.4100e-003	0.0149	3.5600e-003	2.2200e-003	5.7800e-003		41.8243	41.8243	3.1000e-004		41.8307
Worker	0.0172	0.0235	0.2442	6.6000e-004	0.0559	4.4000e-004	0.0563	0.0148	4.0000e-004	0.0152		51.6400	51.6400	2.6100e-003		51.6949
Total	**0.0328**	**0.1712**	**0.4620**	**1.0900e-003**	**0.0684**	**2.8500e-003**	**0.0713**	**0.0184**	**2.6200e-003**	**0.0210**		**93.4643**	**93.4643**	**2.9200e-003**		**93.5256**

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	0.0243	0.0829	0.2999	9.3000e-004	0.0655	1.3100e-003	0.0668	0.0175	1.2100e-003	0.0187		74.2780	74.2780	2.7000e-003		74.3346
Unmitigated	0.0243	0.0829	0.2999	9.3000e-004	0.0655	1.3100e-003	0.0668	0.0175	1.2100e-003	0.0187		74.2780	74.2780	2.7000e-003		74.3346

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	6.97	1.32	0.68	23,312	23,312
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	6.97	1.32	0.68	23,312	23,312

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.510142	0.059804	0.180842	0.139058	0.042603	0.006701	0.016107	0.033206	0.001939	0.002487	0.004384	0.000580	0.002146

5.0 Energy Detail

4.4 Fleet Mix

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	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
NaturalGas Unmitigated	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998

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	51.5342	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
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		**5.6000e-004**	**5.0500e-003**	**4.2400e-003**	**3.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**		**6.0629**	**6.0629**	**1.2000e-004**	**1.1000e-004**	**6.0998**

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					
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
General Light Industry	0.0515342	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Total		**5.6000e-004**	**5.0500e-003**	**4.2400e-003**	**3.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**		**6.0629**	**6.0629**	**1.2000e-004**	**1.1000e-004**	**6.0998**

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	2.2069	1.0000e-004	0.0109	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0231	0.0231	6.0000e-005		0.0244
Unmitigated	2.2069	1.0000e-004	0.0109	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0231	0.0231	6.0000e-005		0.0244

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	0.1190					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0300e-003	1.0000e-004	0.0109	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0231	0.0231	6.0000e-005		0.0244
Total	**2.2069**	**1.0000e-004**	**0.0109**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0231**	**0.0231**	**6.0000e-005**		**0.0244**

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	0.1190					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0300e-003	1.0000e-004	0.0109	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0231	0.0231	6.0000e-005		0.0244
Total	**2.2069**	**1.0000e-004**	**0.0109**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0231**	**0.0231**	**6.0000e-005**		**0.0244**

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 Vegetation

Wetlands Facility Construction - Process Equipment Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	64.80	1000sqft	1.49	64,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per SPEC schedule

Off-road Equipment - Per SPEC equipment schedule

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment -

Off-road Equipment -

Construction Off-road Equipment Mitigation - Mitigation for all equipment is 40% oxidation catalyst.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	200.00	325.00
tblConstructionPhase	PhaseEndDate	5/7/2018	6/29/2018
tblConstructionPhase	PhaseEndDate	7/13/2018	11/27/2017
tblConstructionPhase	PhaseStartDate	2/7/2017	4/3/2017
tblConstructionPhase	PhaseStartDate	6/30/2018	11/14/2017
tblOffRoadEquipment	HorsePower	226.00	208.00
tblOffRoadEquipment	HorsePower	89.00	149.00
tblOffRoadEquipment	HorsePower	97.00	75.00

tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	HorsePower	255.00	358.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	156.0669	58.3337	44.1860	0.0618	5.8890	3.3714	7.1965	2.9774	3.1471	4.1803	0.0000	6,000.1473	6,000.1473	1.5393	0.0000	6,032.4726
2018	4.8492	40.8537	32.4058	0.0467	0.3706	2.2446	2.6152	0.0996	2.1043	2.2040	0.0000	4,448.6760	4,448.6760	1.1071	0.0000	4,471.9241
Total	**160.9162**	**99.1874**	**76.5918**	**0.1085**	**6.2596**	**5.6160**	**9.8116**	**3.0771**	**5.2515**	**6.3842**	**0.0000**	**10,448.8233**	**10,448.8233**	**2.6464**	**0.0000**	**10,504.3967**

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					
2017	150.9474	6.5120	36.9216	0.0618	5.8890	0.1005	5.9174	2.9774	0.0991	3.0058	0.0000	6,000.1473	6,000.1473	1.5393	0.0000	6,032.4726
2018	0.7082	5.6768	26.3293	0.0467	0.3706	0.0775	0.4481	0.0996	0.0763	0.1759	0.0000	4,448.6760	4,448.6760	1.1071	0.0000	4,471.9241
Total	**151.6556**	**12.1888**	**63.2509**	**0.1085**	**6.2596**	**0.1780**	**6.3655**	**3.0771**	**0.1754**	**3.1817**	**0.0000**	**10,448.8233**	**10,448.8233**	**2.6464**	**0.0000**	**10,504.3967**

	ROG	NOx	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	**5.75**	**87.71**	**17.42**	**0.00**	**0.00**	**96.83**	**35.12**	**0.00**	**96.66**	**50.16**	**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	1.6952	7.0000e-005	6.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0142	0.0142	4.0000e-005		0.0151
Energy	0.0360	0.3274	0.2750	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.8728	392.8728	7.5300e-003	7.2000e-003	395.2638
Mobile	2.3522	7.9550	29.2483	0.0594	4.2388	0.1238	4.3625	1.1323	0.1137	1.2460		5,511.3213	5,511.3213	0.2532		5,516.6394
Total	**4.0834**	**8.2824**	**29.5302**	**0.0613**	**4.2388**	**0.1487**	**4.3875**	**1.1323**	**0.1386**	**1.2709**		**5,904.2083**	**5,904.2083**	**0.2608**	**7.2000e-003**	**5,911.9182**

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	1.6952	7.0000e-005	6.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0142	0.0142	4.0000e-005		0.0151
Energy	0.0360	0.3274	0.2750	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.8728	392.8728	7.5300e-003	7.2000e-003	395.2638
Mobile	2.3522	7.9550	29.2483	0.0594	4.2388	0.1238	4.3625	1.1323	0.1137	1.2460		5,511.3213	5,511.3213	0.2532		5,516.6394
Total	**4.0834**	**8.2824**	**29.5302**	**0.0613**	**4.2388**	**0.1487**	**4.3875**	**1.1323**	**0.1386**	**1.2709**		**5,904.2083**	**5,904.2083**	**0.2608**	**7.2000e-003**	**5,911.9182**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	1/31/2017	5	2	
3	Grading	Grading	2/1/2017	2/6/2017	5	4	
4	Building Construction	Building Construction	4/3/2017	6/29/2018	5	325	
5	Paving	Paving	11/14/2017	11/27/2017	5	10	
6	Architectural Coating	Architectural Coating	11/28/2017	12/11/2017	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 97,200; Non-Residential Outdoor: 32,400 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	2	6.00	208	0.29
Building Construction	Forklifts	1	6.00	149	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Rollers	1	6.00	84	0.38
Building Construction	Rubber Tired Dozers	1	6.00	358	0.40
Building Construction	Tractors/Loaders/Backhoes	5	6.00	75	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	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
Demolition	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	14	27.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Clean Paved Roads

3.2 Demolition - 2017

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	4.4928	44.0393	34.5609	0.0396		2.5257	2.5257		2.3727	2.3727		3,960.1415	3,960.1415	0.9545		3,980.1857
Total	**4.4928**	**44.0393**	**34.5609**	**0.0396**		**2.5257**	**2.5257**		**2.3727**	**2.3727**		**3,960.1415**	**3,960.1415**	**0.9545**		**3,980.1857**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4550	1.9715	22.6590	0.0396		0.0607	0.0607		0.0607	0.0607	0.0000	3,960.1415	3,960.1415	0.9545		3,980.1857
Total	**0.4550**	**1.9715**	**22.6590**	**0.0396**		**0.0607**	**0.0607**		**0.0607**	**0.0607**	**0.0000**	**3,960.1415**	**3,960.1415**	**0.9545**		**3,980.1857**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

3.3 Site Preparation - 2017

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					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	2.3109	24.2288	15.9299	0.0171		1.3067	1.3067		1.2022	1.2022		1,752.1239	1,752.1239	0.5369		1,763.3977

Total	**2.3109**	**24.2288**	**15.9299**	**0.0171**	**5.7996**	**1.3067**	**7.1063**	**2.9537**	**1.2022**	**4.1559**		**1,752.1239**	**1,752.1239**	**0.5369**		**1,763.3977**

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	0.0306	0.0414	0.4318	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		85.8289	85.8289	4.5000e-003		85.9235
Total	**0.0306**	**0.0414**	**0.4318**	**1.0600e-003**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**85.8289**	**85.8289**	**4.5000e-003**		**85.9235**

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					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	0.2079	0.9010	10.4605	0.0171		0.0277	0.0277		0.0277	0.0277	0.0000	1,752.1239	1,752.1239	0.5369		1,763.3977
Total	**0.2079**	**0.9010**	**10.4605**	**0.0171**	**5.7996**	**0.0277**	**5.8273**	**2.9537**	**0.0277**	**2.9814**	**0.0000**	**1,752.1239**	**1,752.1239**	**0.5369**		**1,763.3977**

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	0.0306	0.0414	0.4318	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		85.8289	85.8289	4.5000e-003		85.9235
Total	**0.0306**	**0.0414**	**0.4318**	**1.0600e-003**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**85.8289**	**85.8289**	**4.5000e-003**		**85.9235**

3.4 Grading - 2017

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					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.8844	19.7889	13.1786	0.0141		1.0661	1.0661		0.9808	0.9808		1,439.1894	1,439.1894	0.4410		1,448.4496
Total	**1.8844**	**19.7889**	**13.1786**	**0.0141**	**4.9143**	**1.0661**	**5.9804**	**2.5256**	**0.9808**	**3.5064**		**1,439.1894**	**1,439.1894**	**0.4410**		**1,448.4496**

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	0.0306	0.0414	0.4318	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		85.8289	85.8289	4.5000e-003		85.9235
Total	**0.0306**	**0.0414**	**0.4318**	**1.0600e-003**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**85.8289**	**85.8289**	**4.5000e-003**		**85.9235**

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					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	0.1708	0.7402	8.5092	0.0141		0.0228	0.0228		0.0228	0.0228	0.0000	1,439.1894	1,439.1894	0.4410		1,448.4496
Total	**0.1708**	**0.7402**	**8.5092**	**0.0141**	**4.9143**	**0.0228**	**4.9370**	**2.5256**	**0.0228**	**2.5484**	**0.0000**	**1,439.1894**	**1,439.1894**	**0.4410**		**1,448.4496**

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	0.0306	0.0414	0.4318	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		85.8289	85.8289	4.5000e-003		85.9235
Total	**0.0306**	**0.0414**	**0.4318**	**1.0600e-003**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**85.8289**	**85.8289**	**4.5000e-003**		**85.9235**

3.5 Building Construction - 2017

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	5.3466	45.1429	31.7475	0.0408		2.6205	2.6205		2.4554	2.4554		3,989.3818	3,989.3818	1.1098		4,012.6881
Total	**5.3466**	**45.1429**	**31.7475**	**0.0408**		**2.6205**	**2.6205**		**2.4554**	**2.4554**		**3,989.3818**	**3,989.3818**	**1.1098**		**4,012.6881**

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	0.0917	0.8858	1.2485	2.3700e-003	0.0688	0.0141	0.0829	0.0196	0.0130	0.0325		233.9636	233.9636	1.7100e-003		233.9994
Worker	0.1033	0.1397	1.4575	3.5800e-003	0.3018	2.4300e-003	0.3042	0.0800	2.2400e-003	0.0823		289.6724	289.6724	0.0152		289.9917
Total	**0.1949**	**1.0255**	**2.7059**	**5.9500e-003**	**0.3706**	**0.0165**	**0.3871**	**0.0996**	**0.0152**	**0.1148**		**523.6360**	**523.6360**	**0.0169**		**523.9911**

Mitigated Construction On-Site

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

Category	lb/day										lb/day					
Off-Road	0.5297	4.7376	23.8125	0.0408		0.0619	0.0619		0.0619	0.0619	0.0000	3,989.3818	3,989.3818	1.1098		4,012.6881
Total	**0.5297**	**4.7376**	**23.8125**	**0.0408**		**0.0619**	**0.0619**		**0.0619**	**0.0619**	**0.0000**	**3,989.3818**	**3,989.3818**	**1.1098**		**4,012.6881**

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	0.0917	0.8858	1.2485	2.3700e-003	0.0688	0.0141	0.0829	0.0196	0.0130	0.0325		233.9636	233.9636	1.7100e-003		233.9994
Worker	0.1033	0.1397	1.4575	3.5800e-003	0.3018	2.4300e-003	0.3042	0.0800	2.2400e-003	0.0823		289.6724	289.6724	0.0152		289.9917
Total	**0.1949**	**1.0255**	**2.7059**	**5.9500e-003**	**0.3706**	**0.0165**	**0.3871**	**0.0996**	**0.0152**	**0.1148**		**523.6360**	**523.6360**	**0.0169**		**523.9911**

3.5 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	4.6707	39.9146	29.8891	0.0408		2.2290	2.2290		2.0899	2.0899		3,939.7865	3,939.7865	1.0912		3,962.7027
Total	**4.6707**	**39.9146**	**29.8891**	**0.0408**		**2.2290**	**2.2290**		**2.0899**	**2.0899**		**3,939.7865**	**3,939.7865**	**1.0912**		**3,962.7027**

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	0.0857	0.8125	1.1980	2.3700e-003	0.0688	0.0133	0.0821	0.0196	0.0122	0.0318		230.0334	230.0334	1.7000e-003		230.0690
Worker	0.0929	0.1267	1.3188	3.5800e-003	0.3018	2.3600e-003	0.3042	0.0800	2.1900e-003	0.0822		278.8561	278.8561	0.0141		279.1525
Total	**0.1786**	**0.9392**	**2.5168**	**5.9500e-003**	**0.3706**	**0.0156**	**0.3862**	**0.0996**	**0.0144**	**0.1140**		**508.8895**	**508.8895**	**0.0158**		**509.2215**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5297	4.7376	23.8125	0.0408		0.0619	0.0619		0.0619	0.0619	0.0000	3,939.7865	3,939.7865	1.0912		3,962.7026
Total	**0.5297**	**4.7376**	**23.8125**	**0.0408**		**0.0619**	**0.0619**		**0.0619**	**0.0619**	**0.0000**	**3,939.7865**	**3,939.7865**	**1.0912**		**3,962.7026**

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	0.0857	0.8125	1.1980	2.3700e-003	0.0688	0.0133	0.0821	0.0196	0.0122	0.0318		230.0334	230.0334	1.7000e-003		230.0690
Worker	0.0929	0.1267	1.3188	3.5800e-003	0.3018	2.3600e-003	0.3042	0.0800	2.1900e-003	0.0822		278.8561	278.8561	0.0141		279.1525
Total	**0.1786**	**0.9392**	**2.5168**	**5.9500e-003**	**0.3706**	**0.0156**	**0.3862**	**0.0996**	**0.0144**	**0.1140**		**508.8895**	**508.8895**	**0.0158**		**509.2215**

3.6 Paving - 2017

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	1.1857	12.0981	9.0308	0.0133		0.7333	0.7333		0.6755	0.6755		1,347.6575	1,347.6575	0.4052		1,356.1677
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1857**	**12.0981**	**9.0308**	**0.0133**		**0.7333**	**0.7333**		**0.6755**	**0.6755**		**1,347.6575**	**1,347.6575**	**0.4052**		**1,356.1677**

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	0.0497	0.0673	0.7017	1.7200e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.4719	139.4719	7.3200e-003		139.6256

Total	**0.0497**	**0.0673**	**0.7017**	**1.7200e-003**	**0.1453**	**1.1700e-003**	**0.1465**	**0.0385**	**1.0800e-003**	**0.0396**		**139.4719**	**139.4719**	**7.3200e-003**		**139.6256**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1573	0.6817	9.7014	0.0133		0.0210	0.0210		0.0210	0.0210	0.0000	1,347.6575	1,347.6575	0.4052		1,356.1677
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.1573**	**0.6817**	**9.7014**	**0.0133**		**0.0210**	**0.0210**		**0.0210**	**0.0210**	**0.0000**	**1,347.6575**	**1,347.6575**	**0.4052**		**1,356.1677**

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	0.0497	0.0673	0.7017	1.7200e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.4719	139.4719	7.3200e-003		139.6256
Total	**0.0497**	**0.0673**	**0.7017**	**1.7200e-003**	**0.1453**	**1.1700e-003**	**0.1465**	**0.0385**	**1.0800e-003**	**0.0396**		**139.4719**	**139.4719**	**7.3200e-003**		**139.6256**

3.7 Architectural Coating - 2017

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	150.1740					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**150.5063**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

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	150.1740					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0297		282.0721

Total	**150.2037**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3522	7.9550	29.2483	0.0594	4.2388	0.1238	4.3625	1.1323	0.1137	1.2460		5,511.3213	5,511.3213	0.2532		5,516.6394
Unmitigated	2.3522	7.9550	29.2483	0.0594	4.2388	0.1238	4.3625	1.1323	0.1137	1.2460		5,511.3213	5,511.3213	0.2532		5,516.6394

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	451.66	85.54	44.06	1,510,599	1,510,599
Total	451.66	85.54	44.06	1,510,599	1,510,599

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515683	0.060583	0.179994	0.140474	0.041721	0.006653	0.015053	0.028382	0.001919	0.002521	0.004323	0.000600	0.002094

5.0 Energy Detail

4.4 Fleet Mix

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	0.0360	0.3274	0.2750	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.8728	392.8728	7.5300e-003	7.2000e-003	395.2638
NaturalGas Unmitigated	0.0360	0.3274	0.2750	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.8728	392.8728	7.5300e-003	7.2000e-003	395.2638

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	3339.42	0.0360	0.3274	0.2750	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.8728	392.8728	7.5300e-003	7.2000e-003	395.2638
Total		**0.0360**	**0.3274**	**0.2750**	**1.9600e-003**		**0.0249**	**0.0249**		**0.0249**	**0.0249**		**392.8728**	**392.8728**	**7.5300e-003**	**7.2000e-003**	**395.2638**

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	3.33942	0.0360	0.3274	0.2750	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.8728	392.8728	7.5300e-003	7.2000e-003	395.2638
Total		**0.0360**	**0.3274**	**0.2750**	**1.9600e-003**		**0.0249**	**0.0249**		**0.0249**	**0.0249**		**392.8728**	**392.8728**	**7.5300e-003**	**7.2000e-003**	**395.2638**

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	1.6952	7.0000e-005	6.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0142	0.0142	4.0000e-005		0.0151
Unmitigated	1.6952	7.0000e-005	6.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0142	0.0142	4.0000e-005		0.0151

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	0.4114					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2830					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-004	7.0000e-005	6.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0142	0.0142	4.0000e-005		0.0151
Total	**1.6952**	**7.0000e-005**	**6.9200e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0142**	**0.0142**	**4.0000e-005**		**0.0151**

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	0.4114					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2830					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-004	7.0000e-005	6.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0142	0.0142	4.0000e-005		0.0151
Total	**1.6952**	**7.0000e-005**	**6.9200e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0142**	**0.0142**	**4.0000e-005**		**0.0151**

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 Vegetation

Wetlands Facility Construction - Off-Site Construction Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0
Other Asphalt Surfaces	47.10	1000sqft	1.08	47,100.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per SPEC schedule
Only Grading and Paving are relevant

Off-road Equipment -

Off-road Equipment - Per SPEC equipment schedule

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment - Equipment per SPEC

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Per SPEC

Demolition -

Grading - Per SPEC

Architectural Coating -

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	72150	1500
tblConstructionPhase	NumDays	4.00	87.00
tblConstructionPhase	NumDays	10.00	87.00
tblConstructionPhase	PhaseEndDate	11/8/2017	6/21/2017
tblConstructionPhase	PhaseEndDate	10/24/2017	10/25/2017
tblConstructionPhase	PhaseEndDate	10/20/2017	10/31/2017
tblConstructionPhase	PhaseEndDate	3/1/2018	10/31/2017
tblConstructionPhase	PhaseEndDate	1/31/2017	1/17/2017
tblConstructionPhase	PhaseStartDate	10/26/2017	6/15/2017
tblConstructionPhase	PhaseStartDate	1/18/2017	1/19/2017
tblConstructionPhase	PhaseStartDate	6/22/2017	7/3/2017
tblConstructionPhase	PhaseStartDate	11/1/2017	7/3/2017
tblConstructionPhase	PhaseStartDate	1/28/2017	1/14/2017
tblGrading	AcresOfGrading	65.25	1.00
tblGrading	AcresOfGrading	1.00	0.50
tblGrading	MaterialExported	0.00	872.00
tblGrading	MaterialImported	0.00	3,000.00
tblOffRoadEquipment	HorsePower	97.00	95.00
tblOffRoadEquipment	HorsePower	78.00	100.00
tblOffRoadEquipment	HorsePower	208.00	240.00
tblOffRoadEquipment	HorsePower	162.00	270.00
tblOffRoadEquipment	HorsePower	89.00	90.00
tblOffRoadEquipment	HorsePower	84.00	125.00

tblOffRoadEquipment	HorsePower	84.00	25.00
tblOffRoadEquipment	HorsePower	199.00	115.00
tblOffRoadEquipment	HorsePower	46.00	50.00
tblOffRoadEquipment	UsageHours	6.00	1.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2018

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					
2017	114.9171	85.6156	63.7663	0.1133	5.8251	5.0668	9.6598	3.0022	4.8132	6.5792	0.0000	10,814.6102	10,814.6102	2.2263	0.0000	10,861.3623
Total	**114.9171**	**85.6156**	**63.7663**	**0.1133**	**5.8251**	**5.0668**	**9.6598**	**3.0022**	**4.8132**	**6.5792**	**0.0000**	**10,814.6102**	**10,814.6102**	**2.2263**	**0.0000**	**10,861.3623**

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					
2017	114.9171	85.6156	63.7663	0.1133	5.8251	5.0668	9.6598	3.0022	4.8132	6.5792	0.0000	10,814.6102	10,814.6102	2.2263	0.0000	10,861.3623
Total	**114.9171**	**85.6156**	**63.7663**	**0.1133**	**5.8251**	**5.0668**	**9.6598**	**3.0022**	**4.8132**	**6.5792**	**0.0000**	**10,814.6102**	**10,814.6102**	**2.2263**	**0.0000**	**10,861.3623**

	ROG	NOx	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	1.0340	5.0000e-005	4.9800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0105	0.0105	3.0000e-005		0.0111
Energy	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Mobile	0.0259	0.0887	0.3220	9.3000e-004	0.0655	1.3300e-003	0.0668	0.0175	1.2300e-003	0.0187		76.6069	76.6069	2.8800e-003		76.6673
Total	**1.0604**	**0.0938**	**0.3313**	**9.6000e-004**	**0.0655**	**1.7300e-003**	**0.0672**	**0.0175**	**1.6300e-003**	**0.0191**		**82.6803**	**82.6803**	**3.0300e-003**	**1.1000e-004**	**82.7782**

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	1.0340	5.0000e-005	4.9800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0105	0.0105	3.0000e-005		0.0111
Energy	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Mobile	0.0259	0.0887	0.3220	9.3000e-004	0.0655	1.3300e-003	0.0668	0.0175	1.2300e-003	0.0187		76.6069	76.6069	2.8800e-003		76.6673

Total	**1.0604**	**0.0938**	**0.3313**	**9.6000e-004**	**0.0655**	**1.7300e-003**	**0.0672**	**0.0175**	**1.6300e-003**	**0.0191**		**82.6803**	**82.6803**	**3.0300e-003**	**1.1000e-004**	**82.7782**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/14/2017	1/17/2017	5	2	
3	Building Construction	Building Construction	1/19/2017	10/25/2017	5	200	
4	Architectural Coating	Architectural Coating	6/15/2017	6/21/2017	5	10	
5	Grading	Grading	7/3/2017	10/31/2017	5	87	
6	Paving	Paving	7/3/2017	10/31/2017	5	87	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 72,150; Non-Residential Outdoor: 24,050 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41

Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Air Compressors	1	6.00	78	0.48
Grading	Air Compressors	1	6.00	100	0.48
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Crawler Tractors	1	6.00	240	0.43
Grading	Excavators	2	6.00	270	0.38
Grading	Forklifts	1	6.00	90	0.20
Grading	Generator Sets	1	6.00	125	0.74
Grading	Generator Sets	2	2.00	25	0.74
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Loaders	2	6.00	115	0.36
Grading	Tractors/Loaders/Backhoes	1	6.00	95	0.37
Grading	Welders	4	4.00	50	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	20.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	19	48.00	0.00	484.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	4.4928	44.0393	34.5609	0.0396		2.5257	2.5257		2.3727	2.3727		3,960.1415	3,960.1415	0.9545		3,980.1857
Total	**4.4928**	**44.0393**	**34.5609**	**0.0396**		**2.5257**	**2.5257**		**2.3727**	**2.3727**		**3,960.1415**	**3,960.1415**	**0.9545**		**3,980.1857**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278

Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

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	4.4928	44.0393	34.5609	0.0396		2.5257	2.5257		2.3727	2.3727	0.0000	3,960.1415	3,960.1415	0.9545		3,980.1857
Total	**4.4928**	**44.0393**	**34.5609**	**0.0396**		**2.5257**	**2.5257**		**2.3727**	**2.3727**	**0.0000**	**3,960.1415**	**3,960.1415**	**0.9545**		**3,980.1857**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

3.3 Site Preparation - 2017

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					5.5345	0.0000	5.5345	2.9251	0.0000	2.9251			0.0000			0.0000
Off-Road	2.3109	24.2288	15.9299	0.0171		1.3067	1.3067		1.2022	1.2022		1,752.1239	1,752.1239	0.5369		1,763.3977
Total	**2.3109**	**24.2288**	**15.9299**	**0.0171**	**5.5345**	**1.3067**	**6.8412**	**2.9251**	**1.2022**	**4.1273**		**1,752.1239**	**1,752.1239**	**0.5369**		**1,763.3977**

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	0.0306	0.0414	0.4318	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		85.8289	85.8289	4.5000e-003		85.9235
Total	**0.0306**	**0.0414**	**0.4318**	**1.0600e-003**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**85.8289**	**85.8289**	**4.5000e-003**		**85.9235**

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					5.5345	0.0000	5.5345	2.9251	0.0000	2.9251			0.0000			0.0000
Off-Road	2.3109	24.2288	15.9299	0.0171		1.3067	1.3067		1.2022	1.2022	0.0000	1,752.1239	1,752.1239	0.5369		1,763.3977

Total	**2.3109**	**24.2288**	**15.9299**	**0.0171**	**5.5345**	**1.3067**	**6.8412**	**2.9251**	**1.2022**	**4.1273**	**0.0000**	**1,752.1239**	**1,752.1239**	**0.5369**		**1,763.3977**

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	0.0306	0.0414	0.4318	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		85.8289	85.8289	4.5000e-003		85.9235
Total	**0.0306**	**0.0414**	**0.4318**	**1.0600e-003**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**85.8289**	**85.8289**	**4.5000e-003**		**85.9235**

3.4 Building Construction - 2017

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	2.9546	19.1088	14.3110	0.0220		1.2257	1.2257		1.1823	1.1823		2,034.2860	2,034.2860	0.4268		2,043.2497
Total	**2.9546**	**19.1088**	**14.3110**	**0.0220**		**1.2257**	**1.2257**		**1.1823**	**1.1823**		**2,034.2860**	**2,034.2860**	**0.4268**		**2,043.2497**

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	0.0667	0.6442	0.9080	1.7300e-003	0.0500	0.0103	0.0603	0.0143	9.4200e-003	0.0237		170.1553	170.1553	1.2400e-003		170.1814
Worker	0.0765	0.1035	1.0796	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5722	214.5722	0.0113		214.8087
Total	**0.1432**	**0.7477**	**1.9876**	**4.3800e-003**	**0.2736**	**0.0121**	**0.2856**	**0.0735**	**0.0111**	**0.0846**		**384.7275**	**384.7275**	**0.0125**		**384.9901**

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	2.9546	19.1088	14.3110	0.0220		1.2257	1.2257		1.1823	1.1823	0.0000	2,034.2860	2,034.2860	0.4268		2,043.2497
Total	**2.9546**	**19.1088**	**14.3110**	**0.0220**		**1.2257**	**1.2257**		**1.1823**	**1.1823**	**0.0000**	**2,034.2860**	**2,034.2860**	**0.4268**		**2,043.2497**

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	0.0667	0.6442	0.9080	1.7300e-003	0.0500	0.0103	0.0603	0.0143	9.4200e-003	0.0237		170.1553	170.1553	1.2400e-003		170.1814
Worker	0.0765	0.1035	1.0796	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5722	214.5722	0.0113		214.8087
Total	**0.1432**	**0.7477**	**1.9876**	**4.3800e-003**	**0.2736**	**0.0121**	**0.2856**	**0.0735**	**0.0111**	**0.0846**		**384.7275**	**384.7275**	**0.0125**		**384.9901**

3.5 Architectural Coating - 2017

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	111.4718					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**111.8041**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0153	0.0207	0.2159	5.3000e-004	0.0447	3.6000e-004	0.0451	0.0119	3.3000e-004	0.0122		42.9144	42.9144	2.2500e-003		42.9617
Total	**0.0153**	**0.0207**	**0.2159**	**5.3000e-004**	**0.0447**	**3.6000e-004**	**0.0451**	**0.0119**	**3.3000e-004**	**0.0122**		**42.9144**	**42.9144**	**2.2500e-003**		**42.9617**

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	111.4718					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**111.8041**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0153	0.0207	0.2159	5.3000e-004	0.0447	3.6000e-004	0.0451	0.0119	3.3000e-004	0.0122		42.9144	42.9144	2.2500e-003		42.9617
Total	**0.0153**	**0.0207**	**0.2159**	**5.3000e-004**	**0.0447**	**3.6000e-004**	**0.0451**	**0.0119**	**3.3000e-004**	**0.0122**		**42.9144**	**42.9144**	**2.2500e-003**		**42.9617**

3.6 Grading - 2017

Unmitigated Construction On-Site

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

Category	lb/day										lb/day					
Fugitive Dust					0.7700	0.0000	0.7700	0.4159	0.0000	0.4159			0.0000			0.0000
Off-Road	6.2009	51.8971	33.9506	0.0614		3.0682	3.0682		2.9189	2.9189		5,987.8171	5,987.8171	1.3444		6,016.0502
Total	**6.2009**	**51.8971**	**33.9506**	**0.0614**	**0.7700**	**3.0682**	**3.8381**	**0.4159**	**2.9189**	**3.3348**		**5,987.8171**	**5,987.8171**	**1.3444**		**6,016.0502**

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	0.0946	1.4484	1.1935	4.0900e-003	0.0970	0.0222	0.1191	0.0266	0.0204	0.0470		405.6770	405.6770	2.9200e-003		405.7382
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1836	0.2484	2.5910	6.3700e-003	0.5365	4.3100e-003	0.5408	0.1423	3.9800e-003	0.1463		514.9732	514.9732	0.0270		515.5408
Total	**0.2782**	**1.6968**	**3.7845**	**0.0105**	**0.6335**	**0.0265**	**0.6600**	**0.1688**	**0.0244**	**0.1932**		**920.6502**	**920.6502**	**0.0300**		**921.2791**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7700	0.0000	0.7700	0.4159	0.0000	0.4159			0.0000			0.0000
Off-Road	6.2009	51.8971	33.9506	0.0614		3.0682	3.0682		2.9189	2.9189	0.0000	5,987.8171	5,987.8171	1.3444		6,016.0502
Total	**6.2009**	**51.8971**	**33.9506**	**0.0614**	**0.7700**	**3.0682**	**3.8381**	**0.4159**	**2.9189**	**3.3348**	**0.0000**	**5,987.8171**	**5,987.8171**	**1.3444**		**6,016.0502**

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	0.0946	1.4484	1.1935	4.0900e-003	0.0970	0.0222	0.1191	0.0266	0.0204	0.0470		405.6770	405.6770	2.9200e-003		405.7382
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1836	0.2484	2.5910	6.3700e-003	0.5365	4.3100e-003	0.5408	0.1423	3.9800e-003	0.1463		514.9732	514.9732	0.0270		515.5408
Total	**0.2782**	**1.6968**	**3.7845**	**0.0105**	**0.6335**	**0.0265**	**0.6600**	**0.1688**	**0.0244**	**0.1932**		**920.6502**	**920.6502**	**0.0300**		**921.2791**

3.7 Paving - 2017

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	1.1857	12.0981	9.0308	0.0133		0.7333	0.7333		0.6755	0.6755		1,347.6575	1,347.6575	0.4052		1,356.1677
Paving	0.0325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2182**	**12.0981**	**9.0308**	**0.0133**		**0.7333**	**0.7333**		**0.6755**	**0.6755**		**1,347.6575**	**1,347.6575**	**0.4052**		**1,356.1677**

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	0.0497	0.0673	0.7017	1.7200e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.4719	139.4719	7.3200e-003		139.6256
Total	**0.0497**	**0.0673**	**0.7017**	**1.7200e-003**	**0.1453**	**1.1700e-003**	**0.1465**	**0.0385**	**1.0800e-003**	**0.0396**		**139.4719**	**139.4719**	**7.3200e-003**		**139.6256**

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	1.1857	12.0981	9.0308	0.0133		0.7333	0.7333		0.6755	0.6755	0.0000	1,347.6575	1,347.6575	0.4052		1,356.1677
Paving	0.0325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2182**	**12.0981**	**9.0308**	**0.0133**		**0.7333**	**0.7333**		**0.6755**	**0.6755**	**0.0000**	**1,347.6575**	**1,347.6575**	**0.4052**		**1,356.1677**

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	0.0497	0.0673	0.7017	1.7200e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.4719	139.4719	7.3200e-003		139.6256

Total	**0.0497**	**0.0673**	**0.7017**	**1.7200e-003**	**0.1453**	**1.1700e-003**	**0.1465**	**0.0385**	**1.0800e-003**	**0.0396**		**139.4719**	**139.4719**	**7.3200e-003**		**139.6256**

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	0.0259	0.0887	0.3220	9.3000e-004	0.0655	1.3300e-003	0.0668	0.0175	1.2300e-003	0.0187		76.6069	76.6069	2.8800e-003		76.6673
Unmitigated	0.0259	0.0887	0.3220	9.3000e-004	0.0655	1.3300e-003	0.0668	0.0175	1.2300e-003	0.0187		76.6069	76.6069	2.8800e-003		76.6673

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	6.97	1.32	0.68	23,312	23,312
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	6.97	1.32	0.68	23,312	23,312

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511172	0.060004	0.180590	0.138995	0.042398	0.006681	0.016070	0.032568	0.001938	0.002493	0.004370	0.000586	0.002135

5.0 Energy Detail

4.4 Fleet Mix

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	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
NaturalGas Unmitigated	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998

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	51.5342	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Other 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
Total		**5.6000e-004**	**5.0500e-003**	**4.2400e-003**	**3.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**		**6.0629**	**6.0629**	**1.2000e-004**	**1.1000e-004**	**6.0998**

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					
Other 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
General Light Industry	0.0515342	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Total		**5.6000e-004**	**5.0500e-003**	**4.2400e-003**	**3.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**		**6.0629**	**6.0629**	**1.2000e-004**	**1.1000e-004**	**6.0998**

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	1.0340	5.0000e-005	4.9800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0105	0.0105	3.0000e-005		0.0111
Unmitigated	1.0340	5.0000e-005	4.9800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0105	0.0105	3.0000e-005		0.0111

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	0.0811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	5.0000e-005	4.9800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0105	0.0105	3.0000e-005		0.0111
Total	**1.0340**	**5.0000e-005**	**4.9800e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0105**	**0.0105**	**3.0000e-005**		**0.0111**

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	0.0811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	5.0000e-005	4.9800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0105	0.0105	3.0000e-005		0.0111
Total	**1.0340**	**5.0000e-005**	**4.9800e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0105**	**0.0105**	**3.0000e-005**		**0.0111**

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 Vegetation

Wetlands Facility Construction - Office/Warehouse/Parking Lot Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.20	1000sqft	0.12	5,200.00	0
Unrefrigerated Warehouse-No Rail	9.75	1000sqft	0.22	9,750.00	0
Parking Lot	47.00	Space	0.42	18,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Grading, demolition, and site preparation have already been covered in other analyses.
Building schedule based on SPEC

Grading -

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	150.00
tblConstructionPhase	PhaseEndDate	8/16/2017	4/27/2018

tblConstructionPhase	PhaseStartDate	5/5/2018	5/7/2018
tblConstructionPhase	PhaseStartDate	1/19/2017	10/2/2017
tblConstructionPhase	PhaseStartDate	4/28/2018	4/30/2018
tblProjectCharacteristics	OperationalYear	2014	2018

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					
2017	1.3775	13.2294	9.4762	0.0145	0.8645	0.8643	1.5920	0.4434	0.7951	1.1372	0.0000	1,437.3481	1,437.3481	0.3641	0.0000	1,444.9940
2018	72.2163	11.4666	9.0612	0.0145	0.2012	0.7140	0.9080	0.0534	0.6569	0.7090	0.0000	1,410.3136	1,410.3136	0.3632	0.0000	1,417.9411
Total	**73.5939**	**24.6961**	**18.5374**	**0.0290**	**1.0657**	**1.5782**	**2.5000**	**0.4968**	**1.4520**	**1.8463**	**0.0000**	**2,847.6616**	**2,847.6616**	**0.7273**	**0.0000**	**2,862.9351**

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					
2017	1.3775	13.2294	9.4762	0.0145	0.8645	0.8643	1.5920	0.4434	0.7951	1.1372	0.0000	1,437.3481	1,437.3481	0.3641	0.0000	1,444.9940
2018	72.2163	11.4666	9.0612	0.0145	0.2012	0.7140	0.9080	0.0534	0.6569	0.7090	0.0000	1,410.3136	1,410.3136	0.3632	0.0000	1,417.9411
Total	**73.5939**	**24.6961**	**18.5374**	**0.0290**	**1.0657**	**1.5782**	**2.5000**	**0.4968**	**1.4520**	**1.8463**	**0.0000**	**2,847.6616**	**2,847.6616**	**0.7273**	**0.0000**	**2,862.9351**

	ROG	NOx	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	0.7674	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143
Energy	1.9400e-003	0.0177	0.0148	1.1000e-004		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003		21.1792	21.1792	4.1000e-004	3.9000e-004	21.3081
Mobile	0.2833	0.8638	3.2303	8.8200e-003	0.6208	0.0128	0.6335	0.1659	0.0118	0.1776		729.8411	729.8411	0.0277		730.4228
Total	**1.0526**	**0.8815**	**3.2515**	**8.9300e-003**	**0.6208**	**0.0141**	**0.6349**	**0.1659**	**0.0131**	**0.1790**		**751.0338**	**751.0338**	**0.0282**	**3.9000e-004**	**751.7452**

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	0.7674	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143
Energy	1.9400e-003	0.0177	0.0148	1.1000e-004		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003		21.1792	21.1792	4.1000e-004	3.9000e-004	21.3081
Mobile	0.2833	0.8638	3.2303	8.8200e-003	0.6208	0.0128	0.6335	0.1659	0.0118	0.1776		729.8411	729.8411	0.0277		730.4228
Total	**1.0526**	**0.8815**	**3.2515**	**8.9300e-003**	**0.6208**	**0.0141**	**0.6349**	**0.1659**	**0.0131**	**0.1790**		**751.0338**	**751.0338**	**0.0282**	**3.9000e-004**	**751.7452**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/13/2017	5	10	
2	Site Preparation	Site Preparation	1/14/2017	1/16/2017	5	1	
3	Grading	Grading	1/17/2017	1/18/2017	5	2	
4	Building Construction	Building Construction	10/2/2017	4/27/2018	5	150	
5	Paving	Paving	4/30/2018	5/4/2018	5	5	
6	Architectural Coating	Architectural Coating	5/7/2018	5/11/2018	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 23,271; Non-Residential Outdoor: 7,757 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42

Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	14.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930		1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**		**0.7266**	**0.7266**		**0.6930**	**0.6930**		**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

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	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930	0.0000	1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**		**0.7266**	**0.7266**		**0.6930**	**0.6930**	**0.0000**	**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089		955.8663	955.8663	0.2929		962.0167
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**		**955.8663**	**955.8663**	**0.2929**		**962.0167**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089	0.0000	955.8663	955.8663	0.2929		962.0167
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**	**0.0000**	**955.8663**	**955.8663**	**0.2929**		**962.0167**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930		1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**	**0.7528**	**0.7266**	**1.4794**	**0.4138**	**0.6930**	**1.1068**		**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

Mitigated Construction On-Site

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

Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930	0.0000	1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**	**0.7528**	**0.7266**	**1.4794**	**0.4138**	**0.6930**	**1.1068**	**0.0000**	**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

3.5 Building Construction - 2017

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	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869		1,159.5310	1,159.5310	0.3553		1,166.9919
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**		**1,159.5310**	**1,159.5310**	**0.3553**		**1,166.9919**

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	0.0500	0.4831	0.6810	1.2900e-003	0.0375	7.6800e-003	0.0452	0.0107	7.0700e-003	0.0178		127.6165	127.6165	9.3000e-004		127.6360
Worker	0.0535	0.0724	0.7557	1.8600e-003	0.1565	1.2600e-003	0.1578	0.0415	1.1600e-003	0.0427		150.2005	150.2005	7.8800e-003		150.3661
Total	**0.1036**	**0.5556**	**1.4367**	**3.1500e-003**	**0.1940**	**8.9400e-003**	**0.2030**	**0.0522**	**8.2300e-003**	**0.0604**		**277.8170**	**277.8170**	**8.8100e-003**		**278.0021**

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	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869	0.0000	1,159.5310	1,159.5310	0.3553		1,166.9919
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**	**0.0000**	**1,159.5310**	**1,159.5310**	**0.3553**		**1,166.9919**

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	0.0500	0.4831	0.6810	1.2900e-003	0.0375	7.6800e-003	0.0452	0.0107	7.0700e-003	0.0178		127.6165	127.6165	9.3000e-004		127.6360
Worker	0.0535	0.0724	0.7557	1.8600e-003	0.1565	1.2600e-003	0.1578	0.0415	1.1600e-003	0.0427		150.2005	150.2005	7.8800e-003		150.3661
Total	**0.1036**	**0.5556**	**1.4367**	**3.1500e-003**	**0.1940**	**8.9400e-003**	**0.2030**	**0.0522**	**8.2300e-003**	**0.0604**		**277.8170**	**277.8170**	**8.8100e-003**		**278.0021**

3.5 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	1.0786	10.9578	7.7239	0.0113		0.7055	0.7055		0.6491	0.6491		1,140.2487	1,140.2487	0.3550		1,147.7032
Total	**1.0786**	**10.9578**	**7.7239**	**0.0113**		**0.7055**	**0.7055**		**0.6491**	**0.6491**		**1,140.2487**	**1,140.2487**	**0.3550**		**1,147.7032**

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	0.0467	0.4432	0.6535	1.2900e-003	0.0375	7.2400e-003	0.0448	0.0107	6.6600e-003	0.0173		125.4728	125.4728	9.3000e-004		125.4922
Worker	0.0482	0.0657	0.6838	1.8600e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		144.5921	144.5921	7.3200e-003		144.7457
Total	**0.0949**	**0.5089**	**1.3373**	**3.1500e-003**	**0.1940**	**8.4600e-003**	**0.2025**	**0.0522**	**7.7900e-003**	**0.0600**		**270.0648**	**270.0648**	**8.2500e-003**		**270.2379**

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	1.0786	10.9578	7.7239	0.0113		0.7055	0.7055		0.6491	0.6491	0.0000	1,140.2487	1,140.2487	0.3550		1,147.7032
Total	**1.0786**	**10.9578**	**7.7239**	**0.0113**		**0.7055**	**0.7055**		**0.6491**	**0.6491**	**0.0000**	**1,140.2487**	**1,140.2487**	**0.3550**		**1,147.7032**

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	0.0467	0.4432	0.6535	1.2900e-003	0.0375	7.2400e-003	0.0448	0.0107	6.6600e-003	0.0173		125.4728	125.4728	9.3000e-004		125.4922
Worker	0.0482	0.0657	0.6838	1.8600e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		144.5921	144.5921	7.3200e-003		144.7457
Total	**0.0949**	**0.5089**	**1.3373**	**3.1500e-003**	**0.1940**	**8.4600e-003**	**0.2025**	**0.0522**	**7.7900e-003**	**0.0600**		**270.0648**	**270.0648**	**8.2500e-003**		**270.2379**

3.6 Paving - 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	0.9092	8.6233	7.1255	0.0111		0.5050	0.5050		0.4681	0.4681		1,054.2145	1,054.2145	0.2968		1,060.4462
Paving	0.2201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1293**	**8.6233**	**7.1255**	**0.0111**		**0.5050**	**0.5050**		**0.4681**	**0.4681**		**1,054.2145**	**1,054.2145**	**0.2968**		**1,060.4462**

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	0.0619	0.0845	0.8792	2.3900e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4600e-003	0.0548		185.9041	185.9041	9.4100e-003		186.1016
Total	**0.0619**	**0.0845**	**0.8792**	**2.3900e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4600e-003**	**0.0548**		**185.9041**	**185.9041**	**9.4100e-003**		**186.1016**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9092	8.6233	7.1255	0.0111		0.5050	0.5050		0.4681	0.4681	0.0000	1,054.2145	1,054.2145	0.2968		1,060.4462
Paving	0.2201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1293**	**8.6233**	**7.1255**	**0.0111**		**0.5050**	**0.5050**		**0.4681**	**0.4681**	**0.0000**	**1,054.2145**	**1,054.2145**	**0.2968**		**1,060.4462**

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	0.0619	0.0845	0.8792	2.3900e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4600e-003	0.0548		185.9041	185.9041	9.4100e-003		186.1016
Total	**0.0619**	**0.0845**	**0.8792**	**2.3900e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4600e-003**	**0.0548**		**185.9041**	**185.9041**	**9.4100e-003**		**186.1016**

3.7 Architectural Coating - 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					
Archit. Coating	71.9074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**72.2060**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	0.0103	0.0141	0.1465	4.0000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1400e-003		30.9840	30.9840	1.5700e-003		31.0169
Total	**0.0103**	**0.0141**	**0.1465**	**4.0000e-004**	**0.0335**	**2.6000e-004**	**0.0338**	**8.8900e-003**	**2.4000e-004**	**9.1400e-003**		**30.9840**	**30.9840**	**1.5700e-003**		**31.0169**

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	71.9074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**72.2060**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	0.0103	0.0141	0.1465	4.0000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1400e-003		30.9840	30.9840	1.5700e-003		31.0169

Total	**0.0103**	**0.0141**	**0.1465**	**4.0000e-004**	**0.0335**	**2.6000e-004**	**0.0338**	**8.8900e-003**	**2.4000e-004**	**9.1400e-003**		**30.9840**	**30.9840**	**1.5700e-003**		**31.0169**

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	0.2833	0.8638	3.2303	8.8200e-003	0.6208	0.0128	0.6335	0.1659	0.0118	0.1776		729.8411	729.8411	0.0277		730.4228
Unmitigated	0.2833	0.8638	3.2303	8.8200e-003	0.6208	0.0128	0.6335	0.1659	0.0118	0.1776		729.8411	729.8411	0.0277		730.4228

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	57.25	12.32	5.10	139,756	139,756
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	25.25	25.25	25.25	108,225	108,225
Total	82.50	37.58	30.35	247,981	247,981

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH

0.511172	0.060004	0.180590	0.138995	0.042398	0.006681	0.016070	0.032568	0.001938	0.002493	0.004370	0.000586	0.002135

5.0 Energy Detail

4.4 Fleet Mix

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	1.9400e-003	0.0177	0.0148	1.1000e-004		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003		21.1792	21.1792	4.1000e-004	3.9000e-004	21.3081
NaturalGas Unmitigated	1.9400e-003	0.0177	0.0148	1.1000e-004		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003		21.1792	21.1792	4.1000e-004	3.9000e-004	21.3081

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 Office Building	155.715	1.6800e-003	0.0153	0.0128	9.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003		18.3194	18.3194	3.5000e-004	3.4000e-004	18.4309
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	24.3082	2.6000e-004	2.3800e-003	2.0000e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		2.8598	2.8598	5.0000e-005	5.0000e-005	2.8772
Total		**1.9400e-003**	**0.0177**	**0.0148**	**1.0000e-004**		**1.3400e-003**	**1.3400e-003**		**1.3400e-003**	**1.3400e-003**		**21.1792**	**21.1792**	**4.0000e-004**	**3.9000e-004**	**21.3081**

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.0243082	2.6000e-004	2.3800e-003	2.0000e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		2.8598	2.8598	5.0000e-005	5.0000e-005	2.8772
General Office Building	0.155715	1.6800e-003	0.0153	0.0128	9.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003		18.3194	18.3194	3.5000e-004	3.4000e-004	18.4309
Total		**1.9400e-003**	**0.0177**	**0.0148**	**1.0000e-004**		**1.3400e-003**	**1.3400e-003**		**1.3400e-003**	**1.3400e-003**		**21.1792**	**21.1792**	**4.0000e-004**	**3.9000e-004**	**21.3081**

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	0.7674	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143
Unmitigated	0.7674	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143

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	0.0985					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6683					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.1000e-004	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143
Total	**0.7674**	**6.0000e-005**	**6.4100e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0136**	**0.0136**	**4.0000e-005**		**0.0143**

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	0.0985					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6683					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.1000e-004	6.0000e-005	6.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0143
Total	**0.7674**	**6.0000e-005**	**6.4100e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0136**	**0.0136**	**4.0000e-005**		**0.0143**

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 Vegetation

BOMP - Landfill Excavation - Construction Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	7.00	Acre	7.00	304,920.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction per email.

Off-road Equipment - No painting phase.

Off-road Equipment - No drilling or pumping.

Off-road Equipment - No drilling or pumping needed.

Off-road Equipment - Equipment per email.

Off-road Equipment - Equipment per emails.

Off-road Equipment - A grader wasn't included, but one must be needed for handling import.

Off-road Equipment - No paving phase.

Trips and VMT - Assume wet to Simi Valley Landfill and dry to Irwindale Landfill.

Import from 10 to 50 miles source (used 50).

Grading - Acreage of site.

Construction Off-road Equipment Mitigation - All Tier IV per mitigation requirements.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	65.00
tblConstructionPhase	NumDays	10.00	21.00

tblConstructionPhase	NumDaysWeek	5.00	7.00
tblGrading	AcresOfGrading	10.00	7.00
tblGrading	AcresOfGrading	0.00	7.00
tblGrading	MaterialExported	0.00	63,000.00
tblGrading	MaterialImported	0.00	45,000.00
tblOffRoadEquipment	HorsePower	247.00	200.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripLength	20.00	168.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripNumber	7,875.00	2,370.00
tblTripsAndVMT	HaulingTripNumber	5,625.00	3,750.00
tblTripsAndVMT	WorkerTripNumber	0.00	3.00
tblTripsAndVMT	WorkerTripNumber	15.00	5.00

tblTripsAndVMT	WorkerTripNumber	26.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.4688	129.4672	30.5153	0.3520	11.6483	1.7342	13.3825	4.8187	1.6081	6.4268			37,868.0617	2.6169	0.0000	37,933.4851
Maximum	**4.4688**	**129.4672**	**30.5153**	**0.3520**	**11.6483**	**1.7342**	**13.3825**	**4.8187**	**1.6081**	**6.4268**			**37,868.0617**	**2.6169**	**0.0000**	**37,933.4851**

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	3.7244	118.8790	30.7395	0.3520	8.4853	0.5611	9.0464	2.7818	0.5377	3.1514			37,868.0617	2.6169	0.0000	37,933.4851
Maximum	**3.7244**	**118.8790**	**30.7395**	**0.3520**	**8.4853**	**0.5611**	**9.0464**	**2.7818**	**0.5377**	**3.1514**			**37,868.0617**	**2.6169**	**0.0000**	**37,933.4851**

	ROG	**NOx**	**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	**16.66**	**8.18**	**-0.73**	**0.00**	**27.15**	**67.65**	**32.40**	**42.27**	**66.56**	**50.97**	**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	0.0158	1.0000e-005	7.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.5300e-003	0.0000		1.6400e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3133	1.6224	3.8788	0.0123	0.9744	0.0145	0.9890	0.2608	0.0137	0.2744			1,244.8872	0.0700		1,246.6361
Total	**0.3290**	**1.6225**	**3.8795**	**0.0123**	**0.9744**	**0.0145**	**0.9890**	**0.2608**	**0.0137**	**0.2744**			**1,244.8887**	**0.0700**	**0.0000**	**1,246.6378**

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	0.0158	1.0000e-005	7.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.5300e-003	0.0000		1.6400e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3133	1.6224	3.8788	0.0123	0.9744	0.0145	0.9890	0.2608	0.0137	0.2744			1,244.8872	0.0700		1,246.6361
Total	**0.3290**	**1.6225**	**3.8795**	**0.0123**	**0.9744**	**0.0145**	**0.9890**	**0.2608**	**0.0137**	**0.2744**			**1,244.8887**	**0.0700**	**0.0000**	**1,246.6378**

	ROG	**NOx**	**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	Drilling	Demolition	1/1/2018	1/19/2018	5	15	
2	Excavation	Site Preparation	1/20/2018	4/20/2018	5	65	
3	Dewatering	Site Preparation	4/21/2018	5/11/2018	7	21	
4	Final Grading & Import	Grading	5/12/2018	6/8/2018	5	20	
5	Paving	Paving	6/9/2018	6/8/2018	5	0	
6	Architectural Coating	Architectural Coating	6/9/2018	6/8/2018	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Drilling	Bore/Drill Rigs	0	7.00	221	0.50
Drilling	Concrete/Industrial Saws	0	8.00	81	0.73
Drilling	Excavators	0	8.00	158	0.38
Drilling	Rubber Tired Dozers	0	8.00	247	0.40
Excavation	Excavators	1	8.00	158	0.38
Excavation	Pumps	0	24.00	84	0.74
Excavation	Rubber Tired Dozers	1	8.00	200	0.40
Dewatering	Graders	0	8.00	187	0.41
Dewatering	Pumps	0	24.00	84	0.74
Dewatering	Rubber Tired Dozers	0	8.00	247	0.40
Dewatering	Rubber Tired Dozers	0	8.00	247	0.40
Dewatering	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Dewatering	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Final Grading & Import	Excavators	0	8.00	158	0.38
Final Grading & Import	Forklifts	0	8.00	89	0.20
Final Grading & Import	Generator Sets	0	8.00	84	0.74
Final Grading & Import	Graders	1	8.00	187	0.41
Final Grading & Import	Graders	0	8.00	187	0.41
Final Grading & Import	Off-Highway Trucks	1	4.00	402	0.38
Final Grading & Import	Rubber Tired Dozers	0	8.00	247	0.40
Final Grading & Import	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Final Grading & Import	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48
Excavation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Drilling	0	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation	6	5.00	0.00	2,370.00	14.70	6.90	168.00	LD_Mix	HDT_Mix	HHDT
Dewatering	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Dewatering	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Final Grading & Import	2	5.00	0.00	3,750.00	14.70	6.90	50.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Drilling - 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**		**0.0000**

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0176	0.0127	0.1362	3.4000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003			34.2204	1.1700e-003		34.2496
Total	**0.0176**	**0.0127**	**0.1362**	**3.4000e-004**	**0.0335**	**2.7000e-004**	**0.0338**	**8.8900e-003**	**2.5000e-004**	**9.1400e-003**			**34.2204**	**1.1700e-003**		**34.2496**

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0176	0.0127	0.1362	3.4000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003			34.2204	1.1700e-003		34.2496
Total	**0.0176**	**0.0127**	**0.1362**	**3.4000e-004**	**0.0335**	**2.7000e-004**	**0.0338**	**8.8900e-003**	**2.5000e-004**	**9.1400e-003**			**34.2204**	**1.1700e-003**		**34.2496**

3.3 Excavation - 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					6.2459	0.0000	6.2459	3.3392	0.0000	3.3392			0.0000			0.0000
Off-Road	2.2978	23.7848	16.1662	0.0245		1.3897	1.3897		1.2786	1.2786			2,467.1855	0.7681		2,486.3872
Total	**2.2978**	**23.7848**	**16.1662**	**0.0245**	**6.2459**	**1.3897**	**7.6356**	**3.3392**	**1.2786**	**4.6177**			**2,467.1855**	**0.7681**		**2,486.3872**

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	2.1092	68.5781	14.1221	0.2125	5.3465	0.3441	5.6905	1.4647	0.3292	1.7939			22,926.0713	1.2309		22,956.8425
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0293	0.0212	0.2271	5.7000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152			57.0340	1.9500e-003		57.0826
Total	**2.1385**	**68.5993**	**14.3491**	**0.2131**	**5.4024**	**0.3445**	**5.7469**	**1.4796**	**0.3296**	**1.8091**			**22,983.1052**	**1.2328**		**23,013.9252**

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					2.4359	0.0000	2.4359	1.3023	0.0000	1.3023			0.0000			0.0000
Off-Road	0.3001	1.3005	16.3904	0.0245		0.0400	0.0400		0.0400	0.0400			2,467.1855	0.7681		2,486.3872
Total	**0.3001**	**1.3005**	**16.3904**	**0.0245**	**2.4359**	**0.0400**	**2.4759**	**1.3023**	**0.0400**	**1.3423**			**2,467.1855**	**0.7681**		**2,486.3872**

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	2.1092	68.5781	14.1221	0.2125	5.3465	0.3441	5.6905	1.4647	0.3292	1.7939			22,926.0713	1.2309		22,956.8425
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0293	0.0212	0.2271	5.7000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152			57.0340	1.9500e-003		57.0826
Total	**2.1385**	**68.5993**	**14.3491**	**0.2131**	**5.4024**	**0.3445**	**5.7469**	**1.4796**	**0.3296**	**1.8091**			**22,983.1052**	**1.2328**		**23,013.9252**

3.4 Dewatering - 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**			**0.0000**	**0.0000**		**0.0000**

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

Mitigated Construction On-Site

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

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000

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

3.5 Final Grading & Import - 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					0.6256	0.0000	0.6256	0.0786	0.0000	0.0786			0.0000			0.0000
Off-Road	0.9064	11.2900	4.0155	0.0133		0.3836	0.3836		0.3529	0.3529			1,334.7434	0.4155		1,345.1315
Total	**0.9064**	**11.2900**	**4.0155**	**0.0133**	**0.6256**	**0.3836**	**1.0093**	**0.0786**	**0.3529**	**0.4316**			**1,334.7434**	**0.4155**		**1,345.1315**

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	3.5331	118.1560	23.9642	0.3382	8.1855	0.5391	8.7245	2.2427	0.5157	2.7585			36,476.2844	2.1995		36,531.2711
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0293	0.0212	0.2271	5.7000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152			57.0340	1.9500e-003		57.0826
Total	**3.5624**	**118.1772**	**24.1913**	**0.3388**	**8.2413**	**0.5395**	**8.7808**	**2.2576**	**0.5161**	**2.7737**			**36,533.3183**	**2.2014**		**36,588.3537**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2440	0.0000	0.2440	0.0307	0.0000	0.0307			0.0000			0.0000
Off-Road	0.1620	0.7018	5.9386	0.0133		0.0216	0.0216		0.0216	0.0216			1,334.7434	0.4155		1,345.1315
Total	**0.1620**	**0.7018**	**5.9386**	**0.0133**	**0.2440**	**0.0216**	**0.2656**	**0.0307**	**0.0216**	**0.0523**			**1,334.7434**	**0.4155**		**1,345.1315**

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	3.5331	118.1560	23.9642	0.3382	8.1855	0.5391	8.7245	2.2427	0.5157	2.7585			36,476.2844	2.1995		36,531.2711
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0293	0.0212	0.2271	5.7000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152			57.0340	1.9500e-003		57.0826
Total	**3.5624**	**118.1772**	**24.1913**	**0.3388**	**8.2413**	**0.5395**	**8.7808**	**2.2576**	**0.5161**	**2.7737**			**36,533.3183**	**2.2014**		**36,588.3537**

3.6 Paving - 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.7 Architectural Coating - 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					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3133	1.6224	3.8788	0.0123	0.9744	0.0145	0.9890	0.2608	0.0137	0.2744			1,244.8872	0.0700		1,246.6361
Unmitigated	0.3133	1.6224	3.8788	0.0123	0.9744	0.0145	0.9890	0.2608	0.0137	0.2744			1,244.8872	0.0700		1,246.6361

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	13.23	159.25	117.18	140,827	140,827
Total	13.23	159.25	117.18	140,827	140,827

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0158	1.0000e-005	7.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.5300e-003	0.0000		1.6400e-003
Unmitigated	0.0158	1.0000e-005	7.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.5300e-003	0.0000		1.6400e-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	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0157					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.5300e-003	0.0000		1.6400e-003
Total	**0.0158**	**1.0000e-005**	**7.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**1.5300e-003**	**0.0000**		**1.6400e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0157					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.5300e-003	0.0000		1.6400e-003
Total	**0.0158**	**1.0000e-005**	**7.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**1.5300e-003**	**0.0000**		**1.6400e-003**

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

Wetlands Facility Construction - Demolition/Site Prep Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	190.70	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acreage for project

Construction Phase - Demolition and Site Prep will occur simultaneously. Therefore everything put under Demolition. Duration per SPEC schedule

Off-road Equipment - Per SPEC equipment schedule

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Haul truck distance to Montebello disposal site.

Demolition - Estimate by G&A and reviewed by SPEC. Includes pipe removal from Synergy, City and Pumpkin Patch sites.

Construction Off-road Equipment Mitigation - Mitigation is Tier IV equipment

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblLandUse	LotAcreage	0.02	190.70

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	5.7899	60.4448	50.7374	0.0608	18.2675	2.8929	20.6344	9.9840	2.6829	12.1617	0.0000	6,019.9820	6,019.9820	1.6702	0.0000	6,055.0560
2019	4.9544	54.2839	41.1842	0.0644	18.2675	2.5066	20.4195	9.9840	2.3061	11.9639	0.0000	6,310.0089	6,310.0089	1.9433	0.0000	6,350.8190
2020	4.6094	49.4637	39.2585	0.0644	8.8969	2.2637	11.1605	3.6558	2.0826	5.7384	0.0000	6,168.3319	6,168.3319	1.9426	0.0000	6,209.1260
2021	1.8931	17.3403	16.5376	0.0268	0.0000	0.9549	0.9549	0.0000	0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126	0.0000	2,555.6462
2022	1.6992	15.5364	16.3276	0.0268	0.0000	0.8057	0.8057	0.0000	0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085	0.0000	2,556.5286
2023	1.5661	14.3126	16.2093	0.0268	0.0000	0.6967	0.6967	0.0000	0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044	0.0000	2,557.3191
2024	1.4653	13.3774	16.1332	0.0268	0.0000	0.6106	0.6106	0.0000	0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009	0.0000	2,557.7349
2025	1.3615	12.4097	16.0518	0.0269	0.0000	0.5250	0.5250	0.0000	0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975	0.0000	2,558.4386
2026	1.3615	12.4097	16.0518	0.0269	0.0000	0.5250	0.5250	0.0000	0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975	0.0000	2,558.4386
2027	1.3615	12.4097	16.0518	0.0269	0.0000	0.5250	0.5250	0.0000	0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975	0.0000	2,558.4386
2028	1.3615	12.4097	16.0518	0.0269	0.0000	0.5250	0.5250	0.0000	0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975	0.0000	2,558.4386
2029	1.3615	12.4097	16.0518	0.0269	0.0000	0.5250	0.5250	0.0000	0.4939	0.4939	0.0000	2,545.8905	2,545.8905	0.5975	0.0000	2,558.4386
2030	1.3041	7.9179	16.1313	0.0308	0.0000	0.1476	0.1476	0.0000	0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158	0.0000	2,887.2617
2031	1.3041	7.9179	16.1313	0.0308	0.0000	0.1476	0.1476	0.0000	0.1476	0.1476	0.0000	2,884.8300	2,884.8300	0.1158	0.0000	2,887.2617
2032	1.3802	7.9179	16.1313	0.0308	0.1677	0.3247	0.4924	0.0445	0.3246	0.3691	0.0000	2,884.8300	2,884.8300	0.1268	0.0000	2,887.4920
2033	1.3791	7.0124	15.8766	0.0295	0.1677	0.3247	0.4924	0.0445	0.3246	0.3691	0.0000	2,725.8992	2,725.8992	0.1267	0.0000	2,728.5595

Total	**34.1522**	**317.5735**	**340.9172**	**0.5529**	**45.7671**	**14.3007**	**59.1873**	**23.7128**	**13.3715**	**36.2528**	**0.0000**	**52,784.4376**	**52,784.4376**	**11.4553**	**0.0000**	**53,024.9976**

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	0.7672	3.2096	32.8285	0.0608	18.2675	0.0958	18.3325	9.9840	0.0955	10.0489	0.0000	6,019.9820	6,019.9820	1.6702	0.0000	6,055.0560
2019	0.8197	3.3639	35.6740	0.0644	18.2675	0.1026	18.3324	9.9840	0.1025	10.0489	0.0000	6,310.0089	6,310.0089	1.9433	0.0000	6,350.8190
2020	0.8157	3.3575	35.6115	0.0644	8.8969	0.1026	8.9995	3.6558	0.1024	3.7582	0.0000	6,168.3319	6,168.3319	1.9426	0.0000	6,209.1260
2021	0.3265	2.2289	17.4110	0.0268	0.0000	0.0406	0.0406	0.0000	0.0406	0.0406	0.0000	2,542.7817	2,542.7817	0.6126	0.0000	2,555.6462
2022	0.3265	2.2289	17.4110	0.0268	0.0000	0.0406	0.0406	0.0000	0.0406	0.0406	0.0000	2,543.7497	2,543.7497	0.6085	0.0000	2,556.5286
2023	0.3265	2.2289	17.4110	0.0268	0.0000	0.0406	0.0406	0.0000	0.0406	0.0406	0.0000	2,544.6262	2,544.6262	0.6044	0.0000	2,557.3191
2024	0.3265	2.2289	17.4110	0.0268	0.0000	0.0406	0.0406	0.0000	0.0406	0.0406	0.0000	2,545.1154	2,545.1154	0.6009	0.0000	2,557.7349
2025	0.3265	2.2289	17.4110	0.0269	0.0000	0.0406	0.0406	0.0000	0.0406	0.0406	0.0000	2,545.8905	2,545.8905	0.5975	0.0000	2,558.4386
2026	0.3265	2.2289	17.4110	0.0269	0.0000	0.0406	0.0406	0.0000	0.0406	0.0406	0.0000	2,545.8905	2,545.8905	0.5975	0.0000	2,558.4386
2027	0.3265	2.2289	17.4110	0.0269	0.0000	0.0406	0.0406	0.0000	0.0406	0.0406	0.0000	2,545.8905	2,545.8905	0.5975	0.0000	2,558.4386
2028	0.3265	2.2289	17.4110	0.0269	0.0000	0.0406	0.0406	0.0000	0.0406	0.0406	0.0000	2,545.8905	2,545.8905	0.5975	0.0000	2,558.4386
2029	0.3265	2.2289	17.4110	0.0269	0.0000	0.0406	0.0406	0.0000	0.0406	0.0406	0.0000	2,545.8905	2,545.8905	0.5975	0.0000	2,558.4386
2030	0.3265	2.2289	17.4110	0.0308	0.0000	0.0406	0.0406	0.0000	0.0406	0.0406	0.0000	2,884.8300	2,884.8300	0.1158	0.0000	2,887.2617
2031	0.3265	2.2289	17.4110	0.0308	0.0000	0.0406	0.0406	0.0000	0.0406	0.0406	0.0000	2,884.8300	2,884.8300	0.1158	0.0000	2,887.2617
2032	0.3265	2.2289	17.4110	0.0308	0.1677	0.0406	0.2056	0.0445	0.0406	0.0823	0.0000	2,884.8300	2,884.8300	0.1268	0.0000	2,887.4920
2033	0.2987	1.2218	17.2851	0.0295	0.1677	0.0379	0.2056	0.0445	0.0378	0.0823	0.0000	2,725.8992	2,725.8992	0.1267	0.0000	2,728.5595

Total	**6.6190**	**37.8995**	**330.3313**	**0.5529**	**45.7671**	**0.8262**	**46.5222**	**23.7128**	**0.8255**	**24.4674**	**0.0000**	**52,784.4376**	**52,784.4376**	**11.4553**	**0.0000**	**53,024.9975**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**80.62**	**88.07**	**3.11**	**0.00**	**0.00**	**94.22**	**21.40**	**0.00**	**93.83**	**32.51**	**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	0.0262	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Mobile	0.0363	0.1228	0.4514	9.2000e-004	0.0654	1.9100e-003	0.0673	0.0175	1.7500e-003	0.0192		85.0513	85.0513	3.9100e-003		85.1333
Total	**0.0630**	**0.1278**	**0.4557**	**9.5000e-004**	**0.0654**	**2.2900e-003**	**0.0677**	**0.0175**	**2.1300e-003**	**0.0196**		**91.1143**	**91.1143**	**4.0300e-003**	**1.1000e-004**	**91.2333**

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	0.0262	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Mobile	0.0363	0.1228	0.4514	9.2000e-004	0.0654	1.9100e-003	0.0673	0.0175	1.7500e-003	0.0192		85.0513	85.0513	3.9100e-003		85.1333

Total	**0.0630**	**0.1278**	**0.4557**	**9.5000e-004**	**0.0654**	**2.2900e-003**	**0.0677**	**0.0175**	**2.1300e-003**	**0.0196**		**91.1143**	**91.1143**	**4.0300e-003**	**1.1000e-004**	**91.2333**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2018	10/5/2018	5	200	
2	Site Preparation	Site Preparation	10/6/2018	3/22/2019	5	120	
3	Grading	Grading	3/23/2019	5/29/2020	5	310	
4	Building Construction	Building Construction	5/30/2020	4/16/2032	5	3100	
5	Paving	Paving	4/17/2032	2/18/2033	5	220	
6	Architectural Coating	Architectural Coating	2/19/2033	12/23/2033	5	220	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 775

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,500; Non-Residential Outdoor: 500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	0.00	105.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Clean Paved Roads

3.2 Demolition - 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					0.1136	0.0000	0.1136	0.0172	0.0000	0.0172			0.0000			0.0000
Off-Road	5.7124	60.2242	49.6501	0.0577		2.8891	2.8891		2.6793	2.6793		5,775.7744	5,775.7744	1.6595		5,810.6230
Total	**5.7124**	**60.2242**	**49.6501**	**0.0577**	**0.1136**	**2.8891**	**3.0027**	**0.0172**	**2.6793**	**2.6965**		**5,775.7744**	**5,775.7744**	**1.6595**		**5,810.6230**

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	8.7000e-003	0.1268	0.1104	3.9000e-004	9.1500e-003	2.0900e-003	0.0112	2.5100e-003	1.9200e-003	4.4300e-003		37.6475	37.6475	2.8000e-004		37.6534
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0688	0.0939	0.9769	2.6500e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6200e-003	0.0609		206.5601	206.5601	0.0105		206.7796
Total	**0.0775**	**0.2206**	**1.0872**	**3.0400e-003**	**0.2327**	**3.8400e-003**	**0.2365**	**0.0618**	**3.5400e-003**	**0.0653**		**244.2076**	**244.2076**	**0.0107**		**244.4330**

Mitigated Construction On-Site

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

Fugitive Dust					0.1136	0.0000	0.1136	0.0172	0.0000	0.0172			0.0000			0.0000
Off-Road	0.6898	2.9890	31.7412	0.0577		0.0920	0.0920		0.0920	0.0920	0.0000	5,775.7744	5,775.7744	1.6595		5,810.6230
Total	**0.6898**	**2.9890**	**31.7412**	**0.0577**	**0.1136**	**0.0920**	**0.2056**	**0.0172**	**0.0920**	**0.1092**	**0.0000**	**5,775.7744**	**5,775.7744**	**1.6595**		**5,810.6230**

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	8.7000e-003	0.1268	0.1104	3.9000e-004	9.1500e-003	2.0900e-003	0.0112	2.5100e-003	1.9200e-003	4.4300e-003		37.6475	37.6475	2.8000e-004		37.6534
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0688	0.0939	0.9769	2.6500e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6200e-003	0.0609		206.5601	206.5601	0.0105		206.7796
Total	**0.0775**	**0.2206**	**1.0872**	**3.0400e-003**	**0.2327**	**3.8400e-003**	**0.2365**	**0.0618**	**3.5400e-003**	**0.0653**		**244.2076**	**244.2076**	**0.0107**		**244.4330**

3.3 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.2921	45.6088	36.2346	0.0391		2.3654	2.3654		2.1762	2.1762		3,939.7731	3,939.7731	1.2265		3,965.5297
Total	**4.2921**	**45.6088**	**36.2346**	**0.0391**	**18.0663**	**2.3654**	**20.4317**	**9.9307**	**2.1762**	**12.1069**		**3,939.7731**	**3,939.7731**	**1.2265**		**3,965.5297**

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	0.0619	0.0845	0.8792	2.3900e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4600e-003	0.0548		185.9041	185.9041	9.4100e-003		186.1016
Total	**0.0619**	**0.0845**	**0.8792**	**2.3900e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4600e-003**	**0.0548**		**185.9041**	**185.9041**	**9.4100e-003**		**186.1016**

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.4757	2.0615	21.2415	0.0391		0.0634	0.0634		0.0634	0.0634	0.0000	3,939.7731	3,939.7731	1.2265		3,965.5297
Total	**0.4757**	**2.0615**	**21.2415**	**0.0391**	**18.0663**	**0.0634**	**18.1297**	**9.9307**	**0.0634**	**9.9941**	**0.0000**	**3,939.7731**	**3,939.7731**	**1.2265**		**3,965.5297**

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	0.0619	0.0845	0.8792	2.3900e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4600e-003	0.0548		185.9041	185.9041	9.4100e-003		186.1016
Total	**0.0619**	**0.0845**	**0.8792**	**2.3900e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4600e-003**	**0.0548**		**185.9041**	**185.9041**	**9.4100e-003**		**186.1016**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0188	42.5046	34.8088	0.0391		2.1505	2.1505		1.9784	1.9784		3,876.7233	3,876.7233	1.2266		3,902.4810
Total	**4.0188**	**42.5046**	**34.8088**	**0.0391**	**18.0663**	**2.1505**	**20.2167**	**9.9307**	**1.9784**	**11.9091**		**3,876.7233**	**3,876.7233**	**1.2266**		**3,902.4810**

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	0.0569	0.0775	0.8058	2.3800e-003	0.2012	1.5500e-003	0.2027	0.0534	1.4300e-003	0.0548		178.8272	178.8272	8.8100e-003		179.0121
Total	**0.0569**	**0.0775**	**0.8058**	**2.3800e-003**	**0.2012**	**1.5500e-003**	**0.2027**	**0.0534**	**1.4300e-003**	**0.0548**		**178.8272**	**178.8272**	**8.8100e-003**		**179.0121**

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.4757	2.0615	21.2415	0.0391		0.0634	0.0634		0.0634	0.0634	0.0000	3,876.7233	3,876.7233	1.2266		3,902.4810
Total	**0.4757**	**2.0615**	**21.2415**	**0.0391**	**18.0663**	**0.0634**	**18.1297**	**9.9307**	**0.0634**	**9.9941**	**0.0000**	**3,876.7233**	**3,876.7233**	**1.2266**		**3,902.4810**

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	0.0569	0.0775	0.8058	2.3800e-003	0.2012	1.5500e-003	0.2027	0.0534	1.4300e-003	0.0548		178.8272	178.8272	8.8100e-003		179.0121
Total	**0.0569**	**0.0775**	**0.8058**	**2.3800e-003**	**0.2012**	**1.5500e-003**	**0.2027**	**0.0534**	**1.4300e-003**	**0.0548**		**178.8272**	**178.8272**	**8.8100e-003**		**179.0121**

3.4 Grading - 2019

Unmitigated Construction On-Site

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

Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**4.8912**	**54.1978**	**40.2888**	**0.0617**	**8.6733**	**2.5049**	**11.1783**	**3.5965**	**2.3045**	**5.9010**		**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

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	0.0633	0.0861	0.8953	2.6500e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		198.6968	198.6968	9.7800e-003		198.9023
Total	**0.0633**	**0.0861**	**0.8953**	**2.6500e-003**	**0.2236**	**1.7200e-003**	**0.2253**	**0.0593**	**1.5900e-003**	**0.0609**		**198.6968**	**198.6968**	**9.7800e-003**		**198.9023**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.1009	0.1009		0.1009	0.1009	0.0000	6,111.3121	6,111.3121	1.9336		6,151.9167
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**8.6733**	**0.1009**	**8.7742**	**3.5965**	**0.1009**	**3.6974**	**0.0000**	**6,111.3121**	**6,111.3121**	**1.9336**		**6,151.9167**

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	0.0633	0.0861	0.8953	2.6500e-003	0.2236	1.7200e-003	0.2253	0.0593	1.5900e-003	0.0609		198.6968	198.6968	9.7800e-003		198.9023
Total	**0.0633**	**0.0861**	**0.8953**	**2.6500e-003**	**0.2236**	**1.7200e-003**	**0.2253**	**0.0593**	**1.5900e-003**	**0.0609**		**198.6968**	**198.6968**	**9.7800e-003**		**198.9023**

3.4 Grading - 2020

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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.5501	49.3839	38.4257	0.0617		2.2619	2.2619		2.0810	2.0810		5,977.7088	5,977.7088	1.9333		6,018.3084
Total	**4.5501**	**49.3839**	**38.4257**	**0.0617**	**8.6733**	**2.2619**	**10.9353**	**3.5965**	**2.0810**	**5.6775**		**5,977.7088**	**5,977.7088**	**1.9333**		**6,018.3084**

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	0.0593	0.0797	0.8328	2.6400e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		190.6230	190.6230	9.2700e-003		190.8176
Total	**0.0593**	**0.0797**	**0.8328**	**2.6400e-003**	**0.2236**	**1.7100e-003**	**0.2253**	**0.0593**	**1.5800e-003**	**0.0609**		**190.6230**	**190.6230**	**9.2700e-003**		**190.8176**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	0.7564	3.2778	34.7787	0.0617		0.1009	0.1009		0.1009	0.1009	0.0000	5,977.7088	5,977.7088	1.9333		6,018.3084
Total	**0.7564**	**3.2778**	**34.7787**	**0.0617**	**8.6733**	**0.1009**	**8.7742**	**3.5965**	**0.1009**	**3.6974**	**0.0000**	**5,977.7088**	**5,977.7088**	**1.9333**		**6,018.3084**

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	0.0593	0.0797	0.8328	2.6400e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		190.6230	190.6230	9.2700e-003		190.8176

Total	**0.0593**	**0.0797**	**0.8328**	**2.6400e-003**	**0.2236**	**1.7100e-003**	**0.2253**	**0.0593**	**1.5800e-003**	**0.0609**		**190.6230**	**190.6230**	**9.2700e-003**		**190.8176**

3.5 Building Construction - 2020

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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		0.0406	0.0406		0.0406	0.0406	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

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

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		0.0406	0.0406		0.0406	0.0406	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

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

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		0.0406	0.0406		0.0406	0.0406	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

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

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557		2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**		**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

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

Mitigated Construction On-Site

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

Off-Road	0.3265	2.2289	17.4110	0.0268		0.0406	0.0406		0.0406	0.0406	0.0000	2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

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

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744		2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**		**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0268		0.0406	0.0406		0.0406	0.0406	0.0000	2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**0.3265**	**2.2289**	**17.4110**	**0.0268**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

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

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0269		0.0406	0.0406		0.0406	0.0406	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**0.3265**	**2.2289**	**17.4110**	**0.0269**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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

3.5 Building Construction - 2026

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0269		0.0406	0.0406		0.0406	0.0406	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**0.3265**	**2.2289**	**17.4110**	**0.0269**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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

3.5 Building Construction - 2027

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0269		0.0406	0.0406		0.0406	0.0406	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**0.3265**	**2.2289**	**17.4110**	**0.0269**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

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

3.5 Building Construction - 2028

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0269		0.0406	0.0406		0.0406	0.0406	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**0.3265**	**2.2289**	**17.4110**	**0.0269**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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

3.5 Building Construction - 2029

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	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939		2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**		**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0269		0.0406	0.0406		0.0406	0.0406	0.0000	2,545.8905	2,545.8905	0.5975		2,558.4386
Total	**0.3265**	**2.2289**	**17.4110**	**0.0269**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**2,545.8905**	**2,545.8905**	**0.5975**		**2,558.4386**

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

3.5 Building Construction - 2030

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0308		0.0406	0.0406		0.0406	0.0406	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**0.3265**	**2.2289**	**17.4110**	**0.0308**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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

3.5 Building Construction - 2031

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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

Mitigated Construction On-Site

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

Off-Road	0.3265	2.2289	17.4110	0.0308		0.0406	0.0406		0.0406	0.0406	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**0.3265**	**2.2289**	**17.4110**	**0.0308**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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

3.5 Building Construction - 2032

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	1.3041	7.9179	16.1313	0.0308		0.1476	0.1476		0.1476	0.1476		2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**1.3041**	**7.9179**	**16.1313**	**0.0308**		**0.1476**	**0.1476**		**0.1476**	**0.1476**		**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3265	2.2289	17.4110	0.0308		0.0406	0.0406		0.0406	0.0406	0.0000	2,884.8300	2,884.8300	0.1158		2,887.2617
Total	**0.3265**	**2.2289**	**17.4110**	**0.0308**		**0.0406**	**0.0406**		**0.0406**	**0.0406**	**0.0000**	**2,884.8300**	**2,884.8300**	**0.1158**		**2,887.2617**

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

3.6 Paving - 2032

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	1.3549	6.9800	15.5192	0.0275		0.3234	0.3234		0.3234	0.3234		2,599.9866	2,599.9866	0.1219		2,602.5460
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3549**	**6.9800**	**15.5192**	**0.0275**		**0.3234**	**0.3234**		**0.3234**	**0.3234**		**2,599.9866**	**2,599.9866**	**0.1219**		**2,602.5460**

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	0.0253	0.0334	0.3664	2.0000e-003	0.1677	1.3200e-003	0.1690	0.0445	1.2200e-003	0.0457		126.4205	126.4205	4.8900e-003		126.5232
Total	**0.0253**	**0.0334**	**0.3664**	**2.0000e-003**	**0.1677**	**1.3200e-003**	**0.1690**	**0.0445**	**1.2200e-003**	**0.0457**		**126.4205**	**126.4205**	**4.8900e-003**		**126.5232**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0275		0.0366	0.0366		0.0366	0.0366	0.0000	2,599.9866	2,599.9866	0.1219		2,602.5460
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0275**		**0.0366**	**0.0366**		**0.0366**	**0.0366**	**0.0000**	**2,599.9866**	**2,599.9866**	**0.1219**		**2,602.5460**

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	0.0253	0.0334	0.3664	2.0000e-003	0.1677	1.3200e-003	0.1690	0.0445	1.2200e-003	0.0457		126.4205	126.4205	4.8900e-003		126.5232
Total	**0.0253**	**0.0334**	**0.3664**	**2.0000e-003**	**0.1677**	**1.3200e-003**	**0.1690**	**0.0445**	**1.2200e-003**	**0.0457**		**126.4205**	**126.4205**	**4.8900e-003**		**126.5232**

3.6 Paving - 2033

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	1.3549	6.9800	15.5192	0.0275		0.3234	0.3234		0.3234	0.3234		2,599.9866	2,599.9866	0.1219		2,602.5460
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3549**	**6.9800**	**15.5192**	**0.0275**		**0.3234**	**0.3234**		**0.3234**	**0.3234**		**2,599.9866**	**2,599.9866**	**0.1219**		**2,602.5460**

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	0.0242	0.0323	0.3574	1.9900e-003	0.1677	1.3200e-003	0.1690	0.0445	1.2200e-003	0.0457		125.9126	125.9126	4.8000e-003		126.0135
Total	**0.0242**	**0.0323**	**0.3574**	**1.9900e-003**	**0.1677**	**1.3200e-003**	**0.1690**	**0.0445**	**1.2200e-003**	**0.0457**		**125.9126**	**125.9126**	**4.8000e-003**		**126.0135**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2745	1.1895	16.9276	0.0275		0.0366	0.0366		0.0366	0.0366	0.0000	2,599.9866	2,599.9866	0.1219		2,602.5460
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2745**	**1.1895**	**16.9276**	**0.0275**		**0.0366**	**0.0366**		**0.0366**	**0.0366**	**0.0000**	**2,599.9866**	**2,599.9866**	**0.1219**		**2,602.5460**

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	0.0242	0.0323	0.3574	1.9900e-003	0.1677	1.3200e-003	0.1690	0.0445	1.2200e-003	0.0457		125.9126	125.9126	4.8000e-003		126.0135
Total	**0.0242**	**0.0323**	**0.3574**	**1.9900e-003**	**0.1677**	**1.3200e-003**	**0.1690**	**0.0445**	**1.2200e-003**	**0.0457**		**125.9126**	**125.9126**	**4.8000e-003**		**126.0135**

3.7 Architectural Coating - 2033

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	0.1053					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.6873
Total	**0.2361**	**0.8563**	**1.7977**	**2.9700e-003**		**0.0203**	**0.0203**		**0.0203**	**0.0203**		**281.4481**	**281.4481**	**0.0114**		**281.6873**

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

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	0.1053					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0114		281.6873
Total	**0.1351**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0114**		**281.6873**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

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

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	0.0363	0.1228	0.4514	9.2000e-004	0.0654	1.9100e-003	0.0673	0.0175	1.7500e-003	0.0192		85.0513	85.0513	3.9100e-003		85.1333
Unmitigated	0.0363	0.1228	0.4514	9.2000e-004	0.0654	1.9100e-003	0.0673	0.0175	1.7500e-003	0.0192		85.0513	85.0513	3.9100e-003		85.1333

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	6.97	1.32	0.68	23,312	23,312
Total	6.97	1.32	0.68	23,312	23,312

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515683	0.060583	0.179994	0.140474	0.041721	0.006653	0.015053	0.028382	0.001919	0.002521	0.004323	0.000600	0.002094

5.0 Energy Detail

4.4 Fleet Mix

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	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
NaturalGas Unmitigated	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998

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	51.5342	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Total		**5.6000e-004**	**5.0500e-003**	**4.2400e-003**	**3.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**		**6.0629**	**6.0629**	**1.2000e-004**	**1.1000e-004**	**6.0998**

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	0.0515342	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Total		**5.6000e-004**	**5.0500e-003**	**4.2400e-003**	**3.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**		**6.0629**	**6.0629**	**1.2000e-004**	**1.1000e-004**	**6.0998**

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	0.0262	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0262	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.3500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0262**	**0.0000**	**1.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.3500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0262**	**0.0000**	**1.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Wetlands Facility Construction - Well Cellars Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	15.00	1000sqft	0.34	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per SPEC schedule

Off-road Equipment - Per SPEC equipment schedule

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Construction Off-road Equipment Mitigation - Tier 4 mitigation

Table Name	Column Name	Default Value	New Value

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	100.00	261.00
tblConstructionPhase	PhaseEndDate	1/18/2018	1/31/2018
tblConstructionPhase	PhaseEndDate	2/7/2018	6/14/2017
tblConstructionPhase	PhaseStartDate	1/19/2017	2/1/2017
tblConstructionPhase	PhaseStartDate	2/1/2018	6/8/2017
tblOffRoadEquipment	HorsePower	81.00	80.00
tblOffRoadEquipment	HorsePower	255.00	226.00

tblOffRoadEquipment	HorsePower	226.00	208.00
tblOffRoadEquipment	HorsePower	89.00	149.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	LoadFactor	0.73	0.38
tblOffRoadEquipment	LoadFactor	0.40	0.29
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	6.00
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction

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					
2017	74.7465	49.8311	36.2123	0.0547	0.8645	3.2230	3.5038	0.4434	3.0194	3.0941	0.0000	5,290.8596	5,290.8596	1.3573	0.0000	5,319.3623
2018	4.2074	35.0573	27.0122	0.0412	0.0796	2.1879	2.2674	0.0214	2.0574	2.0787	0.0000	3,977.7085	3,977.7085	1.0319	0.0000	3,999.3785
Total	**78.9539**	**84.8885**	**63.2245**	**0.0958**	**0.9441**	**5.4108**	**5.7712**	**0.4648**	**5.0768**	**5.1728**	**0.0000**	**9,268.5682**	**9,268.5682**	**2.3892**	**0.0000**	**9,318.7408**

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					
2017	70.1024	4.7788	34.2971	0.0547	0.8645	0.0801	0.8832	0.4434	0.0797	0.4620	0.0000	5,290.8596	5,290.8596	1.3573	0.0000	5,319.3623
2018	0.5405	4.1928	26.5026	0.0412	0.0796	0.0636	0.1432	0.0214	0.0634	0.0847	0.0000	3,977.7085	3,977.7085	1.0319	0.0000	3,999.3785
Total	**70.6429**	**8.9717**	**60.7997**	**0.0958**	**0.9441**	**0.1437**	**1.0263**	**0.4648**	**0.1430**	**0.5467**	**0.0000**	**9,268.5682**	**9,268.5682**	**2.3892**	**0.0000**	**9,318.7408**

	ROG	**NOx**	**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	**10.53**	**89.43**	**3.84**	**0.00**	**0.00**	**97.35**	**82.22**	**0.00**	**97.18**	**89.43**	**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	0.3924	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.4900e-003
Energy	8.3400e-003	0.0758	0.0637	4.5000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003		90.9428	90.9428	1.7400e-003	1.6700e-003	91.4963
Mobile	0.5445	1.8414	6.7704	0.0137	0.9812	0.0287	1.0099	0.2621	0.0263	0.2884		1,275.7688	1,275.7688	0.0586		1,276.9999
Total	**0.9452**	**1.9172**	**6.8357**	**0.0142**	**0.9812**	**0.0344**	**1.0156**	**0.2621**	**0.0321**	**0.2942**		**1,366.7149**	**1,366.7149**	**0.0604**	**1.6700e-003**	**1,368.4996**

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	0.3924	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.4900e-003
Energy	8.3400e-003	0.0758	0.0637	4.5000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003		90.9428	90.9428	1.7400e-003	1.6700e-003	91.4963
Mobile	0.5445	1.8414	6.7704	0.0137	0.9812	0.0287	1.0099	0.2621	0.0263	0.2884		1,275.7688	1,275.7688	0.0586		1,276.9999
Total	**0.9452**	**1.9172**	**6.8357**	**0.0142**	**0.9812**	**0.0344**	**1.0156**	**0.2621**	**0.0321**	**0.2942**		**1,366.7149**	**1,366.7149**	**0.0604**	**1.6700e-003**	**1,368.4996**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/13/2017	5	10	
2	Site Preparation	Site Preparation	1/14/2017	1/16/2017	5	1	
3	Grading	Grading	1/17/2017	1/18/2017	5	2	
4	Building Construction	Building Construction	2/1/2017	1/31/2018	5	261	
5	Paving	Paving	6/8/2017	6/14/2017	5	5	
6	Architectural Coating	Architectural Coating	6/15/2017	6/21/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 22,500; Non-Residential Outdoor: 7,500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition		0		84	0.74
Demolition		0		89	0.20
Demolition		0		78	0.48
Demolition		0		46	0.45
Demolition	Concrete/Industrial Saws	0	8.00	80	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	226	0.29
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Air Compressors	2	6.00	78	0.48
Building Construction	Cranes	3	4.00	208	0.29
Building Construction	Forklifts	1	6.00	149	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Rollers	2	6.00	84	0.38
Building Construction	Tractors/Loaders/Backhoes	6	8.00	75	0.37
Building Construction	Welders	3	6.00	46	0.45
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	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
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	17	6.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Clean Paved Roads

3.2 Demolition - 2017

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	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930		1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**		**0.7266**	**0.7266**		**0.6930**	**0.6930**		**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1330	0.5765	7.8665	0.0120		0.0177	0.0177		0.0177	0.0177	0.0000	1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**0.1330**	**0.5765**	**7.8665**	**0.0120**		**0.0177**	**0.0177**		**0.0177**	**0.0177**	**0.0000**	**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043

Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089		955.8663	955.8663	0.2929		962.0167
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**		**955.8663**	**955.8663**	**0.2929**		**962.0167**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.1135	0.4917	6.9975	9.3300e-003		0.0151	0.0151		0.0151	0.0151	0.0000	955.8663	955.8663	0.2929		962.0167
Total	**0.1135**	**0.4917**	**6.9975**	**9.3300e-003**	**0.5303**	**0.0151**	**0.5454**	**0.0573**	**0.0151**	**0.0724**	**0.0000**	**955.8663**	**955.8663**	**0.2929**		**962.0167**

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	0.0191	0.0259	0.2699	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152		53.6430	53.6430	2.8200e-003		53.7022
Total	**0.0191**	**0.0259**	**0.2699**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**		**53.6430**	**53.6430**	**2.8200e-003**		**53.7022**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.2049	10.4761	8.5825	0.0120		0.7266	0.7266		0.6930	0.6930		1,183.8131	1,183.8131	0.2333		1,188.7118

Total	**1.2049**	**10.4761**	**8.5825**	**0.0120**	**0.7528**	**0.7266**	**1.4794**	**0.4138**	**0.6930**	**1.1068**		**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.1330	0.5765	7.8665	0.0120		0.0177	0.0177		0.0177	0.0177	0.0000	1,183.8131	1,183.8131	0.2333		1,188.7118
Total	**0.1330**	**0.5765**	**7.8665**	**0.0120**	**0.7528**	**0.0177**	**0.7705**	**0.4138**	**0.0177**	**0.4315**	**0.0000**	**1,183.8131**	**1,183.8131**	**0.2333**		**1,188.7118**

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	0.0382	0.0518	0.5398	1.3300e-003	0.1118	9.0000e-004	0.1127	0.0296	8.3000e-004	0.0305		107.2861	107.2861	5.6300e-003		107.4043
Total	**0.0382**	**0.0518**	**0.5398**	**1.3300e-003**	**0.1118**	**9.0000e-004**	**0.1127**	**0.0296**	**8.3000e-004**	**0.0305**		**107.2861**	**107.2861**	**5.6300e-003**		**107.4043**

3.5 Building Construction - 2017

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	4.8458	39.7115	27.4466	0.0400		2.6165	2.6165		2.4579	2.4579		3,921.8976	3,921.8976	1.0466		3,943.8767
Total	**4.8458**	**39.7115**	**27.4466**	**0.0400**		**2.6165**	**2.6165**		**2.4579**	**2.4579**		**3,921.8976**	**3,921.8976**	**1.0466**		**3,943.8767**

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	0.0167	0.1610	0.2270	4.3000e-004	0.0125	2.5600e-003	0.0151	3.5600e-003	2.3600e-003	5.9200e-003		42.5388	42.5388	3.1000e-004		42.5454
Worker	0.0230	0.0311	0.3239	8.0000e-004	0.0671	5.4000e-004	0.0676	0.0178	5.0000e-004	0.0183		64.3717	64.3717	3.3800e-003		64.4426
Total	**0.0396**	**0.1921**	**0.5509**	**1.2300e-003**	**0.0796**	**3.1000e-003**	**0.0827**	**0.0214**	**2.8600e-003**	**0.0242**		**106.9105**	**106.9105**	**3.6900e-003**		**106.9880**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5043	4.0170	25.9917	0.0400		0.0607	0.0607		0.0607	0.0607	0.0000	3,921.8976	3,921.8976	1.0466		3,943.8767
Total	**0.5043**	**4.0170**	**25.9917**	**0.0400**		**0.0607**	**0.0607**		**0.0607**	**0.0607**	**0.0000**	**3,921.8976**	**3,921.8976**	**1.0466**		**3,943.8767**

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	0.0167	0.1610	0.2270	4.3000e-004	0.0125	2.5600e-003	0.0151	3.5600e-003	2.3600e-003	5.9200e-003		42.5388	42.5388	3.1000e-004		42.5454
Worker	0.0230	0.0311	0.3239	8.0000e-004	0.0671	5.4000e-004	0.0676	0.0178	5.0000e-004	0.0183		64.3717	64.3717	3.3800e-003		64.4426
Total	**0.0396**	**0.1921**	**0.5509**	**1.2300e-003**	**0.0796**	**3.1000e-003**	**0.0827**	**0.0214**	**2.8600e-003**	**0.0242**		**106.9105**	**106.9105**	**3.6900e-003**		**106.9880**

3.5 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	4.1712	34.8815	26.5013	0.0399		2.1849	2.1849		2.0547	2.0547		3,873.9162	3,873.9162	1.0285		3,895.5139
Total	**4.1712**	**34.8815**	**26.5013**	**0.0399**		**2.1849**	**2.1849**		**2.0547**	**2.0547**		**3,873.9162**	**3,873.9162**	**1.0285**		**3,895.5139**

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	0.0156	0.1477	0.2178	4.3000e-004	0.0125	2.4100e-003	0.0149	3.5600e-003	2.2200e-003	5.7800e-003		41.8243	41.8243	3.1000e-004		41.8307
Worker	0.0206	0.0282	0.2931	8.0000e-004	0.0671	5.2000e-004	0.0676	0.0178	4.9000e-004	0.0183		61.9680	61.9680	3.1400e-003		62.0339
Total	**0.0362**	**0.1759**	**0.5109**	**1.2300e-003**	**0.0796**	**2.9300e-003**	**0.0825**	**0.0214**	**2.7100e-003**	**0.0241**		**103.7923**	**103.7923**	**3.4500e-003**		**103.8646**

Mitigated Construction On-Site

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

Category	lb/day										lb/day					
Off-Road	0.5043	4.0170	25.9917	0.0399		0.0607	0.0607		0.0607	0.0607	0.0000	3,873.9162	3,873.9162	1.0285		3,895.5139
Total	**0.5043**	**4.0170**	**25.9917**	**0.0399**		**0.0607**	**0.0607**		**0.0607**	**0.0607**	**0.0000**	**3,873.9162**	**3,873.9162**	**1.0285**		**3,895.5139**

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	0.0156	0.1477	0.2178	4.3000e-004	0.0125	2.4100e-003	0.0149	3.5600e-003	2.2200e-003	5.7800e-003		41.8243	41.8243	3.1000e-004		41.8307
Worker	0.0206	0.0282	0.2931	8.0000e-004	0.0671	5.2000e-004	0.0676	0.0178	4.9000e-004	0.0183		61.9680	61.9680	3.1400e-003		62.0339
Total	**0.0362**	**0.1759**	**0.5109**	**1.2300e-003**	**0.0796**	**2.9300e-003**	**0.0825**	**0.0214**	**2.7100e-003**	**0.0241**		**103.7923**	**103.7923**	**3.4500e-003**		**103.8646**

3.6 Paving - 2017

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	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572		1,068.9366	1,068.9366	0.2968		1,075.1698
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0406**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**		**1,068.9366**	**1,068.9366**	**0.2968**		**1,075.1698**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1100	0.4766	6.7829	0.0111		0.0147	0.0147		0.0147	0.0147	0.0000	1,068.9366	1,068.9366	0.2968		1,075.1698
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.1100**	**0.4766**	**6.7829**	**0.0111**		**0.0147**	**0.0147**		**0.0147**	**0.0147**	**0.0000**	**1,068.9366**	**1,068.9366**	**0.2968**		**1,075.1698**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

3.7 Architectural Coating - 2017

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	69.5250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**69.8573**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	3.8200e-003	5.1700e-003	0.0540	1.3000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		10.7286	10.7286	5.6000e-004		10.7404

Total	**3.8200e-003**	**5.1700e-003**	**0.0540**	**1.3000e-004**	**0.0112**	**9.0000e-005**	**0.0113**	**2.9600e-003**	**8.0000e-005**	**3.0500e-003**		**10.7286**	**10.7286**	**5.6000e-004**		**10.7404**

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	69.5250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**69.5547**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	3.8200e-003	5.1700e-003	0.0540	1.3000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0500e-003		10.7286	10.7286	5.6000e-004		10.7404
Total	**3.8200e-003**	**5.1700e-003**	**0.0540**	**1.3000e-004**	**0.0112**	**9.0000e-005**	**0.0113**	**2.9600e-003**	**8.0000e-005**	**3.0500e-003**		**10.7286**	**10.7286**	**5.6000e-004**		**10.7404**

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	0.5445	1.8414	6.7704	0.0137	0.9812	0.0287	1.0099	0.2621	0.0263	0.2884		1,275.7688	1,275.7688	0.0586		1,276.9999
Unmitigated	0.5445	1.8414	6.7704	0.0137	0.9812	0.0287	1.0099	0.2621	0.0263	0.2884		1,275.7688	1,275.7688	0.0586		1,276.9999

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	104.55	19.80	10.20	349,676	349,676
Total	104.55	19.80	10.20	349,676	349,676

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515683	0.060583	0.179994	0.140474	0.041721	0.006653	0.015053	0.028382	0.001919	0.002521	0.004323	0.000600	0.002094

5.0 Energy Detail

4.4 Fleet Mix

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	8.3400e-003	0.0758	0.0637	4.5000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003		90.9428	90.9428	1.7400e-003	1.6700e-003	91.4963
NaturalGas Unmitigated	8.3400e-003	0.0758	0.0637	4.5000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003		90.9428	90.9428	1.7400e-003	1.6700e-003	91.4963

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	773.014	8.3400e-003	0.0758	0.0637	4.5000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003		90.9428	90.9428	1.7400e-003	1.6700e-003	91.4963
Total		**8.3400e-003**	**0.0758**	**0.0637**	**4.5000e-004**		**5.7600e-003**	**5.7600e-003**		**5.7600e-003**	**5.7600e-003**		**90.9428**	**90.9428**	**1.7400e-003**	**1.6700e-003**	**91.4963**

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	0.773014	8.3400e-003	0.0758	0.0637	4.5000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003		90.9428	90.9428	1.7400e-003	1.6700e-003	91.4963

Total		**8.3400e-003**	**0.0758**	**0.0637**	**4.5000e-004**		**5.7600e-003**	**5.7600e-003**		**5.7600e-003**	**5.7600e-003**		**90.9428**	**90.9428**	**1.7400e-003**	**1.6700e-003**	**91.4963**

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	0.3924	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.4900e-003
Unmitigated	0.3924	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.4900e-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	lb/day										lb/day					
Architectural Coating	0.0952					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2970					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.4900e-003
Total	**0.3924**	**2.0000e-005**	**1.6000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**		**3.4900e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0952					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2970					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.4900e-003
Total	**0.3924**	**2.0000e-005**	**1.6000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**		**3.4900e-003**

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 Vegetation

B2 Health Risk Assessment

Health Risk Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project

Mitigation Bank, Los Cerritos Wetlands Authority (Synergy Gas & Oil LTD)

PREPARED BY:

Soil / Water / Air Protection Enterprise
2656 29th Street, Suite 201
Santa Monica, California 90405

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

Health Risk Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project

June 30, 2017

Prepared For:

Peter D. Zak

Beach Oil Minerals

4901 Birch Street

Newport Beach, CA 92660

Prepared By:

Soil Water Air Protection Enterprise

2656 29th Street, Suite 201

Santa Monica, CA 90405

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
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Email: prosenfeld@swape.com

June 30, 2017

Peter D. Zak
Beach Oil Minerals
4901 Birch Street
Newport Beach, CA 92660

Subject: Health Risk Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project

Dear Mr. Zak,

Please find the enclosed *Health Risk Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project* ("Project") and its associated appendices.

Due to the ongoing nature of this matter, we reserve the right to modify our work and opinions and any information presented in this Health Risk Assessment and any revisions in the future as reasonably accessible information becomes available that materially-affects the findings and conclusions stated herein.

If you should have any questions regarding the above, please call me at (310) 795-2335.

Sincerely,

Paul Rosenfeld

Paul E. Rosenfeld, Ph.D.
Principal

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Appendix B AERMOD Output Files

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LIST OF ABBREVIATED TERMS

$\mu g/m^3$	Micrograms per Cubic Meter
AB	Assembly Bill
ASF	Age Sensitivity Factor
BACT	Best Available Control Technology
BOMP	Beach Oil Minerals Partners
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
City	City of Long Beach
CO	Carbon Monoxide
DEM	Digital Elevation Model
DOGGR	State of California Division of Oil, Gas, and Geothermal Resources
DPM	Diesel Particulate Matter
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
GHG	Greenhouse Gas
HAP	Hazardous Air Pollutant
HARP2	Hotspots Analysis and Reporting Program (Version 2)
HI	Hazard Index
HRA	Health Risk Assessment
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
LBPD	Long Beach Planning Department
LCWA	Los Cerritos Wetlands Authority
Lyon	Lyon Housing (Pumpkin Patch) XLV, LLC
MATES IV	Multiple Air Toxics Exposure Study IV
MEIR	Maximum Exposed Individual Receptor
MICR	Maximum Individual Cancer Risk
MND	Mitigated Negative Declaration
ND	Negative Declaration
NOA	Notice of Adoption

NOI	Notice of Intent
NOP	Notice of Preparation
NO_x	Oxides of Nitrogen
OEHHA	Office of Environmental Health Hazard Assessments
$PM_{2.5}$	Particulate Matter (< 2.5 microns in diameter)
PM_{10}	Particulate Matter (< 10 microns in diameter)
Project	Los Cerritos Wetlands Oil Consolidation and Restoration Project
RAST	Risk Assessment Standalone Tool
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
TAC	Toxic Air Contaminant
T-BACT	Best Available Control Technology for Toxics
VOC	Volatile Organic Compound

EXECUTIVE SUMMARY

The purpose of this health risk assessment is to determine whether a significant health risk impact would result from continued exposure to toxic air contaminant (TAC) emissions emitted during Project construction and operation. Toxic emissions associated with the removal of the existing facilities on the Project site and construction of new facilities would be generated by off-road diesel powered equipment and on-road heavy duty hauling trucks traveling to and from the site. The primary TAC associated with the use of diesel-powered equipment and vehicles is diesel particulate matter (DPM), a known human carcinogen. Therefore, our analysis of the Project's construction-related health risk impacts was limited to DPM, as the primary sources of toxic emissions associated with construction include the use of diesel powered engines. Toxic emissions associated with future operations of the Project, on the other hand, would vary based on the emission source. Combustion sources, such as drilling rigs, workover rigs, and turbines would generate emissions of DPM, formaldehyde, benzene, and 1,3-butadiene, which are all known TACs. Utilization of two electric-powered drill rigs and a carbon monoxide (CO) oxidation catalyst on the Project's gas turbines, however, would significantly reduce these emissions. The use of on-site equipment and mobile sources, including heavy-duty diesel trucks visiting the site, would also generate emissions of DPM. Finally, fugitive toxic emissions, including benzene, toluene, ethyl benzene, xylene, and hexane, from tanks and other operational components would also contribute to the Project's operational toxic emissions.

The ambient air concentration of TACs for Project construction and operation at the closest residential receptor in each of the six surrounding neighborhoods was calculated using AERMOD. In order to evaluate the worst-case scenario, the highest construction and highest operational ambient air concentrations were utilized in the analysis. Using the California Air Resources Board's (CARB) Hotspots Analysis and Reporting Program Version 2 (HARP2) Risk Assessment Stand Alone Tool (RAST) and guidance from the South Coast Air Quality Management District (SCAQMD) on exposure parameters, the unmitigated infant, child, adult, and lifetime cancer risk for the maximum exposed individual receptor (MEIR) was calculated to be 114.76, 14.58, 1.62, and 130.96 in one million, respectively. The lifetime cancer risk exceeds the 10 in one million significance threshold set forth by the SCAQMD, and therefore, mitigation is required.

In order to reduce the Project's TAC emissions, mitigation measures must be identified and implemented for each phase of construction as well as for Project operation. Implementation of Mitigation Measure AQ-2, which requires all off-road diesel-powered construction equipment greater than 50 horsepower to be Tier IV rated and outfitted with Best Available Control Technology (BACT), as defined by CARB, would reduce the Project's construction TAC emissions. Similarly, implementation of Mitigation Measure AQ-3, which requires all diesel-powered drilling rigs to be Tier IV rated and outfitted with BACT, would significantly reduce the Project's operational TAC emissions. While the primary purpose of these measures is to reduce the Project's construction and operational nitrous oxide (NO_X) emissions to below applicable thresholds, they will also effectively reduce emissions of DPM and other TACs that contribute to the Project's health risk impact.

Once Mitigation Measures AQ-2 and AQ-3 are implemented, the infant, child, adult, and lifetime cancer risk for the MEIR was calculated to be 3.40, 3.69, 0.41, and 7.50 in one million, respectively. With mitigation, the lifetime cancer risk is below the 10 in one million significance threshold set forth by the SCAQMD. The mitigated lifetime non-cancer chronic and acute risks are 0.009 and 0.089, respectively, which would not exceed the applicable threshold of 1. Additionally, the cancer burden was calculated to be 0.004, which is below the significance threshold of 0.5. For these reasons, the proposed Project's health risk is not anticipated to contribute to a cumulatively considerable health risk impact.

INTRODUCTION

The purpose of this health risk assessment is to determine whether a significant health risk impact would result from continued exposure to toxic emissions emitted during Project construction and operation. Toxic emissions associated with construction include DPM, which would be generated by off-road diesel powered equipment and on-road heavy duty hauling trucks traveling to and from the site. Toxic emissions associated with future operations of the Project would vary based on the emission source, and include formaldehyde, benzene, 1,3-butadiene, DPM, toluene, ethyl benzene, xylene, and hexane. The report below summarizes our findings.

Project Description

The Project proposes a comprehensive wetlands restoration project which will restore portions of a privately-owned oil production facility in the City of Long Beach through creation of a wetlands mitigation bank. The Project includes the development of specific oil production operations and facilities currently being conducted on the Synergy Site and City-owned property to two offsite properties in close proximity to the Synergy Site. The Project proponent is Beach Oil Minerals Partners ("BOMP"). The proposed Project will be undertaken on properties owned by Los Cerritos Wetlands Oil Operations, LLC, Lyon Housing XLV, LLC ("Lyon"), the Los Cerritos Wetlands Authority ("LCWA"), and the City of Long Beach ("City").

The Project proposed by BOMP will be implemented on four properties located in the City of Long Beach: the Synergy Site, the "Pumpkin Patch" Site, the Los Cerritos Wetlands Authority (LCWA) Site, and the 33-acre City Marketplace Marsh ("City Property") Site. The Synergy Site is located at 6433 East 2nd Street between Pacific Coast Highway to the west, the Los Cerritos Channel to the north, Studebaker Road to the east, and 2nd Street to the south. The "Pumpkin Patch" Site is located at 6701 East Pacific Coast Highway at the northeast corner of the intersection with the San Gabriel Channel. The LCWA Site is located at the northeast corner of the intersection of Studebaker Road and Westminster Boulevard. The City Property Site is located between 2nd Street to the north, the San Gabriel River to the south, and Shopkeeper Road to the west.

<u>Synergy Site</u>

On the Synergy Site, the Project proposes to establish a wetlands mitigation bank and public access trail on the northerly approximately 78 acres of the 154-acre Synergy Site (formerly known as the Bixby Oil

Field), And to construct public access improvements, including a parking lot on existing disturbed areas and relocating an existing building for use as a visitors' center on the remaining approximately 4 acres of the Synergy Site. The Synergy Site currently has 39 oil wells operating on the site. Upon project approval, a majority of the unused pipelines and tanks will be removed from the Synergy Site with those areas proposing to be revegetated. The 39 wells will continue to operate with planned phase out of these wells to occur over the next 40 years. The Synergy Site is owned and operated by Los Cerritos Wetlands, LLC.

"Pumpkin Patch" Site

In order to facilitate the future restoration of the approximately southerly 72 acres on the Synergy Site and construction of the public access improvements, the office and warehouse structures currently on the Synergy Site will be removed and will be relocated to the approximately 7-acre property located at 6701 East Pacific Coast Highway (commonly known as the "Pumpkin Patch"). The office uses currently occupying the Bixby building on the Synergy Site would be relocated to a new approximately 5,200-square-foot, two-story office building constructed on the Pumpkin Patch site. Other proposed site development on the Pumpkin Patch Site includes an approximately 9,750 square feet of storage/warehouse, parking for 47 cars, drilling of up to fifty (50) new wells (both oil production and water injection wells) and associated production facilities. The height of the office building is 35 feet and the storage/warehouse is 22 feet.

In addition to the 50 wells, two tanks will be constructed on the site: a 3,000-barrel tank for storing "wet oil" that is 30 feet in diameter and 24 feet high; and a 2,000-barrel "skim oil" tank that is 24 feet in diameter and 24 feet high. There is an existing oil well on the Pumpkin Patch site which will be used on a temporary basis as a test well to confirm the feasibility of oil production operations at Pumpkin Patch.

A 22-foot high screen wall will be built on the perimeter of the Pumpkin Patch site. Vehicular access to the site will be from Studebaker Road. The structures will be set back 30 feet from Pacific Coast Highway and perimeter landscaping will be provided along Studebaker, Pacific Coast Highway, and the San Gabriel River Channel.

The Pumpkin Patch Site is owned by Lyon Housing XLV, LLC. The Pumpkin Patch site is currently vacant, except for one operating oil well. It is currently used for seasonal sales of pumpkins and Christmas trees. Although the Pumpkin Patch site is approximately 7 acres in size, the oil production operations will be located on 5 acres of the site closest to Pacific Coast Highway. The northeasterly 2-acre portion of the site will be retained as open space and used to provide a 100-foot buffer from the coastal wetland habitat area at the eastern edge of the site.

LCWA Site (Studebaker and Westminster)

The Project proposes the drilling and operation of up to seventy (70) wells on a 5-acre parcel owned by LCWA located at Studebaker Road and Westminster Avenue ("LCWA Site") to replace the oil production facilities currently on the Synergy Site and the City Property Site. The LCWA Site is currently undeveloped

and is used on a temporary lease basis for equipment storage and staging. Due to the geologic conditions at the Synergy Site (i.e., the Newport-Inglewood Fault traverses the site), the oil field is divided between two operating areas; one on each side of the fault. The oil field operations north of the fault extract oil from a subterranean oil horizon that cannot be accessed from Pumpkin Patch, but can be accessed from the LCWA Site.

The wells will be a combination of oil production well and water injection wells. In addition to the oil production area, the project proposes to construct an elevated piperack, a 28,000-barrel sales oil tank (48 feet in height and 75 feet in diameter), tanks, and a 5,000-barrel injection water tank (35 feet in height and 32 feet in diameter). The site will also include a 15 to 20-foot high ground flare to be used for emergencies only. The site will use a hybrid power-generating system comprised of a combination of electrical lines extending from an existing Southern California Edison (SCE) facility to a new SCE substation, four gas-powered turbines to generate electricity to be used onsite, solar panels, and heat recovery systems. The turbines currently being proposed for use are the Mercury 50s by Solar Turbines, or a similar product type. A 22-foot high screen wall will be built on the perimeter of the LCWA site.

The project proposes to improve the existing driveway off Studebaker Road to a 30-foot entrance/exit, and to construct a secondary 30-foot access road from Westminster Avenue. Perimeter landscaping will be provided along the Studebaker Road and Westminster Avenue frontage.

City Property Site (Westminster and Shopkeeper)

The Project proposes the removal of approximately twelve (12) oil wells that are currently being operated on the 33-acre City Property Site located at Westminster Avenue and Shopkeeper Road. The wells are being operated pursuant to a Surface Use Release Agreement and Grant of Easements ("Surface Use Agreement") between the City and Los Cerritos Wetlands Oil Operations, LLC. The wells (including one located immediately west but off-site of the City Property) would be removed and abandoned in accordance with the terms of the Surface Use Agreement which requires abandonment to a standard acceptable to the State of California Division of Oil, Gas, and Geothermal Resources (DOGGR) at the time of abandonment and suitable for the City's intended use for public open space. The Project proposes to construct a pipeline across the City Property Site to transport the produced oil form the Pumpkin Patch Site to the LCWA Site. The pipeline corridor will be above-ground, with an underground utility line corridor also proposed to link the two sites.

Regulatory Context

The Project is under the jurisdiction of the SCAQMD. The SCAQMD has recently updated their *Risk Assessment Procedures for Rules 1401, 1401.1, and 212* ("SCAQMD Risk Assessment Guidelines") to provide guidance on preparing health risk assessments.[1] This guidance is based on and consistent with the Office of Environmental Health Hazard Assessment's (OEHHA) updated *2015 Air Toxics Hot Spot*

[1] "Risk Assessment Procedures For Rules 1401, 1401.1 & 212." SCAQMD. June 2015. Available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/riskassprocjune15.pdf?sfvrsn=2

Program Guidance Manual for Preparation of Health Risk Assessments.[2] The major revisions include calculation of risk in individual age bins rather than a single lifetime calculation, higher breathing rates for children, increased risk to children from cancer causing substances, etc.[3] SWAPE utilizes and relies upon the SCAQMD's Risk Assessment Guidelines for preparation of this health risk assessment, which includes the use of adjusted age sensitivity factors and elevated breathing rates for children and infants.

This health risk assessment was prepared in accordance with SCAQMD recommendations and compares the health risk impact against the SCAQMD's Air Quality Significance Thresholds for TACs in an effort to determine Project significance.[4] Under Rule 1401, the maximum incremental cancer risk (MICR) resulting from toxic air contaminants shall not exceed ten in one million (10×10^6) if Best Available Control Technologies for Toxics (T-BACT) are used, or one in one million (1×10^6) if T-BACT is not used.[5] According to the Air Quality Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project ("AQ Assessment"), oil-containing tanks, diesel drilling rigs, turbines, and all construction equipment will be equipped with BACT.[6] Therefore this health risk assessment uses the cancer risk threshold of ten in one million.

Additionally, SCAQMD guidance states that cancer burden – defined as "the estimated increase in the occurrence of cancer cases in a population as a result of exposures to TAC emissions" – need only be calculated if the MICR is greater than one in one million.[7] Cancer burden is calculated as the product of the number of people in the population (zone of impact multiplied by the population density) and the estimated MICR from TACs. Calculations involve using dispersion factors to estimate the distance at which the MICR falls below one in one million. For the purposes of this assessment, we used the Long Beach location, a MEIR distance of 100 meters, and a local population density of approximately 2,430 people per square kilometer. The cumulative cancer burden shall not exceed 0.5 and neither the chronic hazard index (HIC) nor the total acute hazard index (HIA) shall exceed 1.0 for the maximally exposed individual.[8]

These values serve as thresholds to determine whether a project will result in a significant health risk impact to sensitive receptors. An exceedance of any of the threshold values described above would thereby result in a significant impact.

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[2] "Air Toxics Hot Spot Program Guidance Manual for Preparation of Health Risk Assessments." OEHHA. March 2015. Available at: http://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0

[3] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act." SCAQMD. June 2015. Available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588_guidelines.pdf

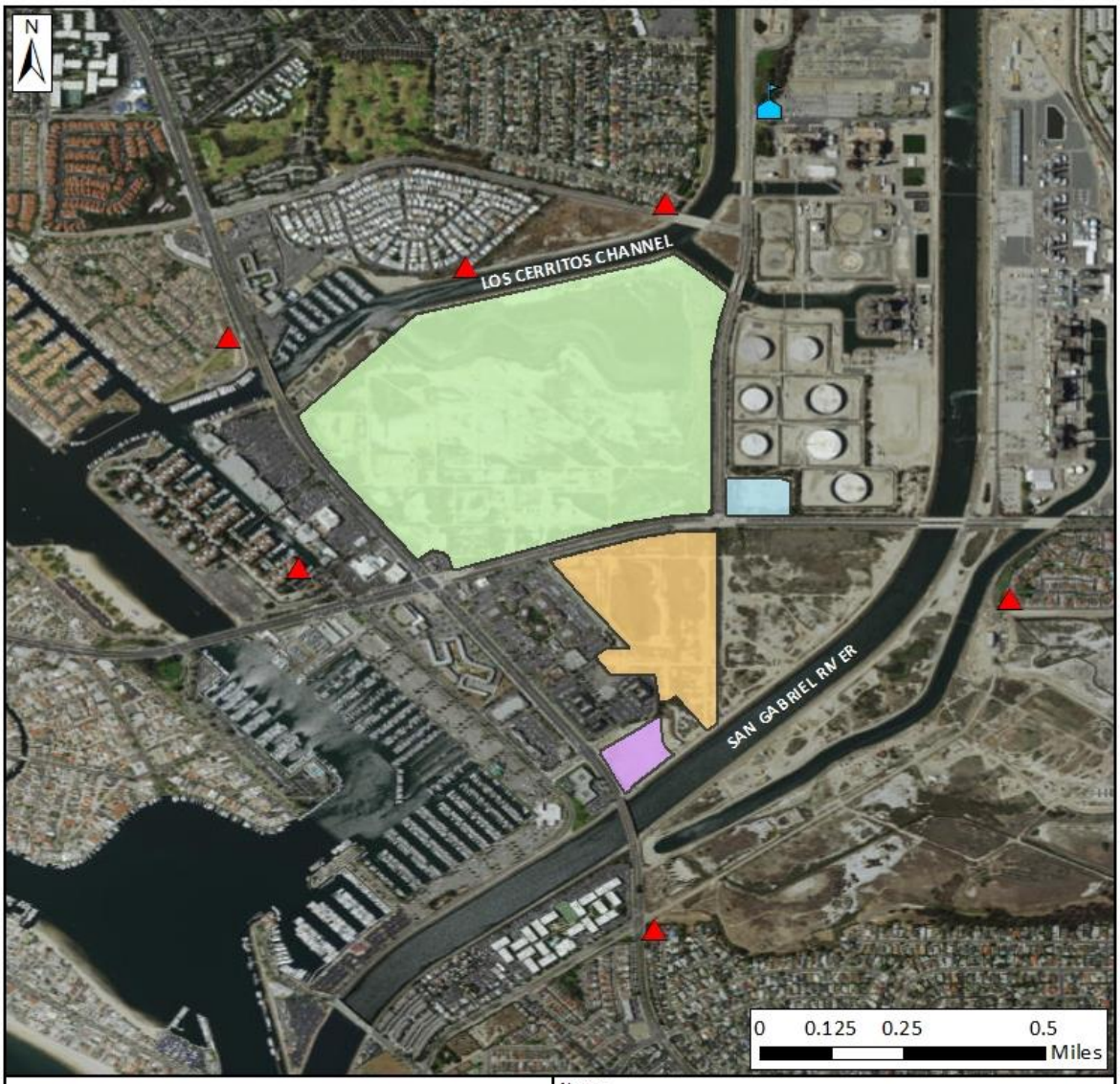
[4] "SCAQMD Air Quality Significance Thresholds." SCAQMD. March 2015. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf

[5] "Risk Assessment Procedures For Rules 1401, 1401.1 & 212." SCAQMD. June 2015. Available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/riskassprocjune15.pdf?sfvrsn=2

[6] "Air Quality Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project." Greve & Associates, LLC. June 2017.

[7] *Ibid*.

[8] "Risk Assessment Procedures For Rules 1401, 1401.1 & 212." SCAQMD. June 2015. Available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/riskassprocjune15.pdf?sfvrsn=2



Rosie the Riveter Charter School

Sensitive Receptors

Project Sites

Synergy Site

City Property Site

LCWA Site

Pumpkin Patch Site

Notes:
1. All locations are approximate.
2. Parcel boundaries obtained from Los Angeles County Property Assessment Information System and georeferenced with Project site boundaries found in Exhibit 1 of the Air Quality Assessment.

Title:
Project Site Reference Map

SWAPE	Project Number: 1042	Drawn By: AMW	Figure: 1
	Approved By: PER	Date: 5/10/2017	

RISK CHARACTERIZATION

The purpose of this health risk assessment is to determine whether a significant health risk impact would result from continued exposure to TAC emissions emitted during Project construction and operation. According to CARB, Assembly Bill (AB) 1807 defines TACs as "air pollutant[s] which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health."[9] TACs are usually found in very small amounts in ambient air, most often in urban environments. TAC emissions will be emitted from various sources throughout construction and operation of the Project, as described in further detail below.

Construction

Removal of the existing facilities and construction of the new facilities would expose members of the public to diesel exhaust, which contains a variety of gaseous and solid particulate chemical compounds, many of which have been identified by CARB as TACs. During construction, diesel exhaust will be generated by off-road diesel powered equipment, such as loaders, drill rigs, dozers, rollers, backhoes, forklifts, etc., and by on-road heavy duty hauling trucks traveling to and from the site. Of the TACs found in diesel exhaust, the primary TAC of concern is DPM, which is generated from the combustion of diesel fuel. According to CARB, DPM is estimated to contribute to 70 percent of total known cancer risk related to air toxics in California.[10] Similarly, according to supporting CARB studies, DPM represents 50 to 90 percent of the risk of mutations that lead to cancer from exposure to diesel exhaust.[11] Due to these reasons, DPM is generally used as a surrogate to identify the potential risks from diesel emissions.[12] Consistent with CARB and other health risk assessments conducted within the Los Angeles Air Basin, our analysis evaluates the health risk impacts from exposure to diesel exhaust by using DPM as a surrogate, as the main sources of toxic emissions associated with construction include the use of diesel powered engines.

According to CARB, "More than 90% of DPM is less than 1 µm in diameter… and thus is a subset of particulate matter less than 2.5 microns in diameter ($PM_{2.5}$). Most $PM_{2.5}$ derives from combustion, such as use of gasoline and diesel fuels by motor vehicles."[13] For this reason, DPM emissions from Project construction were estimated using the values of exhaust $PM_{2.5}$ found in the CalEEMod output files provided in the AQ Assessment.

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[9] "Toxic Air Contaminant Identification Reports." CARB. March 2010. Available at: https://www.arb.ca.gov/toxics/id/summary/summary.htm

[10] "Overview: Diesel Exhaust and Health." CARB. April 2016. Available at: https://www.arb.ca.gov/research/diesel/diesel-health.htm

[11] *Ibid*.

[12] "Health Assessment Document for Diesel Engine Exhaust." United States Environmental Protection Agency. Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi/300055PV.PDF?Dockey=300055PV.PDF

[13] "Overview: Diesel Exhaust and Health." CARB. April 2016. Available at: https://www.arb.ca.gov/research/diesel/diesel-health.htm

Operations

Project operations will also produce harmful emissions of TACs, which may adversely impact the health of the surrounding communities. Unlike Project construction, toxic emissions associated with future operations of the Project are not exclusively limited to diesel exhaust emissions. Rather, toxic emissions associated with future operations would vary based on the emission source, details of which are described in further detail below.

Turbines

The Project proposes to install four natural gas-powered turbines to generate electricity on-site, which can result in hazardous air pollutant (HAP) emissions such as formaldehyde, acetaldehyde, and benzene that can contribute to increased cancer and non-cancer risks. However, the Project applicant proposes, as part of the project design, to install a CO oxidation catalyst on the turbines to reduce these harmful pollutant emissions. According to a memorandum by the U.S. Environmental Protection Agency (EPA), the CO catalyst will not only reduce CO emissions emitted by these gas turbines, but it will also reduce HAP emissions such as formaldehyde, acetaldehyde, and benzene by 85-90 percent.[14] Since the emissions from operation of the proposed gas turbines are approximately 85-90 percent less than potential turbine emissions without a CO oxidation catalyst, the carcinogenic and non-carcinogenic health risk impact from these turbines would be significantly reduced. However, in an effort to provide the most conservative analysis possible, we evaluated the health risk impact of operating the gas-powered turbines equipped with the CO catalyst. Formaldehyde is the most significant HAP emitted from combustion turbines and accounts for about two-thirds of the HAP emissions.[15] Therefore, an evaluation of the Project's formaldehyde emissions is sufficient for determining the health risk impact from these turbines.

Drilling and Workover Rigs

Well drilling and maintenance activities, including the use of drill rigs and workover rigs, also produce TAC emissions. Specifically, the use of drilling and workover rigs would generate emissions of DPM, formaldehyde, benzene, and 1,3-butadiene, which are all known TACs. As part of the proposed Project, one drilling rig will be in operation on a regular basis at each the LCWA and Pumpkin Patch sites for a total of two drilling rigs. These two drilling rigs will be electric rather than diesel powered, and therefore, emissions of TACs from these rigs will be negligible. However, at both the LCWA and Pumpkin Patch sites, diesel powered workover drilling rigs will be in operation, and would contribute to the Project's health risk impact. Therefore, an evaluation of the Project's DPM, formaldehyde, benzene, and 1,3-butadiene emissions is sufficient for determining the health risk impact from these workover rigs.

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[14] "Hazardous Air Pollutant (HAP) Emissions Control Technology for New Stationary Combustion Engines." EPA. August 2001. Available at: http://www.deq.state.ms.us/mdeq.nsf/pdf/epd_CT_HAP_TECHNICAL_GUIDANCE/$File/CT_HAP.pdf?OpenElement

[15] *Ibid*.

Fugitive Emission Sources

Fugitive emissions from pipes, storage tanks, and process losses would also contribute to the Project's TAC emissions. The TACs of concern from fugitive emission sources include benzene, toluene, ethyl benzene, xylene, and hexane.[16] However, tanks at both Pumpkin Patch and LCWA sites will be fixed-roof gas blanket design, and are designed to be both liquid- and vapor-tight, thus reducing the fugitive TAC emissions emitted by these tanks.[17] A breather valve (pressure-vacuum valve), which is commonly installed on many fixed-roof tanks, allows the tank to operate at a slight internal pressure or vacuum. Because this valve prevents the release of vapors during only very small changes in temperature, barometric pressure, or liquid level, the emissions from a fixed-roof tank can be appreciable.[18] These oil-containing tanks will be permitted through SCAQMD and equipped with BACT.

Off-Road Equipment and On-Road Mobile Sources

Finally, the use of on-site equipment and mobile sources, including heavy-duty diesel trucks visiting the site, would also generate emissions of DPM, which is the primary TAC found in diesel exhaust. During operation, diesel exhaust will be generated by off-road diesel powered equipment and by on-road heavy duty hauling trucks traveling to and from the site. As previously stated, DPM represents 50 to 90 percent of the risk of mutations that lead to cancer from exposure to diesel exhaust, and $PM_{2.5}$ accounts for more than 90% of DPM.[19] Therefore, DPM emissions from Project operations were estimated using the values of exhaust $PM_{2.5}$ found in the CalEEMod output files provided in the AQ Assessment.

Air Dispersion Modeling

Air dispersion modeling was conducted using AERMOD, the EPA's preferred air dispersion modeling system to model ambient air concentrations during Project construction and operation. AERMOD is a steady-state Gaussian plume model that requires project-specific input parameters including meteorological and topographic data, as well as emission data for all pollution sources.

For this health risk assessment, the model used the EPA executable's standard regulatory options for modeling $PM_{2.5}$ and VOC concentrations. Surface and upper-air meteorological data was obtained from BREEZE Trinity Consultants, which specialize in processing AERMOD-ready data, for the year November 1, 2015 through October 31, 2016. The surface-air data came from the Los Alamitos Army Airfield (KSLI), which is approximately 6.2 kilometers from the Project site. The upper-air data came from the Miramar Marine Corps Air Station (KNKX), which is approximately 152 kilometers from the Project site. There are only approximately 100 upper air stations in North America, so this distance is typical.

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[16] "Air Quality Impacts from Well Stimulation." Available at: https://ccst.us/publications/2015/vol-II-chapter-3.pdf
[17] "Emission Factor Documentation for AP-42 Section 7.1: Organic Liquid Storage Tanks." EPA. September 2006. Available at: https://www3.epa.gov/ttnchie1/ap42/ch07/bgdocs/b07s01.pdf
[18] *Ibid*.
[19] "Overview: Diesel Exhaust and Health." CARB. April 2016. Available at: https://www.arb.ca.gov/research/diesel/diesel-health.htm

Terrain data was downloaded in the form of digital elevation model (DEM) files. Two 7.5-minute tiles with 30-meter resolution were imported into AERMOD's AERMAP feature, which enables the model to estimate exact elevations for all sources and receptors. A uniform Cartesian receptor grid with 200-meter spacing was used to evaluate ambient air for Project construction and operations. The grid spanned approximately six square-kilometers, centered over the Project site and including potential sensitive receptors surrounding the Project site.

In addition to the receptor grid, seven discrete receptors were placed at the locations of the potential sensitive receptors. These locations include six residential receptors in neighborhoods surrounding the Project, as well as Rosie the Riveter Charter High School. According to the SCAQMD's Risk Assessment Guidelines:

> "For new facilities, the rule requires the facility-wide cancer risk to be less than one in one million at any school or school under construction within 500 feet of the facility. If there are no schools within 500 feet, the same risk levels must be met at any school or school under construction within 500 to 1,000 feet unless there is a residential or sensitive receptor within 150 feet of the facility."[20]

Rosie the Riveter Charter High School is located approximately 1,470 feet north of the Project site and is therefore exempt from the aforementioned SCAQMD rule.

AERMOD polygon area sources require input parameters including elevation (feet), release height (feet), initial vertical dimension (feet), and emission rate (pounds per hour per square foot). Area source elevations were determined using DEMs and the AERMAP feature. A release height of 15 feet was used, which is the approximate average height of truck and construction equipment exhaust pipes as defined by the Port of Los Angeles.[21] The initial vertical dimension parameter is optional and was set to zero for all AERMOD models.

AERMOD point sources require input parameters including elevation (feet), stack height (feet), exhaust temperature (degrees Fahrenheit), exhaust velocity (feet per second), stack diameter (feet), and emission rate (tons per year). Point source elevations were determined using DEMs and the AERMAP feature. All other point source input parameters were obtained from SPEC Services, Inc.

For this assessment, AERMOD was used to determine ambient air concentrations of TACs for both existing emissions and future emissions. See **Figure 2** below for locations of area and point sources used in AERMOD models.

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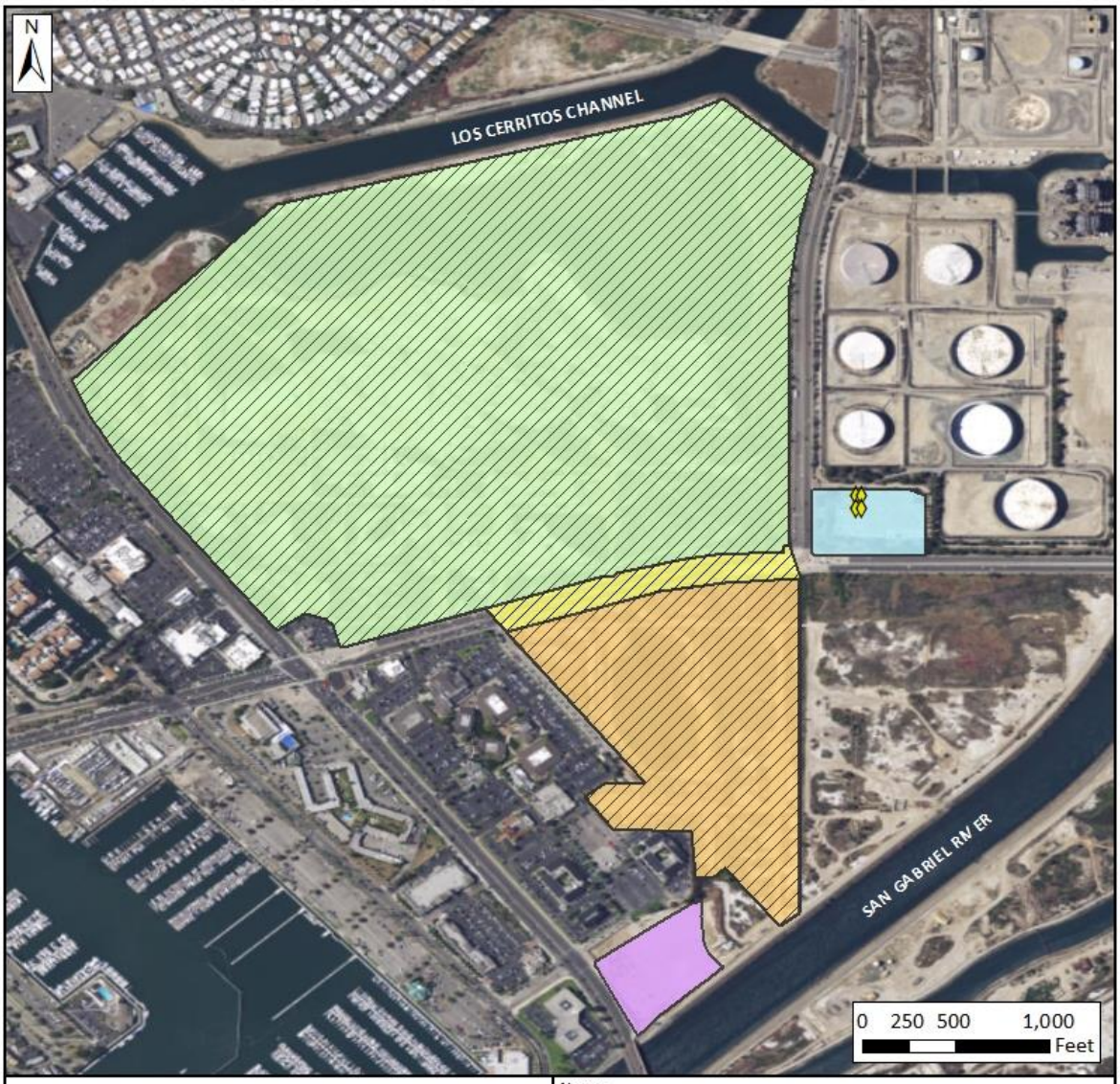
[20] "Risk Assessment Procedures for Rules 1401, 1401.1 and 212." SCAQMD. June 2015. Available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/riskassprocjune15.pdf?sfvrsn=2

[21] "Appendix C2 Dispersion Modeling of Criteria Pollutants for the Southern California International Gateway Project." Los Angeles Harbor Department. September 2011. Available at: https://www.portoflosangeles.org/EIR/SCIG/DEIR/APPENDIX_C2.pdf



Point Sources:

- Natural Gas Turbines (4)

Area Sources:

- Synergy Site (Phases 1 & 7)
- City Property Site (Phases 1 & 5)
- LCWA Site (Phases 1 - 7)
- Pumpkin Patch Site (Phases 1 - 6, 8)
- Synergy + City Sites (Phase 9)

Notes:
1. All locations are approximate.
2. Parcel boundaries obtained from Los Angeles County Property Assessment Information System and georeferenced with Project site boundaries found in Exhibit 1 of the Air Quality Assessment.

Title:
AERMOD Sources Reference Map

SWAPE	Project Number: 1042	Drawn By: AMW	Figure: 2
	Approved By: PER	Date: 6/28/2017	

Existing Emissions

There are approximately 39 oil wells on the Synergy Site, approximately 12 oil wells on the City Property Site, and two wells on the Pumpkin Patch Site that will be removed as a part of the proposed Project. Of these wells, 33 are currently in production.[22] Existing emissions from diesel workover rigs, oil truck trips, and employee travel were modeled to determine the current health risk at the Project site. Existing emissions were modeled as a polygon area source encompassing both the Synergy Site and City Property Site. Emission rates for exhaust $PM_{2.5}$ and ROG (surrogates for DPM and VOCs, respectively) were taken from the CalEEMod output files found in the appendix of the Greenhouse Gas Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project ("GHG Assessment").[23]

Once modeled, the highest concentrations of DPM and VOCs at the seven discrete receptors were evaluated in order to conduct the most conservative analysis. The value of VOCs was speciated according to the SCAQMD's Annual Emissions Reporting Program Supplemental Instructions.[24] Specifically, the Stationary and Portable Internal Combustion Engine (ICE) emission factors were used to speciate the total VOC value into various TACs for evaluation with HARP2.

The maximum concentrations of relevant TACs from existing emissions are presented in **Table 1** below.

Table 1: AERMOD Results for Existing Emissions

Toxic Air Contaminant	Maximum Concentration ($\mu g/m^3$)
1,3-Butadiene	4.890E-04
Benzene	2.628E-03
Diesel Particulate Matter	3.963E-02
Formaldehyde	7.413E-03

Future Emissions

Future Project emissions include both construction and operational emissions. Project construction involved modeling nine different scenarios, one for each construction phase as defined in the AQ Assessment:[25]

[22] "Air Quality Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project." Greve & Associates, LLC. June 2017.
[23] Greenhouse Gas Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project." Greve & Associates, LLC. June 2017.
[24] "Supplemental Instructions Reporting Procedures for AB2588 Facilities for Reporting their Quadrennial Air Toxics Emissions Inventory." SCAQMD. December 2016. Available at: http://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/supplemental-instructions-for-ab2588-facilities.pdf
[25] "Air Quality Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project." Greve & Associates, LLC. June 2017.

1. Demolition/Site Preparation
2. Well Cellars Only
3. Process Equipment Only
4. Tank Construction Only
5. Off-Site Construction Only
6. Office/Warehouse/Parking Lot Only
7. Restoration Only
8. Landfill Excavation
9. Remediation Truck Haul Trips
10. Turbine Commissioning

The last phase of construction, Turbine Commissioning, involves starting and stopping one turbine per day, for a total of four days, for up to 10 times during the day and for up to 20 hours total. According to the AQ Assessment, turbine commissioning would occur after most, if not all, of the other construction phases are completed.[26] Because turbine emissions would occur for a maximum of 20 hours per day for four total days, their emissions are considered insignificant when evaluating lifetime risk (approximately 0.004% of total duration) which is calculated over a 30-year period. For this reason, we did not model the turbine commissioning phase of construction.

Project operations involved modeling four different scenarios, one for each operational phase as defined in the AQ Assessment:[27]

1. Overall Operations
2. Drilling Operations
3. Fugitive Operations
4. Turbine Operations

All emissions, except for Turbine Operations, were modeled as area polygon sources according to the Project site areas at which each construction or operation phase was to take place. See **Table 2** below for a detailed breakdown of construction and operational source types and locations.

[26] "Air Quality Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project." Greve & Associates, LLC. June 2017.
[27] *Ibid*.

Table 2: Sources of Future Project Emissions		
Project Phase	**Source Type**	**Location(s)**
Construction		
1. Demolition/Site Preparation	Area	Synergy Site, City Property Site, LCWA Site, Pumpkin Patch Site
2. Well Cellars	Area	Pumpkin Patch Site & LCWA Site
3. Process Equipment	Area	Pumpkin Patch Site & LCWA Site
4. Tank Construction	Area	Pumpkin Patch Site & LCWA Site
5. Off-Site Construction	Area	LCWA Site, Pumpkin Patch Site, City Property Site
6. Office/Warehouse/Parking Lot	Area	Pumpkin Patch Site & LCWA Site
7. Wetlands Restoration	Area	Synergy Site
8. Landfill Excavation	Area	Pumpkin Patch Site
9. Remediation Truck Haul Trips	Area	Synergy Site & City Property Site
Operational		
1. Overall Operations	Area	Synergy Site, Pumpkin Patch Site, LCWA Site
2. Drilling Operations	Area	Pumpkin Patch Site & LCWA Site
3. Fugitive Operations	Area	Pumpkin Patch Site & LCWA Site
4. Turbine Operations	Point	Stacks at LCWA Site

Project construction involved modeling unmitigated and mitigated emissions of DPM. Unmitigated emission rates were estimated based on the values of annual exhaust $PM_{2.5}$ found in the Project's GHG Assessment CalEEMod output files.[28] Mitigated emission rates for each phase of construction were provided separately by Greve & Associates and are located in **Appendix A** of this report. Each of the nine construction phases were run as a separate AERMOD model, and because the same receptor locations were used for each of the air models, it was possible to manually add the concentrations from each construction phase at each receptor point to find the cumulative ambient air concentration.

Project operations involved modeling unmitigated and mitigated emissions of DPM and VOCs. DPM was modeled for Overall Operations (Synergy Site, Pumpkin Patch Site, and LCWA Site) and Drilling Operations. Unmitigated DPM emission rates were taken from the CalEEMod outputs files provided in the GHG Assessment,[29] and mitigated emission rates were taken from CalEEMod output files provided separately by Greve & Associates and are located in **Appendix A**. VOCs were modeled for Drilling Operations, Fugitive Operations, and Turbine Operations. Unmitigated VOC emission rates for the Drilling Emissions were found in the GHG Assessment,[30] and mitigated emission rates were provided separately by Greve & Associates and are located in **Appendix A**. VOC emission rates for Fugitive Operations and Turbine Operations were provided by SPEC Services and ALTA Environmental.

[28] "Greenhouse Gas Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project." Greve & Associates, LLC. June 2017.
[29] *Ibid*.
[30] *Ibid*.

The discrete receptors provide the exact ambient air concentration of TACs at each of the seven sensitive receptor locations (see **Figure 3**, **Figure 4**, and **Figure 5**). In order to evaluate the worst-case scenario, the highest construction and highest operational ambient air concentrations were utilized in the health risk. This modeling approach is likely to overestimate the Project's health risk, as the receptor exposed to the highest construction risk is not necessarily exposed to the highest operational risk, and vice versa.

In order to determine the health risk associated with specific TACs, the maximum VOC value for each operational component was speciated into various TACs by ALTA Environmental. Drilling emissions were speciated according to the Stationary and Portable Internal Combustion Engine emission factors found in Table B-2 of the SCAQMD's Annual Emissions Reporting Program Supplemental Instructions.[31] Fugitive emissions were speciated according to EPA TANKS, 4.09d, Crude Oil. Turbine emissions were speciated according to data provided by Solar Turbines (manufacturer of the Mercury 50 turbines).

The maximum concentrations of relevant TACs for unmitigated and mitigated future emissions are presented in **Table 3** and **Table 4** below, respectively. These are the values used in HARP2 to assess the health risk impact from construction and future operations.

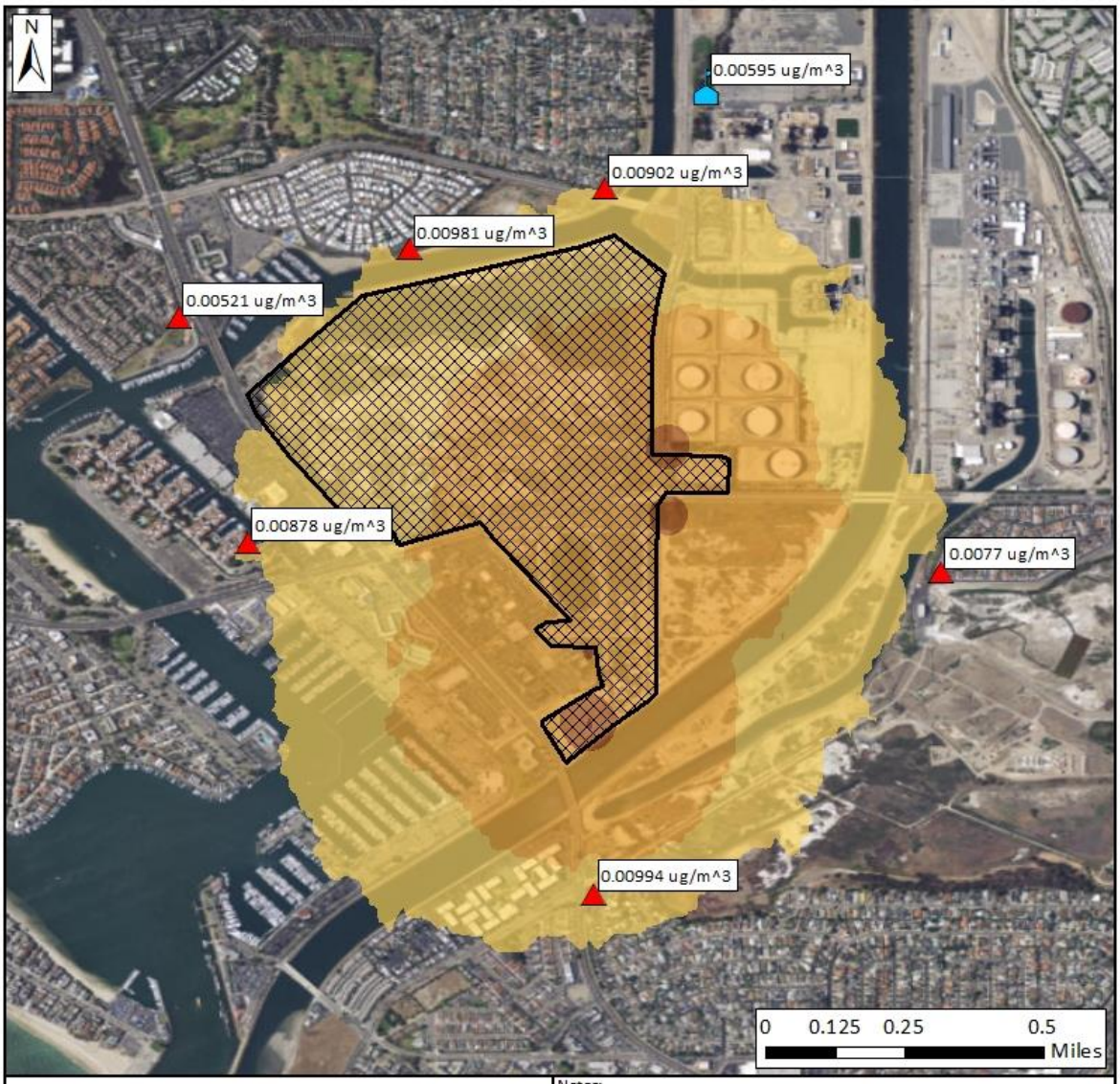
Table 3: AERMOD Results for Unmitigated Future Emissions

Toxic Air Contaminant	Maximum Concentration ($\mu g/m^3$)
Project Construction	
Diesel particulate matter	3.355E-01
Project Operations	
1,3-Butadiene	4.890E-04
Benzene	2.628E-03
Diesel Particulate Matter	3.963E-02
Ethyl benzene	1.473E-03
Formaldehyde	7.413E-03
Hexane	1.473E-03
Toluene	3.682E-03
Xylene	5.155E-03

[31] "Supplemental Instructions Reporting Procedures for AB2588 Facilities for Reporting their Quadrennial Air Toxics Emissions Inventory." SCAQMD. December 2016. Available at: http://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/supplemental-instructions-for-ab2588-facilities.pdf

Table 4: AERMOD Results for Mitigated Future Emissions	
Toxic Air Contaminant	**Maximum Concentration ($\mu g/m^3$)**
Project Construction	
Diesel particulate matter	9.940E-03
Project Operations	
1,3-Butadiene	1.770E-04
Benzene	2.360E-03
Diesel Particulate Matter	9.770E-03
Ethyl benzene	1.473E-03
Formaldehyde	4.932E-03
Hexane	1.473E-03
Toluene	3.682E-03
Xylene	5.155E-03

The following figures – **Figure 3**, **Figure 4**, and **Figure 5** – depict the ambient air concentration results of AERMOD for mitigated construction DPM, mitigated operational DPM, and mitigated operational VOC emissions, respectively. The AERMOD output files can be found in **Appendix B**.



Rosie the Riveter Charter School

Sensitive Receptors

Project Site

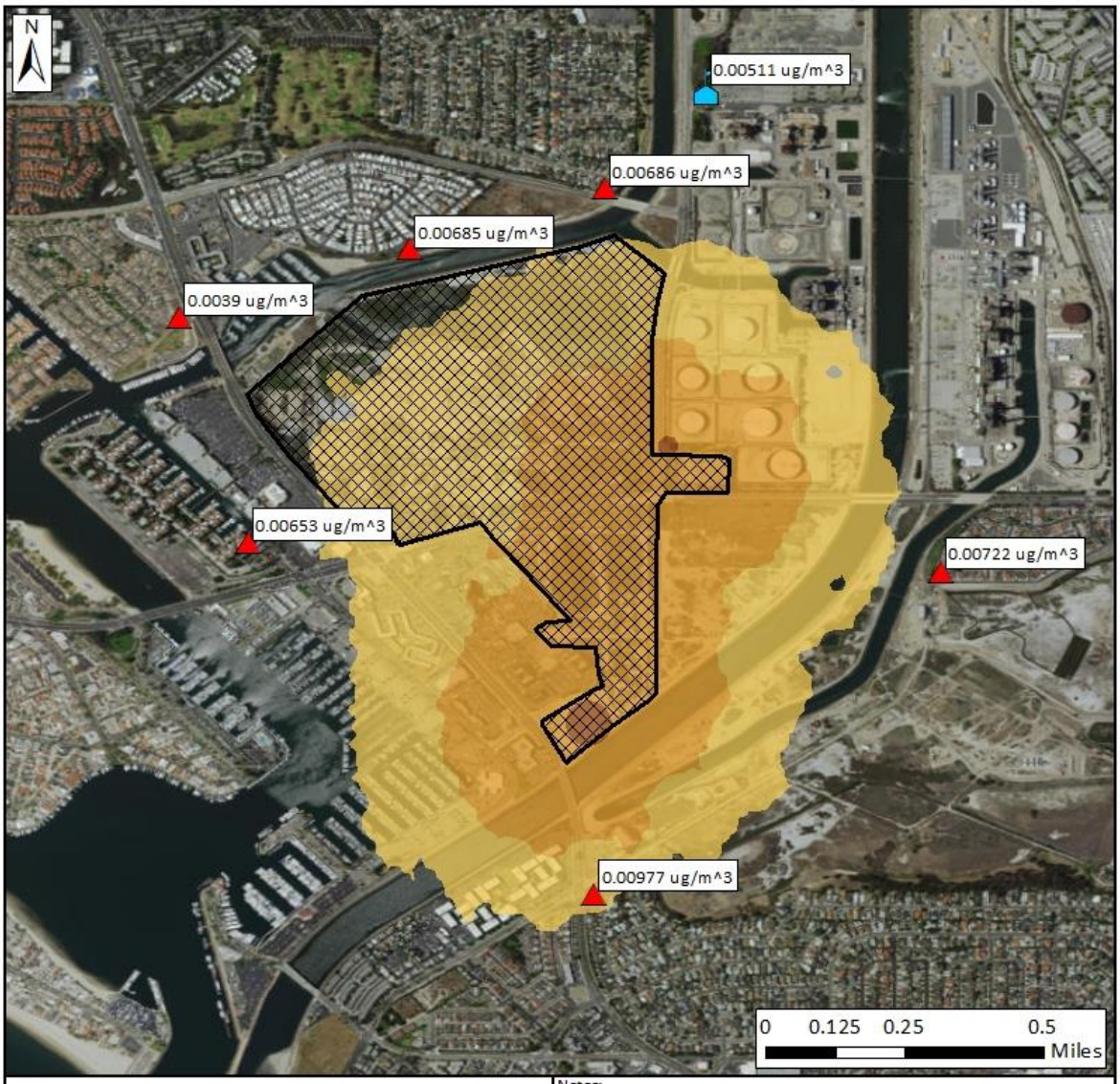
Diesel Particulate Matter (DPM) [ug/m^3]

- Less than 0.01
- 0.011 - 0.02
- 0.021 - 0.05
- 0.051 - 0.10
- 0.101 - 0.25

Notes:
1. All locations are approximate.
2. Project boundaries obtained from Los Angeles County Property Assessment Information System.
3. Meteorological data obtained from BREEZE Trinity Consultants, at the Los Alamitos Army Airfield for November 1st, 2015 through October 31st, 2016.
4. Input parameters provided by Greve & Associates.

Title:
Annual Ambient Air Concentrations of Diesel Particulate Matter (DPM) for Mitigated Project Construction

SWAPE	Project Number: 1042	Drawn By: AMW	Figure: 3
	Approved By: PER	Date: 6/30/2017	



Rosie the Riveter Charter School

Sensitive Receptors

Project Site

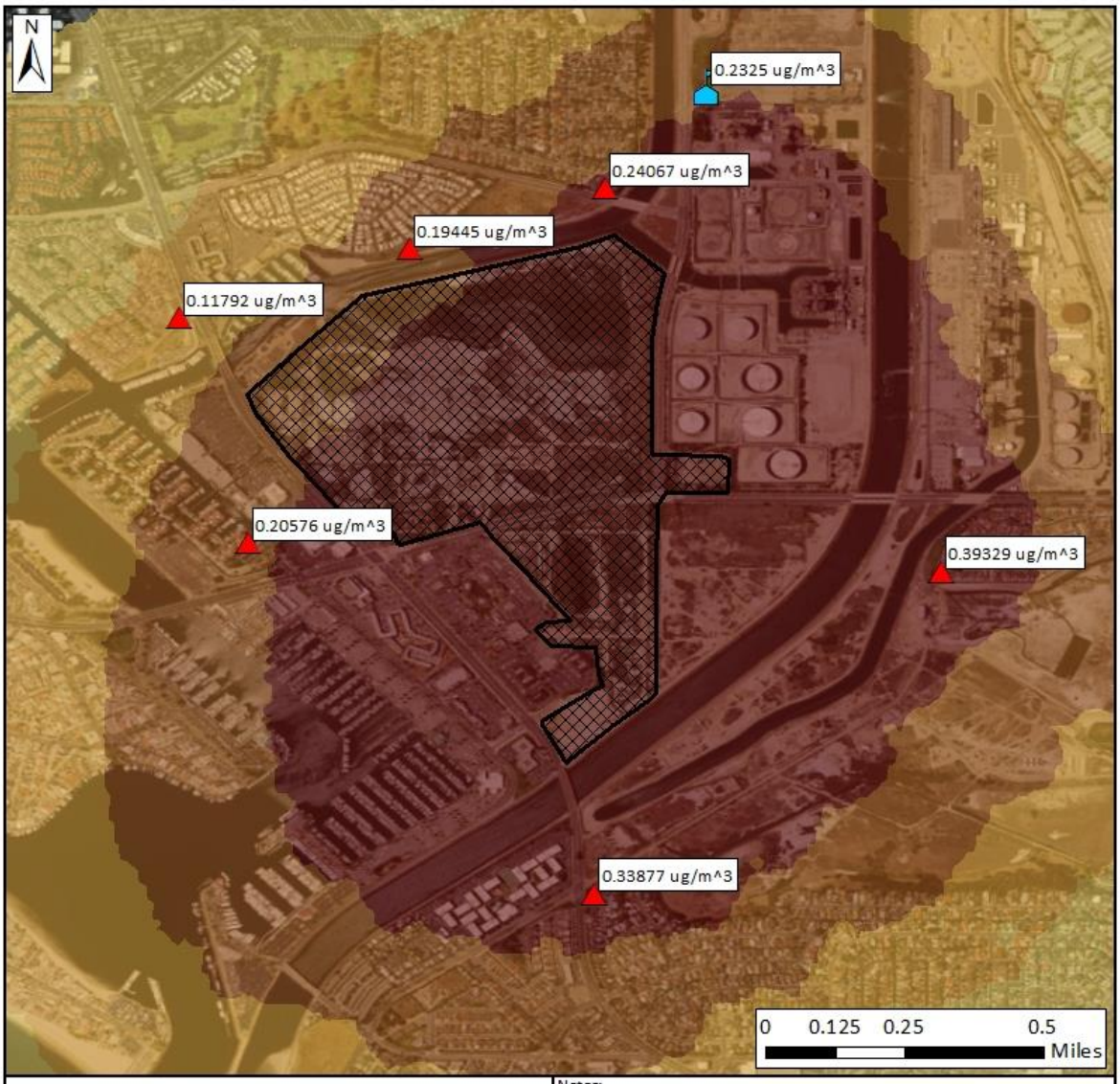
Diesel Particulate Matter (DPM) [ug/m^3]

- Less than 0.01
- 0.011 - 0.02
- 0.021 - 0.05
- 0.051 - 0.10
- 0.101 - 0.25

Notes:
1. All locations are approximate.
2. Project boundaries obtained from Los Angeles County Property Assessment Information System.
3. Meteorological data obtained from BREEZE Trinity Consultants, at the Los Alamitos Army Airfield for November 1st, 2015 through October 31st, 2016.
4. Input parameters provided by Greve & Associates.

Title:
Annual Ambient Air Concentrations of Diesel Particulate Matter (DPM) for Mitigated Project Operation

SWAPE	Project Number: 1042	Drawn By: AMW	Figure: 4
	Approved By: PER	Date: 5/10/2017	



Rosie the Riveter Charter School

Sensitive Receptors

Project Site

Volatile Organic Compounds (VOCs) [ug/m^3]

- Less than 0.05
- 0.051 - 0.10
- 0.101 - 0.15
- 0.151 - 0.25
- 0.251 - 0.30

Notes:
1. All locations are approximate.
2. Project boundaries obtained from Los Angeles County Property Assessment Information System.
3. Meteorological data obtained from BREEZE Trinity Consultants, at the Los Alamitos Army Airfield for November 1st, 2015 through October 31st, 2016.
4. Input parameters provided by Greve & Associates, SPEC Services, and ALTA Environmental.

Title:
Annual Ambient Air Concentrations of Volatile Organic Compounds (VOCs) for Mitigated Project Operation

	Project Number:	Drawn By:	Figure:
SWAPE	1042	AMW	5
	Approved By: PER	Date: 5/10/2017	

HARP2 Modeling

This health risk assessment was prepared using CARB's Hotspots Analysis and Reporting Program Version 2 Risk Assessment Stand Alone Tool. HARP2 is a software suite used to assist with the programmatic requirements of the Air Toxics "Hot Spots" Program (AB 2588), and is required by the SCAQMD for preparing a detailed risk assessment.[32] HARP2 RAST allows the user to estimate single or multi-pathway carcinogenic and non-carcinogenic health impacts from one or more emission points and incorporates age specific breathing rates, age sensitivity factors, cancer potency factors, etc., consistent with 2015 OEHHA guidance.

For the purpose of this analysis, the excess cancer risk at the MEIR was calculated for infants (3rd trimester to 2 years), children (2 to 16 years), and adults (16 to 30 years) using the maximum construction and operational ambient air concentrations modeled in AERMOD. The SCAQMD provides guidance on preparing a health risk assessment using HARP2 in the following document titled, "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act."[33] Per the SCAQMD's recommendations, this HRA assumes a 30-year continuous exposure, from 3rd trimester to 30 years.

According to CalEEMod outputs for each phase of construction (located in the Appendix of the AQ Assessment), Project construction is expected to last a little over two years (approximately 25 months).[34] This duration corresponds to the exposure duration for infants, therefore the ambient air concentration for construction was applied to infants and the ambient air concentration for operations was applied to children and adults to estimate a lifetime risk. The risk was calculated for the inhalation, dermal absorption, soil ingestion, home grown produce, and mother's milk. A deposition velocity of 0.02 meters per second was used for non-inhalation pathways. The default exposure frequency of 350 days per year was utilized. The "RMP Using the Derived Method" risk calculation option was selected for the model's Intake Rate Percentile for all the exposure pathways included in this assessment, consistent with SCAQMD guidance.

Age-specific daily breathing rates (DBRs) were utilized. Consistent with the SCAQMD, the 95th percentile DBR was assumed for infants and the 80th percentile DBR was assumed for all other ages.[35] The OEHHA recommended Age Sensitivity Factors (ASFs) were also included in the health risk assessment to take into account the increased sensitivity to carcinogens during early-in-life exposure. Furthermore, in order to take into account the percentage of the day that people are at home and exposed to TACs, the health risk assessment assumes that the fraction of time spent at home for adults was 73 percent, while children and

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[32] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act." SCAQMD. June 2015. Available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588_guidelines.pdf

[33] *Ibid*.

[34] "Air Quality Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project." Greve & Associates, LLC. June 2017.

[35] "Risk Assessment Procedures For Rules 1401, 1401.1 & 212." SCAQMD. June 2015. Available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/riskassprocjune15.pdf?sfvrsn=2

infants are assumed to attend a daycare or school in close proximity to their home and therefore no discount is taken for time spent outside of the area affected by the project's emissions.[36]

Table 5 summarizes the exposure parameters utilized in the HARP2 models.

Table 5: HARP2 Exposure Parameters						
Age	**Daily Breathing Rate (L/kg-day)**	**Age Sensitivity Factor**	**Exposure Duration (years)**	**Fraction of Time at Home**	**Exposure Frequency (days/year)**	**Cancer Potency Factor (1/(mg/kg-day))**
-0.25 to 0	361	10	0.25	1	350	1.1
0 to 2	1,090	10	2	1	350	1.1
2 to 16	572	3	14	1	350	1.1
16 to 30	261	1	14	0.73	350	1.1

The HARP2 output files can be found in **Appendix C**.

RESULTS

Health Risk for Existing Emissions

There are approximately 33 wells currently in production on the Synergy Site and City Property Site, though without any additional permits the oil field could operate 53 wells.[37] TAC emissions generated by the operation of 53 potential wells include DPM and VOC emissions associated with diesel workover rigs, oil truck trips, and employee travel.[38] The operation of these existing oil wells have a combined cancer risk of approximately 92.84 in one million (see **Table 6** below) and the cancer burden was calculated to be 0.594.

Table 6: Existing Emissions Health Risk Assessment Results			
Receptor	**Cancer Risk (per million)**	**Chronic Risk (HI)**	**Acute Risk (HI)**
Infant	42.67	0.02889	0.01511
Child	45.15	0.02889	0.01511
Adult	5.01	0.02889	0.01511
MEIR Lifetime Total	**92.84**	**0.08667**	**0.04533**

[36] "Risk Assessment Procedures For Rules 1401, 1401.1 & 212." SCAQMD. June 2015. Available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/riskassprocjune15.pdf?sfvrsn=2
[37] "Air Quality Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project." Greve & Associates, LLC. June 2017.
[38] *Ibid*.

According to the Project applicant, once the Project has a certified Environmental Impact Report (EIR) and has received the necessary building permits to begin construction of the new oil facilities, the Project will reduce current operations and oil production of the existing wells by 75% to facilitate their removal. Therefore, by reducing existing oil production by 75% and eventually removing all existing wells, implementation of the Project would significantly reduce the health risk impact to nearby sensitive receptors. Calculations show that with a 75% reduction, the cancer risk would be reduced to 23.21 per one million which results in a cancer burden of 0.035.

Health Risk for Unmitigated Future Emissions

The HARP2 modeling results for unmitigated future Project emissions are shown below in **Table 7**. Overall, the worst-case health risk associated with Project construction and operation is 130.96 cancers per one million which exceeds the applicable health risk criteria of ten per one million. Furthermore, the cancer burden for unmitigated future emissions was calculated to be 0.958 which exceeds the threshold of 0.5.

Table 7: Unmitigated Health Risk Assessment Results

Receptor	Cancer Risk (per million)	Chronic Risk (HI)	Acute Risk (HI)
Infant	114.76	0.06709	0.00000
Child	14.58	0.00991	0.05028
Adult	1.62	0.00993	0.05028
MEIR Lifetime Total	**130.96**	**0.08693**	**0.10055**

Based on the health risk assessment modeling results, health risks would be considered potentially significant. Sources that contribute the greatest to high health risk levels mainly include diesel engines associated with short-term construction equipment and on-road hauling trucks. Therefore, additional construction-related and operational mitigation should be identified and incorporated in order to reduce the Project's health risk impact.

Mitigation Measures

Mitigation measures have been identified as part of the AQ Assessment for both short-term (construction) and long-term (operational) impacts, respectively.

Mitigation Measure AQ-2: NO_X Reduction Measures states:

> "Require all off-road diesel-powered construction equipment greater than 50 hp (e.g., excavators, graders, dozers, scrappers, tractors, leaders, etc.) to comply with EPA-Certified Tier IV emission controls where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB."[39]

[39] "Air Quality Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project." Greve & Associates, LLC. June 2017.

Mitigation Measure AQ-3: NO_X Operational Reduction Measures states:

> "Require all diesel-powered drilling rigs located at the Pumpkin Patch and LCWA sites to comply with EPA-Certified Tier IV emission controls. This drilling rig equipment shall be outfitted with BACT devices certified by CARB."[40]

In addition to reducing NO_X emissions, these mitigation measures would also effectively reduce emissions of DPM and other TACs emitted during Project construction and operations. In order to reach acceptable levels of public health risk, Mitigation Measure AQ-2 must be applied to each phase of construction and Mitigation Measure AQ-3 must be applied to drilling operations.

Health Risk for Mitigated Future Emissions

To evaluate the effectiveness of the proposed mitigation measures, the HARP2 model was rerun using mitigated DPM and VOC emissions. The HARP2 modeling results for mitigated future Project emissions are presented in **Table 8**. The health risk associated with Project construction and operations, when these mitigation measures are implemented, are all well below the applicable health risk criteria for infant, child, adult, and lifetime risk at the MEIR.

Table 8: Mitigated Health Risk Assessment Results

Receptor	Cancer Risk (per million)	Chronic Risk (HI)	Acute Risk (HI)
Infant	3.40	0.00199	0
Child	3.69	0.00344	0.04467
Adult	0.41	0.00344	0.04467
MEIR Lifetime Total	**7.50**	**0.00887**	**0.08934**

With implementation of the mitigation measures listed above, the Project's lifetime Maximum Individual Cancer Risk (MICR) of 7.50 in one million would be reduced to below the significance threshold of 10 in one million. Additionally, the chronic and acute non-cancer risks are below the significance threshold of one. The cancer burden associated with mitigated future emissions was calculated to be 0.004, which is well below the SCAQMD significance threshold of 0.50.[41]

Conclusion

Table 9: Mitigated Health Risk Assessment Results & Significance Thresholds

Criteria Description	Health risk	Threshold Value	Exceedance?
Cancer Risk, per million	7.50	10	No
Cancer Burden	0.004	0.5	No
Chronic Risk, health index	0.009	1	No
Acute Risk, health index	0.089	1	No

[40] "Air Quality Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project." Greve & Associates, LLC. June 2017.
[41] *Ibid*.

As evident in **Table 9**, the maximum individual cancer risk, cancer burden, chronic non-cancer risk, and acute non-cancer risk are all below their respective significance thresholds when mitigation is applied to the Project. Therefore, the Project's health risk impacts would be less than significant with mitigation.

It should be noted that in order to provide the most conservative analysis possible, several assumptions were made in the modeling process that likely overestimate the Project's cancer risks and non-cancer hazards, as explained in further detail below.

In AERMOD, the nine construction phases were modeled separately, and then the resulting ambient air concentrations were added together as if every phase was happening simultaneously. In reality construction will take place over a two year period, so this method greatly overestimates the annual ambient air concentrations surrounding the Project during construction. Additionally, the most conservative method was used to determine ambient air concentrations at sensitive receptor locations. As mentioned in the Air Dispersion Modeling section, seven potential sensitive receptor locations were identified to be in close proximity to the Project site. Instead of using the closest individual receptor for the basis of the health risk analysis, we selected the receptor with the highest ambient air concentration separately for construction and operation. Therefore, the highest exposures estimated by AERMOD were input into HARP2 to estimate the health risk.

Additionally, SWAPE made assumptions regarding the AERMOD input parameters associated with the turbines located on the LCWA Site. At the time air dispersion models were run, two turbine options were being considered for the Project – two Mars 100 turbines or four Mercury 50 turbines. In order to provide the most conservative analysis possible with the information available, SWAPE modeled emissions of four turbines using input parameters pertaining to the more heavily-emitting turbine option, the Mars 100. The Mars 100 input parameters, provided by SPEC Services, Inc., include stack height (35 feet), stack diameter (6.5 feet), exhaust temperature (320 degrees Fahrenheit), and exhaust velocity (55 feet per second). It should be noted that this method likely overestimates operational emissions of TACs from the turbines.

Furthermore, SWAPE relied upon SCAQMD's most recent health risk guidance document, "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act," to determine the Project's health risk impact.[42] This guidance document, which was published in June of 2015, was prepared as a supplement to OEHHA's most recent health risk guidelines entitled, "Air Toxics Hot Spots Program Risk Assessment Guidelines" (referred to as the "OEHHA Guidelines"), and is intended to be more health protective of infants and children exposed to cancer causing substances.[43] As stated in the OEHHA Guidelines, studies have shown that young animals are more sensitive than adult animals to

[42] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act." SCAQMD. June 2015. Available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588_guidelines.pdf

[43] "Air Toxics Hot Spots Program Risk Assessment Guidelines." OEHHA. March 2015. Available at: https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0

exposure to many carcinogens.[44] Therefore, in an effort to take into account the increased sensitivity to carcinogens during early-in-life exposure, OEHHA developed updated risk assessment methodologies, such as the use of higher breathing rates and age sensitivity factors (ASF) for infants and children, and the inclusion of multiple exposure pathways, including inhalation, as well as dermal absorption, soil ingestion, home grown produce, and mother's milk.[45] Consistent with these updated guidelines, we used high end breathing rates (95th percentile) for children from the 3rd trimester through age 2, and 80th percentile breathing rates for all other ages for residential exposures, and we applied an ASF of 10 for the third trimester to age 2 years, and an ASF of 3 for ages 2 through 15 years to account for potential increased sensitivity to carcinogens during childhood. Finally, we accounted for exposure via multiple pathways including inhalation, dermal absorption, soil ingestion, home grown produce, and mother's milk.

Due to these reasons, the Project's health risk impact is most likely much lower than what was estimated in this report, as our assessment relies upon the maximum construction and operational ambient air concentrations and relies upon exposure assumptions that are very conservative, and tend to err on the side of health protection for early-in-life exposures.

CUMULATIVE IMPACT

In order to evaluate the cumulative health risk impact from other projects nearby, an inventory of all pending and approved/certified projects for the City of Long Beach was made from the City of Long Beach's Planning Department (LBPD) website (see **Table 10** below).[46]

Table 10: LBPD Environmental Reports

Project Name	Location	Status	Case Type
2nd & PCH	6400 East Pacific Coast High Way, Long Beach, California 90803	Pending	IS, NOP
5365 Cherry Avenue Opportunities for Learning Charter School	5365 Cherry Avenue, Long Beach, California 90805	Pending	ND, NOA, NOI, IS
Staybridge Suites Hotel	2640 North Lakewood Boulevard, Long Beach, California 90815	Pending	MND, NOA, NOI, IS
Dorado Residential Development Project	3655 North Norwalk Boulevard, Long Beach, California 90808	Pending	EIR, NOP, IS
Shoreline Gateway East Tower Project	777 East Ocean Boulevard, Long Beach, California 90802	Pending	Addendum to EIR

[44] "Air Toxics Hot Spots Program Risk Assessment Guidelines." OEHHA. March 2015. Available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-4

[45] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act." SCAQMD. June 2015. Available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588_guidelines.pdf, p. 3

[46] Available at: http://www.lbds.info/planning/environmental_planning/environmental_reports.asp

Table 10 (continued)			
Project Name	**Location**	**Status**	**Case Type**
Alamitos Bess Project	690 North Studebaker Road, Long Beach, California 90803	Pending	NOI, IS, MND
2 61st Place Rezoning from CNR to R-2-1	2 61st Place, Long Beach, California 90803	Pending	NOC, ND, IS
Belmont Pool Final EIR	4000 East Olympic Plaza, Long Beach, California 90803	Pending	Re-NOP, Revitalization, IS, NOP, IS
Riverwalk Residential Development Project	4747 Daisy Avenue, Long Beach, California 90805	Approved/ Certified	IS, NOP
Weber Metals Large Press Expansion	16706 Garfield Avenue, Paramount, California 90723	Approved/ Certified	IS, MND
Oceanaire Apartment	150 West Ocean Boulevard, Long Beach, California 90802	Approved/ Certified	IS, ND
442 W. Ocean Blvd	442 West Ocean Boulevard, Long Beach, California 90802	Approved/ Certified	IS, ND
207 Seaside Way	207 East Seaside Way, Long Beach, California 90802	Approved/ Certified	IS, ND
Pacific Pointe East	3747 Worsham Avenue, Long Beach, California 90808	Approved/ Certified	IS, NOP
LB East Division Police Substation	3800 East Willow Street, Long Beach, California 90815	Approved/ Certified	IS, ND, Technical Appendices
2810 East 1st Street	2810 East 1st Street, Long Beach, California 90803	Approved/ Certified	IS, NOP
Drake Park Soccer Field	838 West 12th Street, Long Beach, California 90021	Approved/ Certified	IS
Long Beach Sports Park	2898 Orange Avenue, Long Beach, California 90755	Approved/ Certified	EIR
Safran Senior Housing Project	3215 East 3rd Street, Long Beach, California 90814	Approved/ Certified	NOP, IS, EIR
Urban Village on Long Beach	1081 Long Beach Boulevard, Long Beach, California 90813	Approved/ Certified	ND
3801 East 5th Street	3801 East 5th Street, Long Beach, California 90814	Approved/ Certified	ND
4201 E. Willow	4201 East Willow Street, Long Beach, California 90815	Approved/ Certified	ND

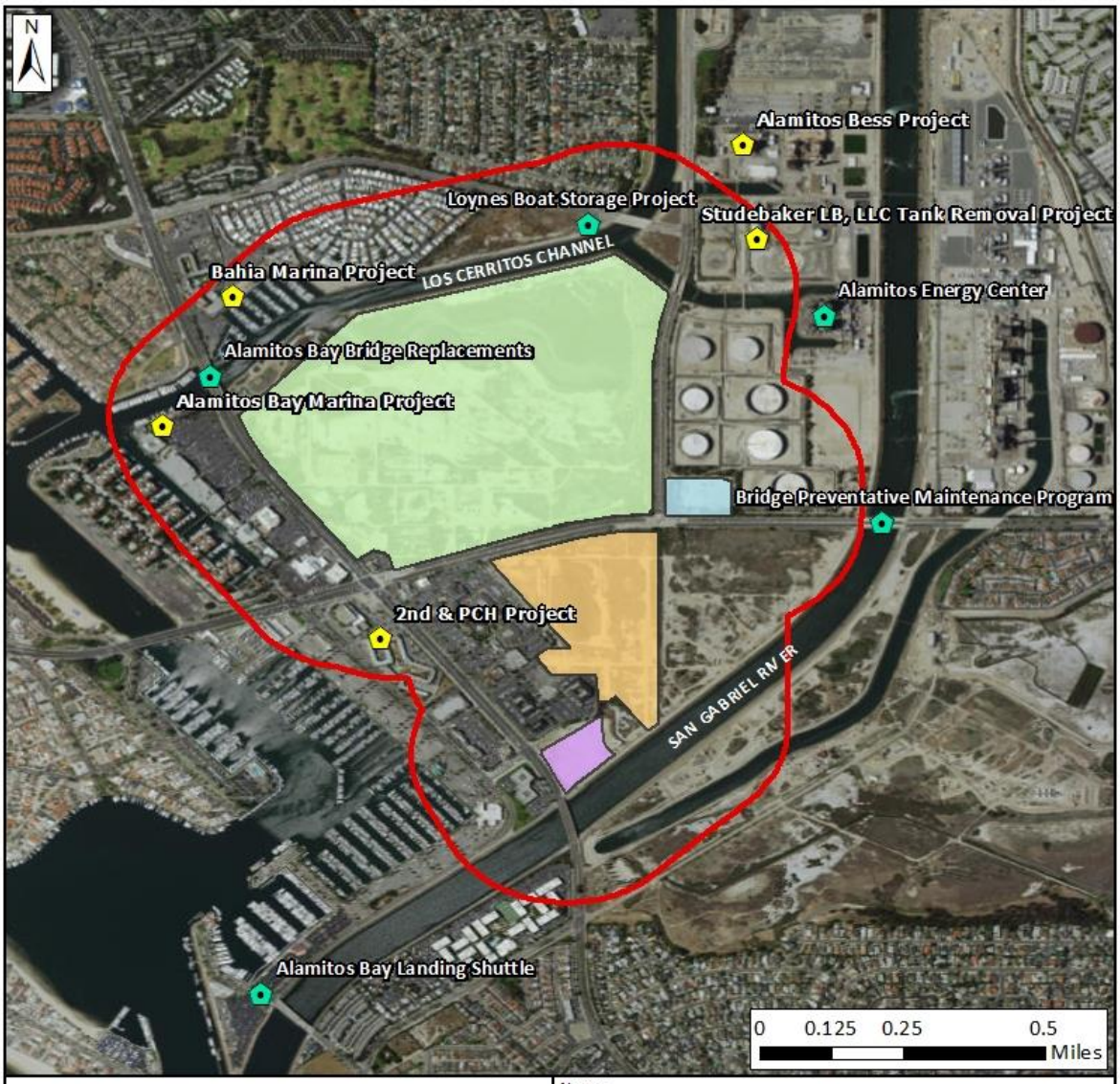
Table 10 (continued)			
Project Name	**Location**	**Status**	**Case Type**
Pine Square Theater Conversion to Residential	250 Pacific Avenue, Long Beach, California 90802	Approved/ Certified	ND
Colorado Lagoon	5416 East Eliot Street, Long Beach, California 90803	Approved/ Certified	EIR
100 E. Ocean Boulevard Acquisition Project	100 East Ocean Boulevard, Long Beach, California 90802	Approved/ Certified	ND 07-10
Oregon Park	4951 Oregon Avenue, Long Beach, California 90805	Approved/ Certified	ND 04-10
Aquarium of the Pacific "Pacific Visions" Expansion	100 Aquarium Way, Long Beach, California 90802	Approved/ Certified	ND 01-10
925 East PCH Lease Acquisition Project	925 East Pacific Coast Highway, Long Beach, California 90806	Approved/ Certified	ND
Fresh & Easy Neighborhood Market	3300 Atlantic Avenue, Long Beach, California 90807	Approved/ Certified	IS
Studebaker LB, LLC Tank Removal Project	400 N. Studebaker Road, Long Beach, California 90807	Approved/ Certified	ND
Ramona Park Senior Apartments	3290 Artesia Boulevard, Cerritos, California 90703	Approved/ Certified	ND
Alamitos Bay Marina	6270 Pacific Coast Highway, Long Beach, California 90803	Approved/ Certified	EIR
Bahia Marina	6289 East Pacific Coast Highway, Long Beach, California 90803	Approved/ Certified	IS
North Village Center	5800 Atlantic Avenue, Long Beach, California 90805	Approved/ Certified	EIR 01-08, NOP, IS
Hotel Sierra	290 Bay Street, Long Beach, California 90802	Approved/ Certified	EIR 01-09
Douglas Park Rezone Project	4319 East Carson Street, Long Beach, California 90808	Approved/ Certified	Addendum to Final EIR
Rancho Dominguez Annexation	150 West Victoria Street, Long Beach, California 90805	Approved/ Certified	ND-18-06
Ocean Blvd Project	1628 Ocean Boulevard, Long Beach, California 90805	Approved/ Certified	ND 10-09
Aquarium of the Pacific Facility Enhancement Project	100 Aquarium Way, Long Beach, California 90802	Approved/ Certified	ND 14-06

In addition, we received a list of existing and reasonably foreseeable future projects prepared by ESA in conjunction with the City of Long Beach (see **Table 11** below).

Table 11: Existing and Reasonably Foreseeable Future Projects		
Project Name	**Location**	**Status**
Middle Harbor Terminal Redevelopment	Middle Harbor area of the Port of Long Beach	Approved project. Construction underway (2010-2019)
Piers G and J Terminal Redevelopment Project	Southeast Harbor Planning District area of the Port of Long Beach	Approved project. Construction underway (Ongoing)
Inner Harbor Turning Basin Project	Inner Harbor Turning Basin	Approved project. Construction pending (2016-2017)
Fireboat Station No. 20 Project	331-549 Pier D Ave W, Long Beach, CA 90802	Approved project (2017-2018)
Gerald Desmond Bridge Replacement Project by POLB, Caltrans, and Federal Highway Administration (FHWA)	Gerald Desmond Bridge	Approved project. Construction underway.
Eagle Rock Aggregate Terminal	Pier D of Port of Long Beach	Approved project. Construction underway (2014-2016)
Pier B On-Dock Rail Support Facility	Pier B Rail Yard of Port of Long Beach	Draft EIR currently being prepared
Mitsubishi Cement Corporation Facility Modifications	1150 Pier F Ave, Long Beach, CA 90802	Project approved in April 2015 Project on hold
Baker Cold Storage, Inc. Cold Storage Facility	1710 Pier B Street, Long Beach, CA 90813	Approved project. Construction underway (2014-2016)
Southeast Area Specific Plan	Southeast edge of the City of Long Beach	Unknown
Loynes Boat Storage Project	6400 Loynes Drive, Long Beach, CA 90803	Unknown
Alamitos Energy Center	South of State Route 22 (7th Street), west of by the San Gabriel River, north of 2nd Street, and east of Studebaker Road	Under environmental review
Alamitos Bay Bridge Replacements	The Alamitos Bay Bridge, over the Los Cerritos Channel	Planning Phase
Alamitos Bay Landing Shuttle	Marina Drive corridor, between 2nd Street and Alamitos Bay Landing	Ongoing (Nov 2017 - Nov 2018)
Bridge Preventive Maintenance Program-Group 4	2nd St bridges over the San Gabriel River and Hanes Steam Plant Channel	Unknown

Table 11 (continued)		
Project Name	**Location**	**Status**
7th Street Gateway Landscaping		Estimated Construction Winter/Sprint 2017
AES Southland Sewer Interconnect Alignment	Loynes Drive Bridge spanning over the Los Cerritos Channel	Planning Phase
Major & Secondary Highway Program	Anaheim St between Atlantic Ave and Alamitos Ave Atherton St between Outer Traffic Circle and Clark Ave Artesia Blvd between Paramount Blvd and Downey Ave Broadway between Alamitos Ave and Junipero Ave Carson St between City Limits and Clark Ave Del Amo Blvd between Long Beach Blvd and West City Limits Junipero Ave between Ocean Blvd and Broadway Long Beach Blvd between Pacific Coast Highway and Anaheim St Magnolia Ave between Spring St and Wardlow Rd Magnolia Ave between 4th St and Anaheim St	Estimated Construction Jan 2017 – Sep 2017
Citywide Slurry Seal Program	Various locations, including Peralta Ave	Unknown
Water Department Projects	Various locations	Unknown
Bridge Deck Repair	Studebaker	Estimated Construction in 2017

Of the projects listed in **Table 10** and **Table 11** above, ten are located within approximately 1,000 to 2,000 feet of the proposed Project and could contribute to a cumulatively considerable health risk impact (see **Figure 6** below).



LBPD Projects

Other Nearby Projects

1000-Foot Buffer

Project Sites

Synergy Site

City Property Site

LCWA Site

Pumpkin Patch Site

Notes:
1. All locations are approximate.
2. LBPD Project locations obtained from Long Beach Planning Department website for Environmental Reports.
3. Parcel boundaries obtained from Los Angeles County Property Assessment Information System and georeferenced with Project site boundaries found in Exhibit 1 of the Air Quality Assessment.

Title: **Cumulative Impact Reference Map**

	Project Number:	Drawn By:	Figure:
SWAPE	1042	AMW	6
	Approved By: PER	Date: 5/10/2017	

Below is a discussion of the five LBPD projects and whether the health risk would be cumulatively considerable when combined with the proposed Project.

Alamitos BESS Project: The Alamitos Generating Station Battery Energy Storage System (BESS) Project, located immediately northeast of the Project site, proposes to construct a 300-megawatt battery energy storage facility at the existing AES Southland Energy, LLC Alamitos Generating Station. According to the BESS project's Initial Study/Mitigated Negative Declaration (IS/MND), construction will start in 2019 and be completed in 2023.[47] Construction of the proposed Project, however, is expected to finish in January 2019, as demonstrated in the AQ Assessment's CalEEMod output files. As such, there will be only minimal overlap of construction emissions from both projects. Because only approximately one month of construction for both projects will occur at the same time, and because the construction health risk posed to infants, children, and adults from the proposed Project is well below the significance threshold, it is reasonable to assume that the potential cumulative impacts from construction of the proposed Project and the BESS project would be less than significant. The BESS project's IS/MND only mentions occasional unintended leaks of coolants from the chiller system as a source of operational hazardous emissions that may pose an acute risk.[48] However, these sporadic accidental leaks are expected to result in a negligible health risk to the surrounding communities and therefore not result in a cumulative operational risk.

Studebaker LB, LLC Tank Removal Project: LBPD's Environmental Planning website includes the Studebaker LB, LLC Tank Removal Project in its list of approved/certified projects.[49] A Notice of Intent to Adopt the Revised Mitigated Negative Declaration was prepared in early 2010, and a public hearing for the planning commission was scheduled on February 18, 2010.[50] The project would remove four large above-ground storage tanks and a smaller above-ground storage tank, along with above ground pipelines associated with the tanks.[51] Although this project is still listed on the LBPD's website, it has already been completed.[52] Therefore, there will be no cumulative construction health risk impact. Furthermore, this project only includes removal of on-site tanks and does not have an operational aspect to it. Therefore, there will be no operational source of TACs that will contribute to a cumulative health risk.

Bahia Marina Project: The Bahia Marina Project Initial Study was prepared in August 2009 and is listed as an Approved/Certified project on the LBPD's Environmental Planning website. The project includes maintenance dredging in the Cerritos Bahia Marina which would result in 26,867 cubic yards of removed material.[53] According to the Initial Study, the dredging would be conducted in phases to and is expected

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[47] "Alamitos Generating Station Batter Energy Storage System Project Initial Study/Mitigated Negative Declaration." Prepared by Michael Baker International for City of Long Beach. October 2016. Available at: http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=6142
[48] *Ibid*.
[49] Available at: http://www.lbds.info/planning/environmental_planning/environmental_reports.asp
[50] Notice of Intent to Adopt Revised Mitigated Negative Declaration (MND15-09) for Studebaker LB, LLC Tank Removal Project. City of Long Beach. February 2010. Available at: http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=3284
[51] *Ibid*.
[52] Correspondence with Craig Chalfant, Planner. Department of Development Services, City of Long Beach. December 13, 2016.
[53] "Cerritos Bahia Marina Maintenance Dredging Project Initial Study." City of Long Beach. August 2009. Available at: http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=3026

to last approximately 66 days beginning in mid to late fall of 2009.[54] Although this project is still listed on the LBPD's Environmental Planning website, it has already been completed.[55] Therefore, there will be no cumulative construction health risk impact. Furthermore, this project only includes temporary dredging of the marina and does not have an operational aspect to it. Therefore, there will be no operational source of TACs that will contribute to a cumulative health risk.

Alamitos Bay Marina Rehabilitation Project: An Initial Study/Mitigated Negative Declaration was prepared for this project in 2007/2008, and, following the public commenting period, the City of Long Beach decided to prepare a subsequent Environmental Impact Report (EIR). Specifically, the project would involve upgrading existing facilities including ADA-compliant restrooms, sea wall repairs, dock and piling replacement, dock replacement and extension, parking lot replacement, and creation of an underwater open space/habitat mitigation site.[56] According to the City of Long Beach, construction of the project has already been completed even though it is still listed on the Environmental Planning website; therefore there will be no cumulative health risk from construction.[57] Additionally, the Air Quality report of the EIR states that because the capacity of the Marina would not be increased, there are no additional operational emissions above the project's baseline level.[58] Therefore, there are not any additional operational sources of TACs after completion of the project that will contribute to a cumulative risk.

2nd & PCH Project: A Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the 2nd & PCH project was prepared in November 2016. This 2nd & PCH project will be located in a shopping center approximately 600 feet southwest of the Synergy Site. The 2nd & PCH project proposes to demolish the existing Seaport Marina Hotel and construct a commercial center consisting of retail uses, a grocery store, a fitness/health club, restaurant, and parking land uses.[59] Construction of this project would result in DPM emissions from use of off-road construction equipment. However, at the time this report was prepared, the construction schedule is currently unknown, as an EIR with project-specific information is in the process of being prepared. Therefore, it is unclear if construction of the 2nd & PCH project will coincide with construction of the proposed Project and result in cumulative construction health risk impact. If construction was to occur concurrently with the proposed Project, there may be a cumulative construction risk, however this risk would only be short term. In regards to operational emissions, the 2nd & PCH project is not expected to be a major source of TACs due to its proposed commercial land use. The occasional use of landscaping equipment, natural gas consumption for heating, and limited truck idling

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[54] "Cerritos Bahia Marina Maintenance Dredging Project Initial Study." City of Long Beach. August 2009. Available at: http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=3026

[55] Correspondence with Craig Chalfant, Planner. Department of Development Services, City of Long Beach. December 13, 2016.

[56] "Final Environmental Impact Report Alamitos Bay Marina Rehabilitation Project." City of Long Beach. October 2009. Available at: http://www.lbds.info/planning/environmental_planning/alamitos_bay_marina.asp

[57] Correspondence with Craig Chalfant, Planner. Department of Development Services, City of Long Beach. December 13, 2016.

[58] "Final Environmental Impact Report Alamitos Bay Marina Rehabilitation Project." City of Long Beach. October 2009. Available at: http://www.lbds.info/planning/environmental_planning/alamitos_bay_marina.asp

[59] Notice of Preparation of a Draft Environmental Impact Report in Compliance with Title 14, Section 15082(a) of the California Code of Regulations for 2nd & PCH Project. City of Long Beach. November 2016. Available at: http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=6252

for vendor deliveries would result in negligible levels of emissions that would not exacerbate the existing health risk in the area.

In conclusion, the projects discussed above are not anticipated to result in a significant cumulative impact. The Alamitos BESS project will only have minimal overlap of construction with the proposed Project and not result in a cumulative construction impact. Additionally, operation of the BESS project will not result in a cumulative health impact. Moreover, the Studebaker LB LLC Tank Removal project, the Bahia Marina project, and the Alamitos Bay Marina Rehabilitation Project have been completed and will not result in a cumulative construction health impact with the proposed Project. Furthermore, there are no operational activities associated with the three projects, and therefore they will not contribute to a cumulative operational impact. At the time this report was prepared, the construction schedule for the 2nd & PCH project was unknown and therefore it is unclear if a cumulative construction impact may occur. If construction was to occur concurrently with the proposed Project, there may be a cumulative construction risk, however this risk would only be short term. In regards to operational emissions, the 2nd & PCH project is not expected to be a major source of TACs due to its proposed commercial land use.

MATES IV Regional Health Risk

In addition to the discussion of the projects above, the results of the HARP2 modeling for this Project demonstrates that the overall, worst-case health risk associated with potential future oil field construction and operations are well below all applicable health risk criteria. The overall, worst-case lifetime health risk associated with future operations also represents a small fraction of the current overall health risk in the region identified in the *Multiple Air Toxics Exposure Study IV* (*MATES IV*) completed by the SCAQMD in May 2015. *MATES IV* models the current ambient TAC concentrations from both stationary and mobile sources throughout the South Coast Air Basin ("Basin") and estimates the background cancer risk from exposure to TACs.

The background cancer risk in the vicinity of the Project site prior to implementation of the proposed Project, as estimated by MATES IV, is 1,226 excess cancers per one million.[60] The proposed Project's cancer risk of 7.50 per one million represents only 0.61 percent of the excess cancer risk in the vicinity of the Project site. The table below shows the average modeled cancer risk at each of the 10 monitoring site used in the MATES IV Final Report.[61]

[60] MATES IV Carcinogenic Risk Interactive Map. SCAQMD. 2015. Available at: http://www3.aqmd.gov/webappl/OI.Web/OI.aspx?jurisdictionID=AQMD.gov&shareID=73f55d6b-82cc-4c41-b779-4c48c9a8b15b

[61] *Ibid*.

Table 4-7
Comparison of Network Averaged CAMx RTRAC 2012-2013 Modeled Cancer Risk to Measured Risk at the 10 MATES IV Sites

Location	2012/2013 MATES IV CAMX RTRAC Simulation				
	Benzene	1,3-Butadiene	Diesel	Others	Total
Anaheim	26	14	301	54	395
Burbank	27	13	333	59	431
Central Los Angeles	33	19	516	78	646
Compton	26	17	383	63	489
Inland Valley San Bernardino	21	9	309	61	400
Huntington Park	30	62	389	96	576
North Long Beach	27	16	395	65	503
Pico Rivera	25	13	358	62	459
Rubidoux	20	7	296	46	369
West Long Beach	32	15	662	69	778
10-Station Average Modeled	27	18	394	65	505
10-Station MATES IV Average Measured ($EC_{2.5}$ x 0.82 for Diesel)	35	33	287	47*	402

*Including modeled species only, Risk from some measured species, such as carbon tetrachloride, chloroform and PAHs are excluded.

**NOTE: Table 4-7 can be found on page 4-21 of the MATES IV Final Report (May 2015).*

Based on Table 4-7, the proposed Project's cancer risk of 7.50 in one million represents only 0.96 percent of the total excess cancer risk and only 1.13 percent of the diesel excess cancer risk at the West Long Beach monitoring site; 1.49 percent of the total excess cancer risk and 1.90 percent of the diesel excess cancer risk at the North Long Beach monitoring site; and 1.90 percent of the excess cancer risk and 2.49 percent of the diesel excess cancer risk at the Anaheim monitoring site.[62] Therefore, it can be concluded that the proposed oil field operations will not result in a cumulatively considerable health risk impact with current and future projects.

[62] "Final Report: Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES IV)." SCAQMD. May 2015. Available at: http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15.pdf?sfvrsn=7

B3 Greenhouse Gas Assessment

Greenhouse Gas Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project

Report #16-005GHG
June 21, 2017

Prepared For:

Beach Oil Minerals Partners

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1.0 EXISTING ENVIRONMENT

1.1 Project Description

The project will be implemented on four sites: the Synergy Oil Field Site, the "Pumpkin Patch" Site, the Los Cerritos Wetlands Authority (LCWA) Site, and the 33-acre City Marketplace Marsh (City Property) Site (Exhibit 1). The Synergy Oil Field Site is located at 6433 East 2nd Street between Pacific Coast Highway to the west, the Los Cerritos Channel to the north, Studebaker Road to the east, and 2nd Street to the south. The "Pumpkin Patch" Site is located at 6701 East Pacific Coast Highway at the northeast corner of the intersection with the San Gabriel Channel. The LCWA Site is located at the northeast corner of the intersection of Studebaker Road and Westminster Boulevard. The City Property Site is located between 2nd Street to the north and the San Gabriel River to the south.

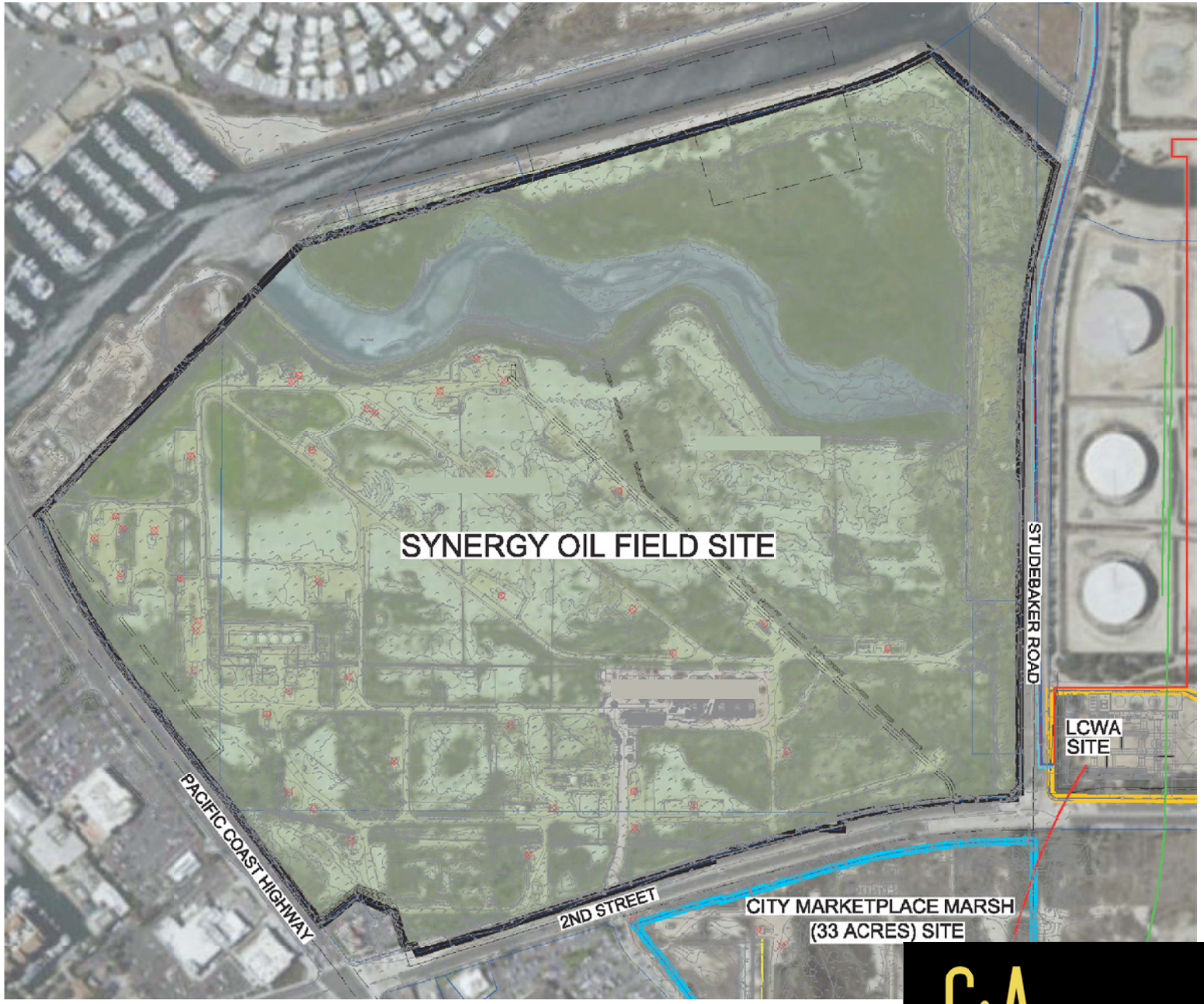
Synergy Oil Field Site: On the Synergy Oil Field Site, the Project proposes to establish a wetlands mitigation bank and public access trail on the northerly approximately 78 acres of the 154-acre Synergy Oil Field (formerly known as the Bixby Oil Field), to implement a wetlands restoration plan on the southerly approximately 72 acres of the Synergy Oil Field, and to construct public access improvements, including a parking lot on existing disturbed areas and relocating and converting an existing building for use as a visitors' center on the remaining approximately 4 acres of the Synergy Oil Field. The mitigation bank provides for the phased restoration and permanent preservation of restored wetlands. The Project also proposes the removal of thirty-nine (39) oil wells from the southerly 72 acres. The Synergy Oil Field is owned and operated by Beach Oil Minerals Partners (Exhibit 2).

"Pumpkin Patch" Site: In order to facilitate the future restoration of the approximately southerly 72 acres on the Synergy Oil Field and construction of the public access improvements, the warehouse structures currently on the Synergy Oil Field will be removed and a portion of the oil production activities currently being conducted at the Synergy Oil Field and the City Property Site will be relocated to the approximately 7 acre property located at 6701 E. Pacific Coast Highway (commonly known as the "Pumpkin Patch"). The office uses currently occupying the Bixby building on the Synergy Oil Field site would be relocated to a new approximately 5,200 square feet (sf), two-story office building constructed on the Pumpkin Patch site. Other proposed site development on the Pumpkin Patch Site includes an approximately 9,750 sf of storage/warehouse, parking for 47 cars, drilling of up to fifty (50) new wells (both oil production and water injection wells) and associated production facilities. The height of the office building is 35 feet and the storage/warehouse is 22 feet (Exhibit 3).

Exhibit 1 - Overall Location Map

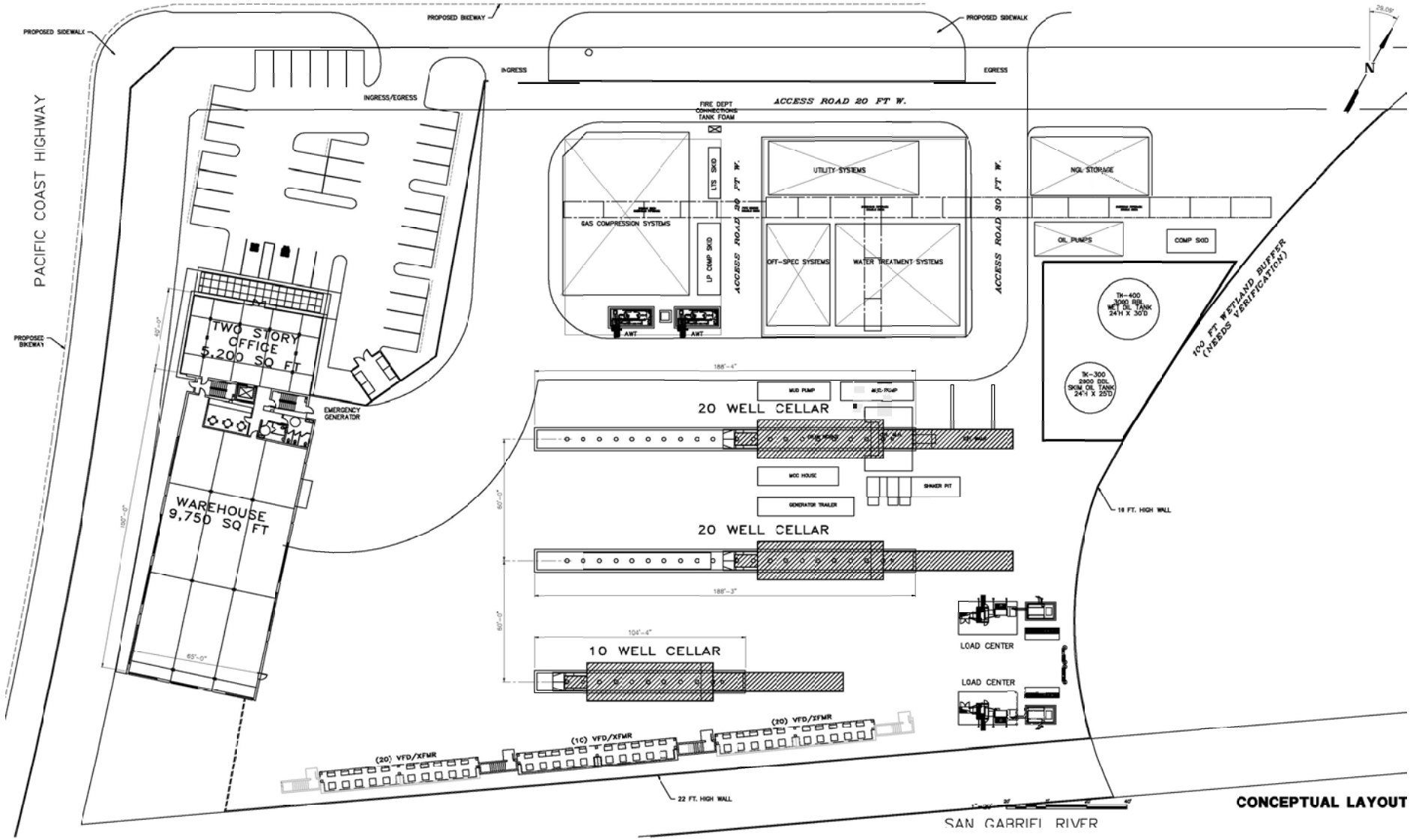
G&A

Exhibit 2 - Synergy Oil Field Site



G&A

Exhibit 3 - Pumpkin Patch Concept Site Plan



G&A

In addition to the 50 wells, two tanks will be constructed on the site: a 3,000-barrel tank for storing "wet oil" that is 30 feet in diameter and 24 feet high; and a 2,000 barrel "skim oil" tank that is 24 feet in diameter and 24 feet high. There is an existing oil well on the Pumpkin Patch site which will be used on a temporary basis as a test well to confirm the feasibility of oil production operations on Pumpkin Patch.

A 22-foot high screen wall will be built on the perimeter of the Pumpkin Patch site. Vehicular access to the site will be from Studebaker Road. The structures will be set back 30 feet from Pacific Coast Highway and perimeter landscaping will be provided along Studebaker, Pacific Coast Highway and the San Gabriel River Channel.

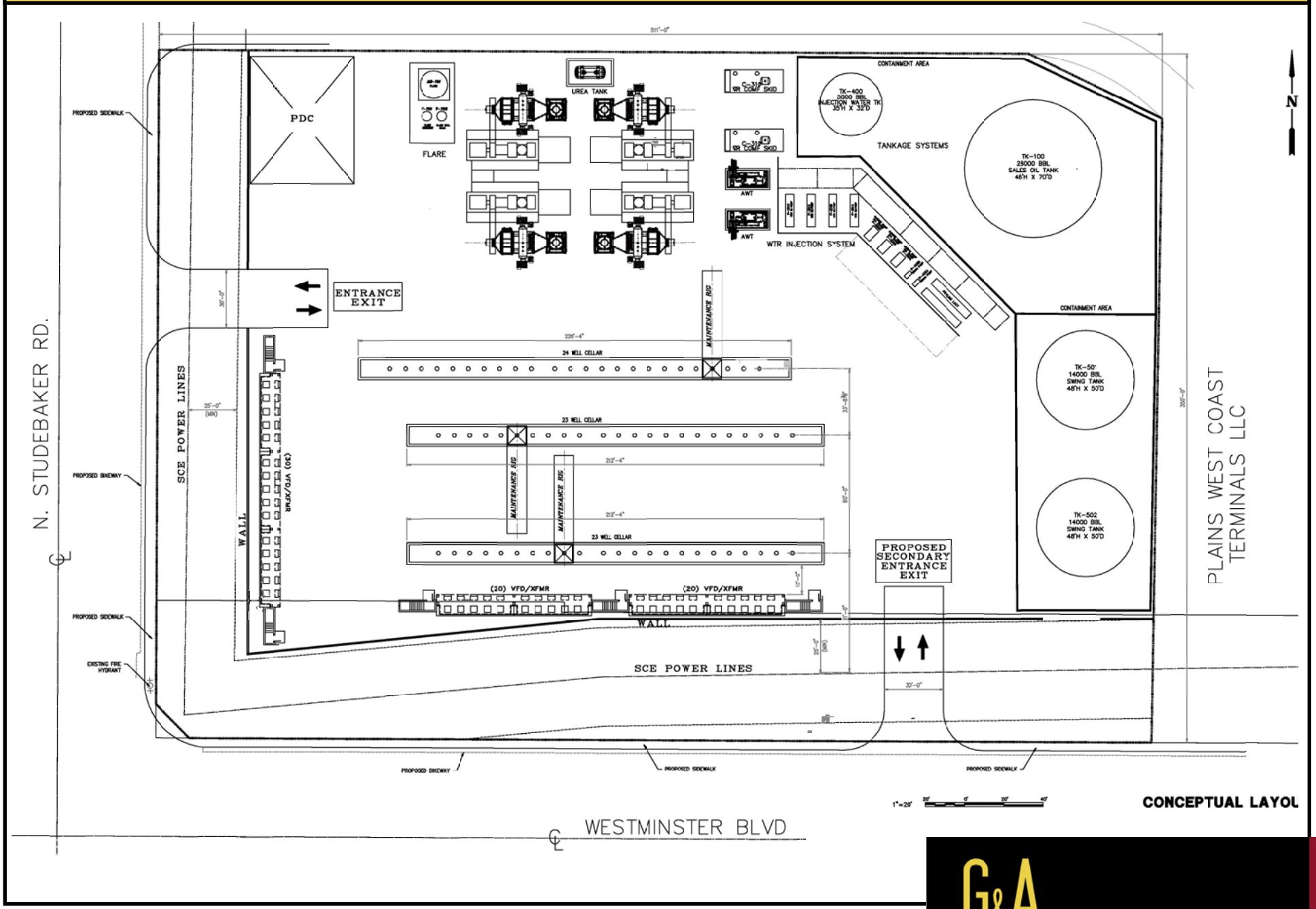
The Pumpkin Patch Site is owned by Beach Oil Minerals Partners. The Pumpkin Patch site is currently vacant, except for one operating oil well. It is currently used for seasonal sales of pumpkins and Christmas trees.

Although the Pumpkin Patch site is approximately 7 acres in size, the oil production operations will be located on 5 acres of the site closest to Pacific Coast Highway. The northeasterly 2-acre portion of the site will be retained as open space and used to provide a 100-foot buffer from the coastal wetland habitat area at the eastern edge of the site.

LCWA Site: The Project proposes the drilling and operation of up to seventy (70) wells on a 5-acre parcel owned by LCWA located at Studebaker and Westminster ("LCWA Site") to replace the oil production facilities currently on the Synergy Oil Field and the City Property Site (Exhibit 4). The LCWA Site is currently undeveloped and is used on a temporary lease basis for equipment storage and staging. Due to the geologic conditions at the Synergy Oil Field (i.e., the Newport-Inglewood Fault traverses the site), the oil field is divided between two operating areas; one on each side of the fault. The oil field operations north of the fault extract oil from a subterranean oil horizon that cannot be accessed from Pumpkin Patch, but can be accessed from the LCWA Site.

The wells will be a combination of oil production well and water injection wells. In addition to the oil production area, the project proposes to construct an elevated piperack, a 28,000 barrel sales oil tank (48 feet in height and 75 feet in diameter), tanks, and a 5,000-barrel injection water tank (35 feet in height and 32 feet in diameter). The site will also include a 15-20 feet high ground flare to be used for emergencies only. The site will use a hybrid power-generating system comprised of a combination of electrical lines extending from an existing SCE facility to a new SCE substation, four gas-powered turbines to generate electricity to be used onsite, solar panels, and heat recovery systems. The turbines currently planned for use are the Mercury 50s by Solar Turbines. A 22-foot high screen wall will be built on the perimeter of the LCWA site.

Exhibit 4 - LCWA Concept Site Plan



The project proposes to improve the existing driveway off of Studebaker Road to a 30-foot entrance/exit, and to construct a secondary 30-foot access from Westminster Boulevard. Perimeter landscaping will be provided along the Studebaker Road and Westminster Boulevard frontage.

City Property Site (33-acre Marketplace Marsh): The Project proposes the removal of approximately twelve (12) oil wells that are currently being operated on the 33-acre City Property Site located at Westminster and Shopkeeper Road. The wells are being operated pursuant to a Surface Use Release Agreement and Grant of Easements ("Surface Use Agreement") between the City and LCW Oil Operations, LLC. The wells would be removed and abandoned in accordance with the terms of the Surface Use Agreement which requires abandonment to a standard acceptable to the State of California Division of Oil, Gas and Geothermal Resources at the time of abandonment and suitable for the City's intended use for public open space. (Another well located immediately west but off-site of the City Property will also be removed.)

This report analyzes the potential climate change impacts associated with this project. Both the greenhouse gas emissions generated by construction and operation of the project are assessed.

1.2 Greenhouse Gases and Climate Change

1.2.1 Impact of Climate Change

The Earth's climate has always been in the process of changing, due to many different natural factors. These factors have included changes in the Earth's orbit, volcanic eruptions, and varying amounts of energy released from the sun. Differences such as these have caused fluctuations in the temperature of the climate, ranging from ice ages to long periods of warmth. However, since the late 18th century, humans have had an increasing impact of the rate of climate change, beginning with the Industrial Revolution.

Many human activities have augmented the amount of "greenhouse gases" ("GHGs") being released into our atmosphere, specifically the burning of fossil fuels, such as coal and oil, and deforestation. The gases increase the efficiency of the greenhouse effect, which is the process of trapping and recycling energy (in the form of heat) that the Earth emits naturally, resulting in higher temperatures worldwide. The Intergovernmental Panel on Climate Change stated in February 2007 that warming is unequivocal, expressing very high confidence (expressed as a nine out of ten chance of being correct) that the net effect of human activities since 1750 has been one of warming. According to the National Oceanic and Atmospheric Administration (NOAA) and National Aeronautics and Space Administration (NASA) data, the average surface temperature of the Earth has increased by about 1.2 to 1.4°F in the last 100 years. The eight warmest years on record (since 1850) have all occurred

since 1998, with the warmest year being 2005. [EPA, 2011, epa.gov/climatechange/basicinfo.html].

This process of heating is often referred to as 'global warming,' although the National Academy of Sciences prefers the terms 'climate change' as an umbrella phrase which includes global warming as well as other environmental changes, in addition to the increasing temperatures. Some of these effects include changes to rainfall, wind, and current weather patterns, as well as snow and ice cover, and sea level.

If greenhouse gases continue to increase, climate models predict that the average temperature at the Earth's surface could increase from 3.2 to 7.2°F above 1990 levels by the end of this century. The degree of change is influenced by the assumed amount of GHG emissions, and how quickly atmospheric GHG levels are stabilized. At this point, however, the climate change models are not capable of predicting local impacts, but rather, can only predict global trends. [EPA, 2011, epa.gov/climatechange/basicinfo.html].

Global GHG emissions are measured in million metric tons of carbon dioxide equivalent ("MMT CO_2EQ") units. A metric ton is approximately 2,205 lbs. Some GHGs emitted into the atmosphere are naturally occurring, while others are caused solely by human activities. The principal GHGs that enter the atmosphere because of human activities are:

- **Carbon dioxide (CO_2)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), agriculture, irrigation, and deforestation, as well as the manufacturing of cement.

- **Methane (CH_4)** is emitted through the production and transportation of coal, natural gas, and oil, as well as from livestock. Other agricultural activities influence methane emissions as well as the decay of waste in landfills.

- **Nitrous oxide (N_2O)** is released most often during the burning of fuel at high temperatures. This greenhouse gas is caused mostly by motor vehicles, which also include non-road vehicles, such as those used for agriculture.

- **Fluorinated Gases** are emitted primarily from industrial sources, which often include hydrofluorocarbons (HRC), perfluorocarbons (PFC), and sulfur hexafluoride (SF_6). Though they are often released in smaller quantities, they are referred to as High Global Warming Potential Gases because of their ability to cause global warming. Fluorinated gases are often used as substitutes for ozone depleting substances.

These gases have different potentials for trapping heat in the atmosphere, called global warming potential ("GWP"). For example, one pound of methane has 21 times more heat capturing potential than one pound of carbon dioxide. When dealing with an array of emissions, the gases are converted to carbon dioxide equivalents for comparison purposes. The GWPs for common greenhouse gases are shown in Table 1.

Table 1 Global Warming Potentials (GWP)

Gas	Global Warming Potential
Carbon Dioxide	1
Methane	25
Nitrous Oxide	198

Source: IPCC, "Fourth Assessment Report, Climate Change 2007, AR4".

1.2.2 Impact of Climate Change on California and Human Health

The long-term environmental impacts of global warming may include sea level rise that could cause devastating erosion and flooding of coastal cities and villages, as well as more intense hurricanes and typhoons worldwide. In the United States, Chicago is projected to experience 25 percent more frequent heat waves and Los Angeles a four-to-eight-fold increase in heat wave days by the end of the century (IPCC, 2007: Climate Change 2007: Impacts, Adaptation and Vulnerability, Contribution of Working Group II to the Third Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge University Press, Cambridge).

Locally, global warming could cause changing weather patterns with increased storm and drought severity in California. Changes to local and regional ecosystems include the potential loss of species and a significant reduction in winter snow pack (e.g., estimates include a 30 to 90% reduction in snow pack in the Sierra Nevada mountain range). Current data suggest that in the next 25 years, in every season of the year, California could experience unprecedented heat, longer and more extreme heat waves, greater intensity and frequency of heat waves, and longer dry periods. The California Climate Change Center (2006) predicted that California could witness the following events:

- Temperature rises between 3 and 10.5°F
- 6 to 20 inches or more increase in sea level
- 2 to 4 times as many heat-wave days in major urban centers
- 2 to 6 times as many heat-related deaths in major urban centers
- 1 to 1.5 times more critically dry years
- 10 to 55% increase in the risk of wildfires

An increase in the frequency of extreme events may result in more event-related deaths, injuries, infectious diseases, and stress-related disorders. Particular segments of the population such as those with heart problems, asthma, the elderly, the very young and the

homeless can be especially vulnerable to extreme heat. Also, climate change may increase the risk of some infectious diseases; particularly those diseases that appear in warm areas and are spread by mosquitoes and other insects. These "vector-borne" diseases include malaria, dengue fever, yellow fever, and encephalitis. Also, algal blooms could occur more frequently as temperatures warm – particularly in areas with polluted waters – in which case diseases (such as cholera) that tend to accompany algal blooms could become more frequent.

1.2.3 Adaptation Impact

Adaptation refers to potential climate change impacts on the project. Global warming is already having a profound impact on water resources. Climate change already altered the weather patterns and water supply in California leading to increased water shortages (i.e., a dwindling snowpack, bigger flood flows, rising sea levels, longer and harsher droughts). Water supplies are also at risk from rising sea levels. Risks may include degradation of California's estuaries, wetlands, and groundwater aquifers that would threaten the quality and reliability of the major California fresh water supply (Climate Change Adaptation Strategies for California's Water, State of California Department of Water Resources, October 2008).

Higher temperatures will also likely increase electricity demand due to higher air conditioning use. Even if the population remained unchanged, toward the end of the century annual electricity demand could increase by as much as 20 percent if temperatures rise into the higher warming range. (Implementing aggressive efficiency measures could lower this estimate).

Higher temperatures may require that the project consume more electricity for cooling. Additionally, more water may be needed for the landscaping. Sea level rise may impact the project because its proximity to the ocean. (For a complete analysis of the impact on the project due to sea level rise refer to "Los Cerritos Wetlands Restoration and Oil Consolidation Project, Beach Oil Minerals Partners, Updated Sea Level Rise Impact Analyses," by Moffatt & Nichol.)

Adaptation includes the responses to the changing climate and policies to minimize the predicted impacts (e.g., building better coastal defenses to sea level rise). Adaptation is not included in this report. It should be note that adaptation is not mitigation. Mitigation includes intervention or policies to reduce GHG emissions or to enhance the sinks of GHGs.

1.2.4 Emission Inventories

To put perspective on the emissions generated by a project and to better understand the sources of GHGs, it is important to look at emission inventories. The United Nations has taken the lead in quantifying GHG emissions and compiling the literature on climate change.

The United Nations estimate for CO_2 emissions for the world and for the top ten CO_2 producing countries is presented in Table 2.

Table 2 Top Ten CO2 Producing Nations in 2007 (Million Metric Tons (MMT) CO_2)

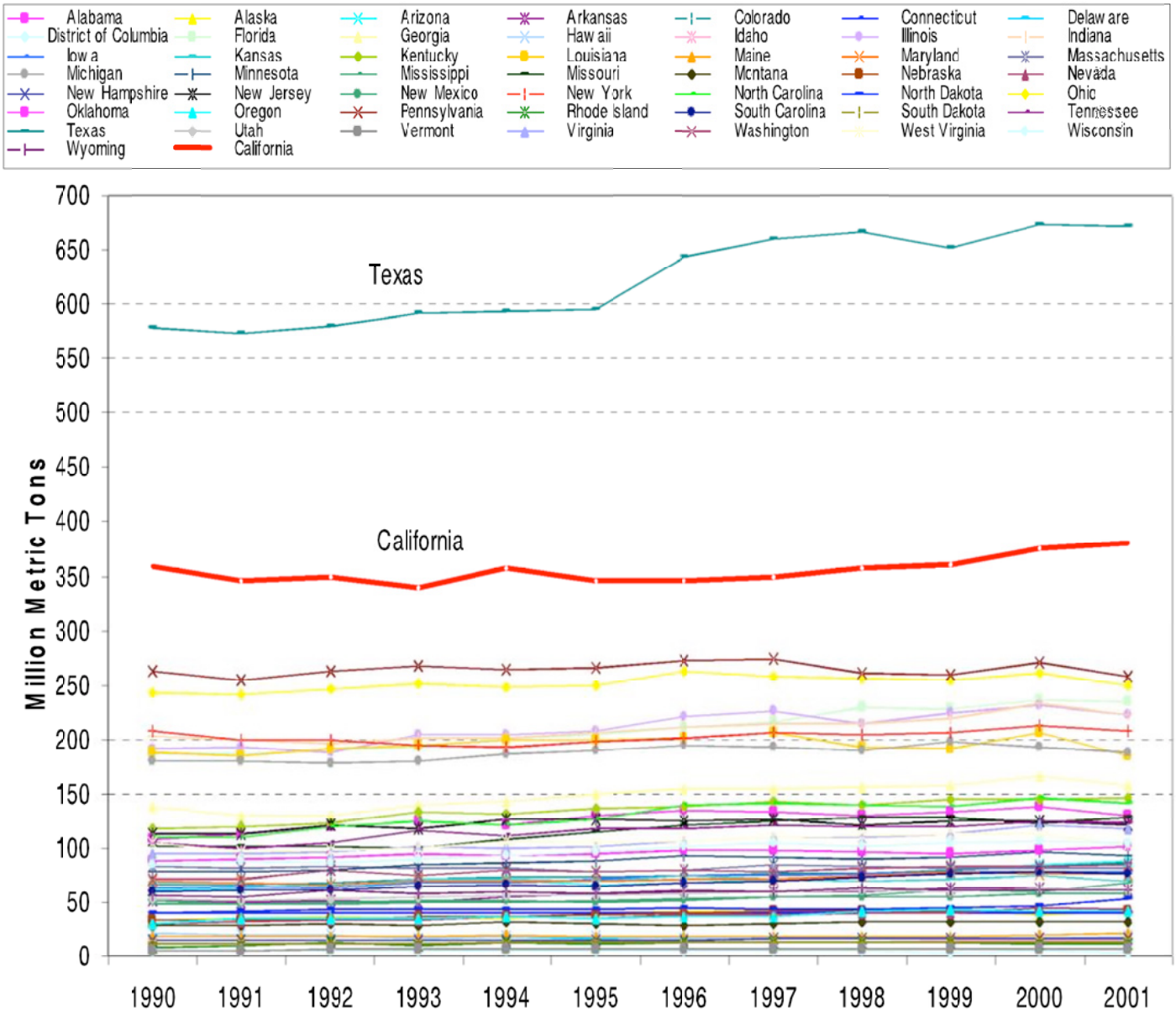
Country	Emissions	Percent of Global
1. China	6,538	22%
2. United States	6,094	20%
3. India	1,610	5%
4. Russian Federation	1,580	5%
5. Japan	1,304	4%
6. Germany	841	3%
7. Canada	590	2%
8. United Kingdom	546	2%
9. Korea, Republic of	503	2%
10. Iran (Islamic Republic of)	496	2%
Remaining Countries	*10,010*	*33%*
Total Global	**30,114**	**100%**

Source: United Nations, 2011, http://unstats.un.org/unsd/environment/air_co2_emissions.htm

Global CO_2 emissions totaled about 30,114 MMT CO_2 in 2007. China released the most CO_2 emissions. The United States was second and released 6,094 MMT CO_2 in 2007, which is approximately 20% of the earth's total emissions. The data in Table 2 emphasize the major role that the United States and China play in climate change with the emissions of the two countries accounting for 42% of the emissions.

Within the United States, California has the second highest level of GHG production with Texas having the highest. In 2001, the burning of fossil fuels produced over 81% of total GHG emissions. In relation to other states, California is the second highest producer of CO_2 by fossil fuels, as shown in Exhibit 5.

Exhibit 5 - CO2 Production by State



Source: California Energy Commission, "Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004," December 2006

G&A

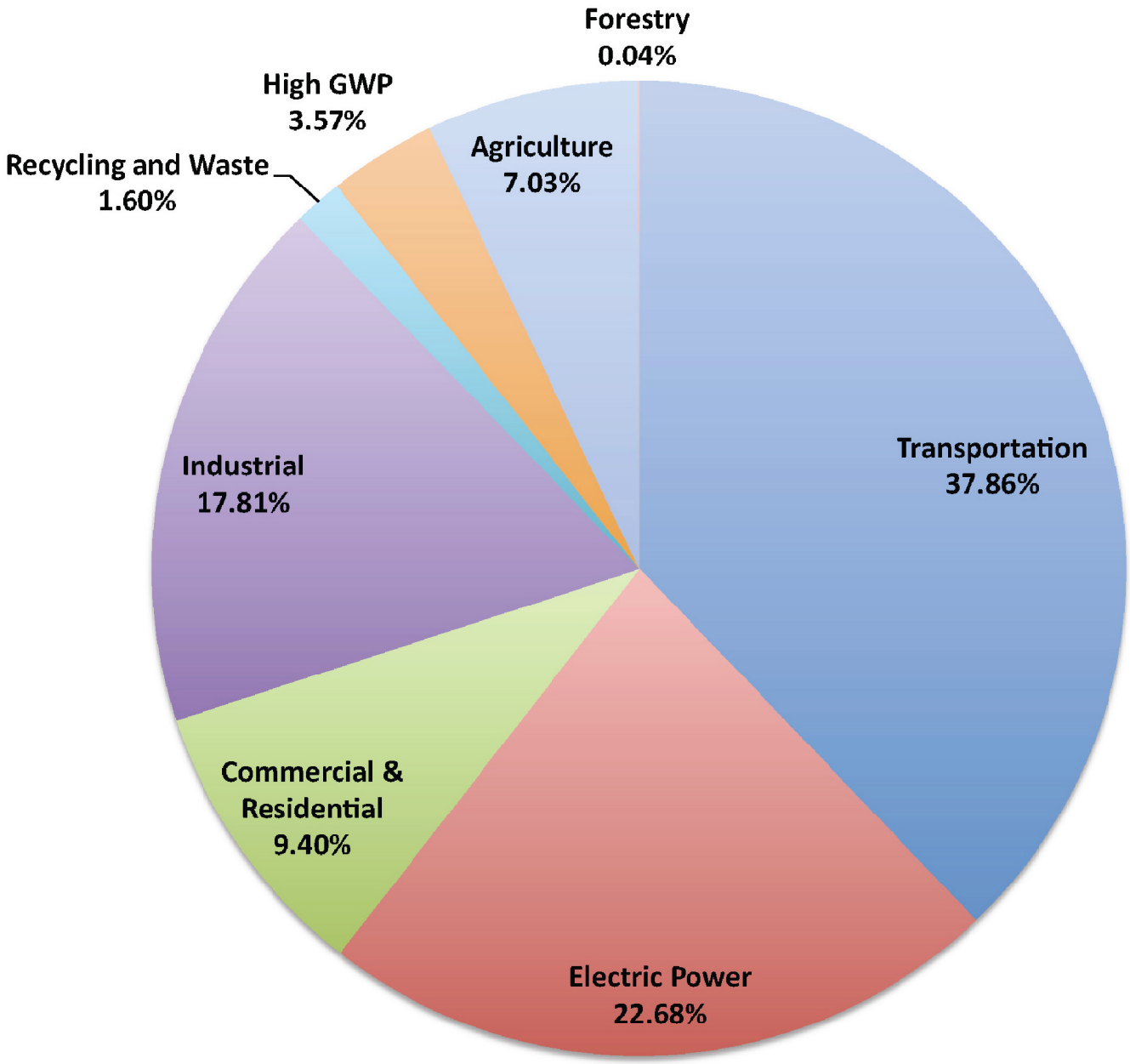
1.2.5 Sources of Greenhouse Gases in California

The California Energy Commission ("CEC") categorizes GHG generation by source into eight broad categories. The categories are:

- **Transportation** includes the combustion of gasoline and diesel in automobiles and trucks. Transportation also includes jet fuel consumption and bunker fuel for ships.
- **Agriculture** GHG emissions are composed mostly of nitrous oxide from agricultural soil management, methane from enteric fermentation, and methane and nitrous oxide from manure management.
- **Commercial and residential** uses generate GHG emissions primarily from the combustion of natural gas for space and water heating.
- **Industrial** GHG emissions are produced from many industrial activities. Major contributors include oil and natural gas extraction; crude oil refining; food processing; stone, clay, glass, and cement manufacturing; chemical manufacturing; and cement production. Wastewater treatment plants are also significant contributors to this category.
- **Electric generation** includes both emissions from power plants in California as well as power plants located outside of the state that supply electricity to the state.
- **Recycling and waste** includes primarily landfills.
- **High (GWP)** emissions consist of ozone depleting substance substitutes and electricity grid SF6 losses.
- **Forestry** emissions are due to wildfires.

The relative amount of GHGs released from each of these categories in California in 2009 is shown in Exhibit 6 (source: "California Greenhouse Gas Inventory for 2000-2009 by Category as Defined in the Scoping Plan," California Environmental Protection Agency, October 26, 2011).

Exhibit 6 - California GHG Emissions by Sector



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Examination of Exhibit 6 indicates that most of California's GHGs are emitted by transportation sources, such as automobiles, trucks, and airplanes. Combustion of fossil fuels in the transportation sector contributed approximately 38% of the California GHG. This category was followed by the electric power sector (including both in-state and out-of-state sources) (23%) and the industrial sector (18%). Residential and commercial activity accounted for approximately 9% of the emissions.

While California has the second highest rate of GHG production in the nation, it should also be noted that California has one of the lowest per capita rates of GHG emissions, as shown in Exhibit 7. According to Exhibit 7, California had the fourth lowest per capita rate of CO_2 production from fossil fuels in the United States. Wyoming produced the most CO_2 per capita, while the District of Columbia produced the lowest.

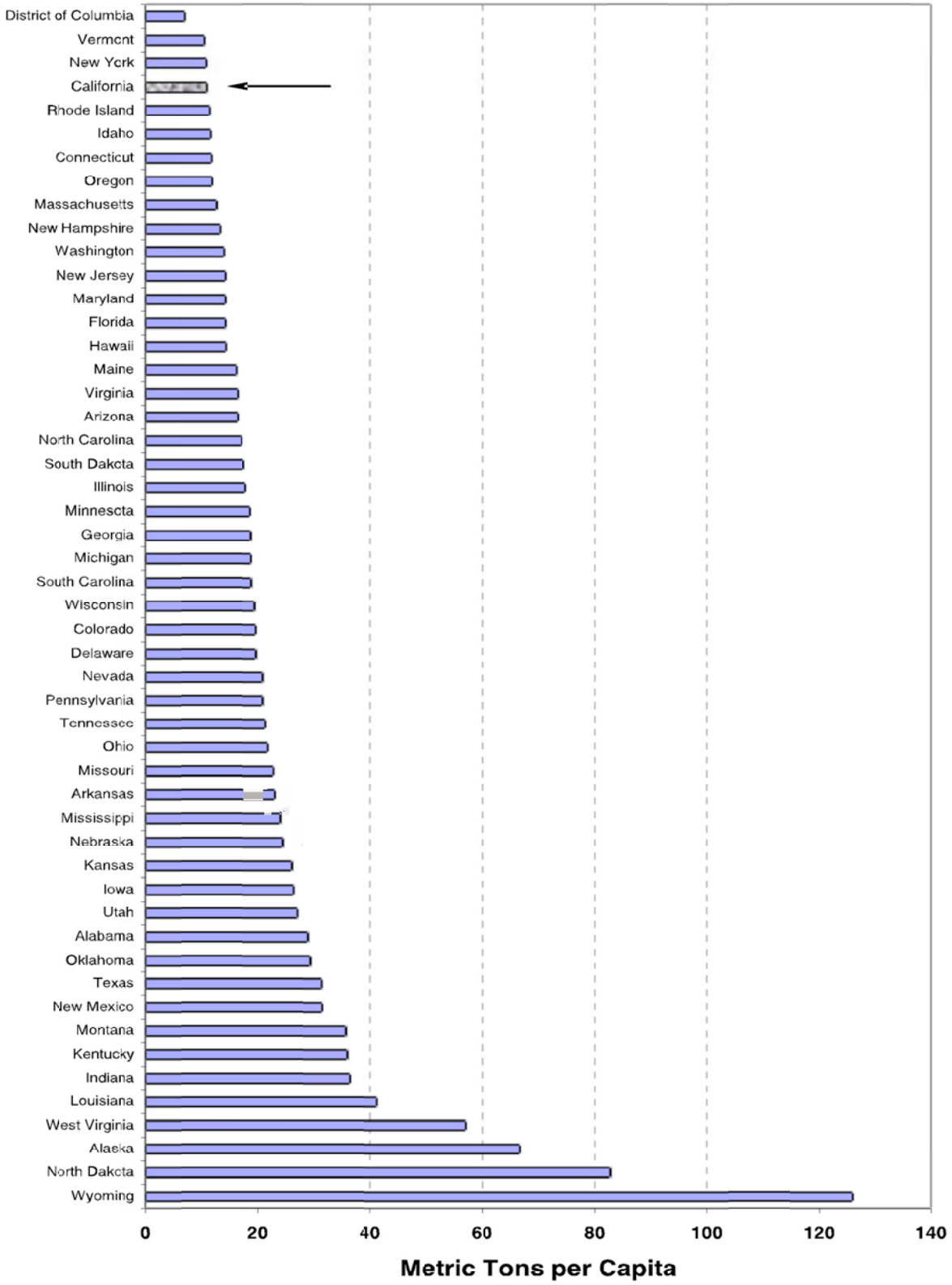
1.3 Regulatory Framework

1.3.1 Federal Plans, Policies, Regulations, and Laws.

The federal government began studying the phenomenon of global warming as early as 1978 with the National Climate Protection Act, 92 Stat. 601, which required the President to establish a program to "assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications." The 1987 Global Climate Protection Act, Title XI of Pub. L. 100-204, directed the U.S. EPA to propose a "coordinated national policy on global climate change," and ordered the Secretary of State to work "through the channels of multilateral diplomacy" to coordinate efforts to address global warming. Further, in 1992, the United States ratified a nonbinding agreement among 154 nations to reduce atmospheric GHGs.

The U.S. EPA has several regulatory initiatives to reduce greenhouse gas emissions. On August 3, 2015, the EPA issued the Clean Power Plan, which put the nation on track to cut harmful pollution from the power sector by 32 percent below 2005 levels, while also cutting smog-and soot-forming emissions that threaten public health by 20 percent. Previously, on May 13, 2010, EPA set greenhouse gas emissions thresholds to define when permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule "tailors" the requirements of these Clean Air Act permitting programs to limit covered facilities to the nation's largest greenhouse gas emitters: power plants, refineries, and cement production facilities.

Exhibit 7 - CO2 Emissions Per Capita (2001)



Source: California Energy Commission, "Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004," December 2006

G&A

EPA and the National Highway Traffic Safety Administration (NHTSA) are taking coordinated steps to enable the production of a new generation of clean vehicles through reduced greenhouse gas emissions and improved fuel use. Together, the enacted and proposed standards are expected to save more than six billion barrels of oil through 2025 and reduce more than 3,100 million metric tons of carbon dioxide emissions. Additionally, EPA is also responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. By 2022, the Renewable Fuel Standard (RFS) program will reduce greenhouse gas emissions by 138 million metric tons, about the annual emissions of 27 million passenger vehicles, replacing about seven percent of expected annual diesel consumption and decreasing oil imports by $41.5 billion.

The U.S. EPA has issued two proposals to further reduce GHG emissions from municipal solid waste landfills. The EPA has proposed a suite of requirements that would reduce GHG emissions from the oil and natural gas industry.

1.3.2 California State Plans, Policies, Regulations, and Laws

In the past several years, California has distinguished itself as a national leader in efforts to address global climate change by enacting several major pieces of legislation, engaging in multi-national and multi-state collaborative efforts, and preparing a wealth of information on the impacts associated with global climate change.

In November 2008, the Governor issued Executive Order S-13-08 directing state agencies to plan for sea level rise and other climate change impacts. There are four key actions in the Executive Order: (1) initiation of a climate change adaptation strategy that will assess the state's expected climate change impacts where the state is most vulnerable, with recommendations by early 2009; (2) an expert panel on sea level rise will inform state planning and development efforts; (3) interim guidance to state agencies on planning for sea level rise in coastal and floodplain areas for new projects; and (4) initiation of a report on critical existing and planned infrastructure projects vulnerable to sea level rise.

Assembly Bill 32, the California Global Warming Solutions Act of 2006 (Health and Safety Code § 38500 et seq.). In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006. In general, AB 32 directs the California Air Resources Board ("CARB") to do the following:

- On or before June 30, 2007, CARB shall publish a list of discrete early action measures for reducing GHG emissions that can be implemented by January 1, 2010;

- By January 1, 2008, establish the statewide GHG emissions cap for 2020, based on CARB's calculation of statewide GHG emissions in 1990 (an approximately 25 percent reduction in existing statewide GHG emissions);

- Also by January 1, 2008, adopt mandatory reporting rules for GHG emissions sources that "contribute the most to statewide emissions" (Health & Safety Code § 38530);

- By January 1, 2009, adopt a scoping plan that indicates how GHG emission reductions will be achieved from significant GHG sources through regulations, market mechanisms, and other strategies;

- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures;

- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that will achieve the statewide GHG emissions limit by 2020; and

- On January 1, 2012, CARB's GHG emissions regulations become operative.

- On January 1, 2020, achieve 1990 levels of GHG emissions.

In a December 2006 report, CARB estimated that California emitted between 425 and 468 million metric tons of CO_2 in 1990. In December 2007, CARB finalized 1990 emissions at 427 million metric tons of CO_2. In the August 2007 draft report, CARB estimated California emitted approximately 480 million metric tons of CO_2 in 2004. Based on the U.S. Census Bureau California 2007 population of 36,553,215, this would result in about 13 metric tons of CO_2 per capita.

AB 32 takes into account the relative contribution of each source or source category to protect adverse impacts on small businesses and others by requiring CARB to recommend a *de minimis* (minimal importance) threshold of GHG emissions below which emissions reduction requirements would not apply. AB 32 also allows the Governor to adjust the deadlines mentioned above for individual regulations or the entire state to the earliest feasible date in the event of extraordinary circumstances, catastrophic events, or threat of significant economic harm.

The Scoping Plan was first approved by the Board in 2008 and must be updated every five years. The First Update to the Climate Change Scoping Plan was approved by the Board on May 22, 2014. ARB is moving forward with a second update to the Scoping Plan to reflect the 2030 target established in Executive Order B-30-15.

Executive Order B-30-15. Governor Edmund G. Brown Jr. on April 29, 2015 issued an executive order to establish a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030. This is the most aggressive benchmark enacted by any

government in North America to reduce dangerous carbon emissions over the next decade and a half. "With this order, California sets a very high bar for itself and other states and nations, but it's one that must be reached - for this generation and generations to come," said Governor Brown.

The executive action sets the stage for the important work being done on climate change by the Legislature. The Governor's executive order aligns California's greenhouse gas reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris to be convened in 2015. The 28-nation European Union, for instance, set the same target for 2030 just last October.

California is on track to meet or exceed the current target of reducing greenhouse gas emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent under 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2 degrees Celsius - the warming threshold at which scientists say there will likely be major climate disruptions such as super droughts and rising sea levels.

CARB "Early Action Measures" (June 30, 2007). On June 21, 2007, CARB approved its early action measures to address climate change, as required by AB 32. The three measures include: (1) a low carbon fuel standard, which will reduce the carbon-intensity in California fuels, thereby reducing total CO_2 emissions; (2) reduction of refrigerant losses from motor vehicle air conditioning system maintenance through the restriction of "do-it-yourself" automotive refrigerants; and (3) increased CH_4 (methane) capture from landfills through the required implementation of state-of-the-art capture technologies.

CARB Mandatory Reporting Regulations (December 2008). Under AB 32, CARB propounded regulations to govern mandatory greenhouse gas emissions reporting for certain sectors of the economy, most dealing with approximately 94 percent of the industrial and commercial stationary sources of emissions. Regulated entities include electricity generating facilities, electricity retail providers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and industrial sources that emit over 25,000 metric tons of CO2 from stationary source combustion.

Senate Bill 97 (2007). By July 1, 2009, the Governor's Office of Planning and Research (OPR) is directed to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions, as required by the California Environmental Quality Act. The Resources Agency is required to certify and adopt these guidelines by January 1, 2010. OPR is required to periodically update these guidelines as CARB implements AB 32. In addition, SB 97 states that the failure

to include a discussion of greenhouse gas emissions in any CEQA document for a project funded under the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006, or projects funded under the Disaster Preparedness and Flood Prevention Bond Act of 2006 shall not be a cause of action under CEQA. This last provision will be repealed on January 1, 2010. In response to SB 97, the Office of Planning and Research ("OPR") issued a Technical Advisory on CEQA and Climate Change in June 2008. The Advisory provides an outline of what should be included in a GHG analysis under CEQA (http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf). In January 2009, OPR issued draft amendments to the CEQA Guidelines that address GHGs. Among the amendments are the following:

- Determining the Significance of Impacts from Greenhouse Gas Emissions (Guidelines § 15064.4);
- Thresholds of Significance (Guidelines ¤ 15064.7(c));
- Discussion of Cumulative Impacts (Guidelines ¤ 15130(a)(1)(B) and Guidelines § 15130(f));
- Tiering and Streamlining the Analysis of Greenhouse Gas Emissions (Guidelines § 15183.5).

Executive Order S-01-07 (2007). Executive Order S-01-07 calls for a reduction in the carbon intensity of California's transportation fuels by at least 10 percent by 2020. As noted above, the low-carbon fuel standard ("LCFS") was adopted by CARB as one of its three "early action measures" on June 21, 2007.

Senate Bill 1368 (2006) (Public Utilities Code §§ 8340-41). SB 1368 required the California Public Utilities Commission ("PUC") to establish a "GHG emission performance standard" by February 1, 2007, for all electricity providers under its jurisdiction, including the state's three largest privately owned utilities. These utilities provide approximately 30 percent of the state's electric power. After the PUC acted, the CEC adopted a performance standard "consistent with" the PUC performance standard and applied it to local publicly-owned utilities on May 23, 2007 (over one month ahead of its June 30, 2007 deadline). Cal. Pub. Res. Code § 8341(e)(1). However, the California Office of Administrative Law ("OAL") found four alleged flaws in the CEC's rulemaking. The CEC overcame these alleged flaws and adopted reformulating regulations in August 2007.

Senate Bill 107 (2006). Senate Bill 107 ("SB 107") requires investor-owned utilities such as Pacific Gas and Electric, Southern California Edison and San Diego Gas and Electric, to generate 20 percent of their electricity from renewable sources by 2010. Previously, state law required that this target be achieved by 2017.

Senate Bill 375 (September 2008). In September 2008, SB 375 was signed by Governor Schwarzenegger. SB 375 is a comprehensive global warming bill that helps to achieve the goals of AB32. To help establish these targets, the CARB assigned a Regional Targets Advisory Committee to recommend factors to be considered and methodologies for setting greenhouse gas emission reduction targets. SR 375 also provides incentive – relief from certain CEQA requirements for development projects that are consistent with regional plans that achieve the targets. SB 375 requires CARB to develop, in collaboration with the Metropolitan Planning Organization (MPO), passenger vehicle greenhouse gas emissions reduction targets for 2020 and 2035 by September 30, 2010. The MPO is required to include and adopt, in their regional transportation plan, a sustainable community strategy that will meet the region's target provided by CARB.

California's Renewable Energy Portfolio Standard Program (2005). In 2002, California established its Renewable Energy Portfolio Standard Program, which originally included a goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent by 2017. The state's most recent 2005 Energy Action Plan raises the renewable energy goal from 20 percent by 2017, to 33 percent by 2020.

Title 24, Part 6, California Code of Regulations (2005). In 2005, California adopted new energy efficiency standards for residential and nonresidential buildings in order to reduce California's energy consumption. This program has been partially responsible for keeping California's per capita energy use approximately flat over the past 30 years.

Assembly Bill 1493 (2002) (Health and Safety Code § 43018.5). Assembly Bill 1493 ("AB 1493") required CARB to develop and adopt the nation's first GHG emission standards for automobiles. Not only have litigants challenged their legality in federal court, but also USEPA denied California's request for a Clean Air Act waiver to implement its regulations. As of this writing, California and other states that seek to adopt California's greenhouse gas emissions standards for automobiles are challenging USEPA's denial in federal court.

California Air Resource Board Cap-and-Trade Regulation. The California Air Resource Board has implemented a cap-and-trade type program, pursuant to the AB-32 directed Scoping Plan, applicable to specific industries that emit more than 25,000 MTCO2e. The AB 32 Scoping Plan identifies a Cap-and-Trade program as one of the strategies California will employ to reduce the greenhouse gas (GHG) emissions that cause climate change. Under Cap-and-Trade, an overall limit on GHG emissions from capped sectors will be established by the Cap-and-Trade program and facilities subject to the cap will be able to trade permits (allowances) to emit GHGs. The program started on January 1, 2012, with an enforceable compliance obligation beginning with the 2013 GHG emissions for GHG emissions from stationary sources. The petroleum and natural gas systems sector is covered starting in 2013 for stationary and related combustion, process vents and flare emissions if the total emissions from these sources exceed 25,000 MTCO2e per year. Suppliers of natural gas and

transportation fuels are covered beginning in 2015 for combustion emissions from the total volume of natural gas delivered to non-covered entity or for transportation fuels.

Cap-and-Trade is designed to reduce the emissions from a substantial percentage of GHG sources (about 80% of GHG emissions will come under the program) within California through a market trading system. The system would reduce GHG emissions by reducing the available GHG "allowances" over time up until the year 2020. The program beyond the year 2020 has not been designed yet, but the program is intended to extend beyond that timeframe. Facilities are required to obtain an "allowance", either through purchasing on auction or through freely allocated "industry assistance" allowances from CARB, for each MTCO2e of GHG they emit. CARB issues the "industry assistance" allocations for free for a number of industries. These are based, in part, on a pre-defined "benchmark" of GHG emissions per unit of production.

For the oil recovery production sector, allowances are provided as a function of the amount of crude oil produced, thereby establishing, in effect, a level of efficiency in regards to GHG emissions for that sector. Other sectors are also allocated allowances based on their own respective activities. If an operation within the sector operates less efficiently than the specified "benchmark", thereby receiving an insufficient number of "free" allowances to cover their emissions, they would be required to implement efficiency improvements or purchase additional allowances from the CARB auction. Some availability of "offsets" is also included in the program which can be obtained from specific, allowable offset programs, such as GHG reduction projects related to forestry, livestock and ozone depleting chemicals. Offsets outside of these three options are not allowed at this time. The first group of sectors began trading in allowances in 2012. That group includes the oil and gas sector as well as most stationary sources. A second group is planned to begin the program in 2015, which would include the transportation fuels sector. CARB auctioned about 23 million allowances in November 2012 to be used for the 2013 year.

For subsequent periods after the initial 2013 period, allowances are planned to be distributed freely through the "industry assistance" program or auctioned off. Industry assistance allowances would decrease each year as per a "cap adjustment factor". The cap adjustment factor would be about 2-3% annually through 2020. The total allowances allowed to be allocated each year (either freely allocated or auctioned) are limited by the defined allowance budget, which decreases each year through 2020 and is current set at about 163 million MTCO2e for the year 2013. An operator is required to participate in the Cap-and-Trade program if its facility emits more than 25,000 MTCO2e annually. Annual reporting of GHG emissions is required under the CARB Mandatory Reporting Rule for facilities that emit more than 10,000 MTCO2e annually.

1.3.3 SCAQMD Plans, Policies, Regulations and Laws

The South Coast Air Quality Management District ("SCAQMD") adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" in April 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:

- Phase out the use and corresponding emissions of chlorofluorocarbons (CFCs), methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;
- Phase out the large quantity use and corresponding emissions of hydrochlorofluorocarbons (HCFCs) by the year 2000;
- Develop recycling regulations for HCFCs (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and,
- Support the adoption of a California GHG emission reduction goal.

The legislative and regulatory activity detailed above is expected to require significant development and implementation of energy efficient technologies and shifting of energy production to renewable sources.

1.3.4 City of Long Beach GHG Plans

The City of Long Beach adopted an "Air Quality Element," (adopted December 3, 1996). The Element does not contain specific control strategies for greenhouse gases except a policy to support reduced energy consumption through conservation improvements that would reduce greenhouse gas emissions (Policy 7.1.7).

The City has announced that they are developing a Climate Action and Adaptation Plan. No details on the plan are available at this time (http://www.lbds.info/climate/).

1.4 Existing Emissions

A minimal amount of air emissions is currently generated by oil field operations. Currently 33 wells are in production. However, without any additional permits the field could operate 53 wells in a combination of production wells and water injection wells. The oil production is cyclical, and the 53 wells estimate of potential operations is based on existing facilities, existing permits, as well as the cyclical operations and historical operation rates. Estimates were made of emissions for the field operating at its existing potential level.

Emissions come from electrical consumption, trucks driving oil from the site to the refinery, and from on-site remedial and maintenance drilling rigs. It was estimated that two drilling rigs could be operating every day of the year during daylight hours (email from InterAct, Val Lerma, P.E., December 6, 2016). These drilling rigs would be driven by diesel engines. Historically, a 425 hp and a 525 hp engines were used. Emissions from these drilling rigs were modeled using the CalEEMod emissions model and the output is presented in the Appendix.

Heavy duty diesel trucks would drive from the site to refineries in Wilmington and Torrance. It was estimated that an average 32 mile round trip for oil hauling would occur. CalEEMod (version 2016.3.1) was used to estimate oil hauling emissions.

It should be noted that wells on-site are electric and that electric consumption will generate emissions. Lederhos Engineering in "Synergy Lease Only Production Forecast" estimates that the power requirement would be 7.206 MW. That power would be provided by Southern California Edison, and CalEEMod (v. 2016.3.1) was used to estimate those emissions.

Additionally, there are existing workers that travel to and from the site on a daily basis. Approximately 15 employees travel to and from the site daily. These emissions were estimated with CalEEMod.

The estimate of potential existing emissions is presented below in Table 3. The emissions are presented in terms of metric tons per year. The analysis shows that the site potentially generates 22,208 metric tons of equivalent CO2 per year (MTCO2EQ/YR).

Table 3 Potential Existing Emissions (Metric Tons Per Year)

	CO2	CH4	N2O	CO2EQ
Electrical Usage	20,119	1	0	20,190
Drilling Operations	1,125	0	0	1,133
Oil Trucks	850	0	0	851
Employee Travel	36	0	0	36
Total Potential Existing Emissions	22,129	1	0	22,211

2.0 POTENTIAL CLIMATE CHANGE IMPACTS

2.1 Significance Thresholds

As discussed above, the CEQA Guidelines do not include or recommend any particular threshold of significance; instead, they leave that decision to the discretion of the lead agency. During the development of the CEQA Guidelines update to address GHG, the Natural Resources Agency concluded that the CEQA Guidelines do not establish significance thresholds for other potential impacts and SB97 did not authorize the development of a statewide threshold as a part of the guidelines update[1].

Early in the process of developing the guidelines The Governor's Office of Planning and Research (OPR) published a Technical Advisory[2] that requested CARB to recommend a method for setting significance thresholds to encourage consistency and uniformity in the CEQA analysis of the GHG emission impacts. On October 24, 2008, CARB published its proposed approach to setting significance thresholds[3]. Two public meetings were held to present and clarify the proposed approach and CARB received public comments on the proposal[4]. However, development of the thresholds was not continued after the close of the public comment period at the request of OPR.

Several California Air Districts have adopted significance thresholds for projects where they are the lead agency (primarily air permits for industrial projects) and have provided recommendations for significance thresholds for commercial and residential development projects. In June 2010, the Bay Area Air Quality Management District (BAAQMD) adopted CEQA guidelines with recommended GHG thresholds of significance for general development projects, which were updated in 2011. On March 5, 2012, the Alameda County Superior Court issued a judgment finding that the Air District had failed to comply with CEQA when it adopted the Thresholds and ordered the district to no longer recommend the Thresholds. SCAQMD has adopted significance thresholds for industrial projects where they are the lead agency, which included recommendations for recommended significance thresholds for development projects. However, SCAQMD has stopped working on

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[1] "Final Statement of Reasons for Regulatory Action Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97" California Natural Resources Agency, December 2009. http://ceres.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf (accessed 1/22/2013)

[2] "CEQA AND CLIMATE CHANGE: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review" June 19, 2008. http://opr.ca.gov/docs/june08-ceqa.pdf (accessed 1/22/2013)

[3] "Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act" October 24, 2008. http://www.arb.ca.gov/cc/localgov/ceqa/meetings/102708/prelimdraftproposal102408.pdf (accessed 1/22/2013)

[4] http://www.arb.ca.gov/cc/localgov/ceqa/ceqacomm.htm (accessed 1/22/2013)

developing these recommendations awaiting a resolution of the BAAQMD legal proceedings.

The following sections discuss the recommended CARB threshold approach, as well as the proposed SCAQMD and adopted but rescinded BAAQMD significance thresholds. Section 2.1.1 discusses CARB's significance threshold development and Section 2.1.2 discusses SCAQMD's significance threshold development. These proposed thresholds were used as guidance for the Significance Thresholds that will be used to determine the project's GHG impact potential and are described in Section 2.1.3.

2.1.1 CARB Significance Thresholds Approach

On October 24, 2008, the California Air Resources Board (CARB) published a preliminary staff proposal of approaches for setting GHG significance thresholds for CEQA. In this document, CARB considered but rejected the use of a "zero threshold" that would have identified any project emitting GHGs as being significant and asserted that a non-zero threshold can be supported by substantial evidence. Non-zero thresholds were found to be not mandated because some level of emissions is still consistent with stabilizing atmospheric GHG concentrations and that current and anticipated regulations, apart from CEQA, will proliferate and increasingly will reduce GHG contributions of past, present and future projects. However, CARB argued that any non-zero threshold must make substantial contributions in reducing the peak of the State's GHG emissions. The thresholds should cause that peak to occur sooner and put California on track to meet its interim (2020) and long-term (2050) emission reduction targets.

The CARB approach recognized that different GHG thresholds may apply in different sectors because some sectors contribute more to the problem and should be obliged to provide greater reductions and that differing levels of emissions reductions were expected from different sectors in order to meet the State's objectives. Further, the data and science suggests that sectors must be treated separately and different thresholds—qualitative, quantitative and performance-based—can apply to different sectors.

Specific threshold recommendations were proposed for the two types of projects which local agencies are typically the CEQA lead agency, industrial projects, and residential/commercial projects. However, the two approaches are similar. A non-exempt project that meets specified performance standards and whose emissions are less than a specified amount would be determined to be less than significant. For residential/commercial projects, a project that is consistent with a previously approved plan meeting the following requirements would be considered to have a less than significant impact relative to climate change:

- Addresses GHG emissions.
- Satisfies 15064(h)(3) of the California Code of Regulations.

- Meets a community level GHG target consistent with the statewide emissions limit in AB 32 and where the plan will apply beyond 2020, Executive Order S-3-05.
- Is consistent with a transportation related reduction target adopted by CARB pursuant to SB 375.
- Includes a GHG inventory and mechanisms to regularly monitor and evaluate emissions.
- Incorporates specific, enforceable GHG requirements.
- Incorporates mechanisms that allow the plan to be revised in order to meet targets.

AND

- Has a certified final CEQA document (see 15152(f)).

CARB proposed that Industrial projects that meet CARB performance standards for construction-related emissions and transportation emissions or incorporate equivalent mitigation measures AND emit less than 7,000 MT/yr. CO_2EQ from non-transportation sources would be considered less than significant. Residential/commercial projects that meet CARB performance standards for constructed related emissions, energy use, water use, waste and transportation AND emit less GHG's than a threshold to be developed later would be considered less than significant. All other projects would be presumed to be significant and implement all feasible mitigation measures. Note that the initial proposal did not specify the performance standards but left their development for later work.

In October of 2008 CARB held a public meeting to present the draft document and request public input. In December of 2008 CARB held a second public meeting that provided a refinement of the proposal including specific performance standards. The suggested construction performance standards were:

- Provide alternative transportation mode options or incentives for workers to and from worksite on days that construction requires 200 or more workers; and
- Recycle and/or salvage at least 75% of non-hazardous construction and demolition debris by weight (residential) or by weight in volume (commercial); and
- Use recycled materials for at least 20% of construction materials based on cost for building materials, based on volume for roadway, parking lot, sidewalk and curb material. Recycled materials may include salvaged, reused, and recycled content materials.

The proposed performance standards for energy use, water use, waste and transportation applicable to residential/commercial projects were:

> **Energy:** Meet California Energy Commission's (CEC) Tier II Energy Efficiency standards in effect at the time building construction begins. At the time this represented a 30% reduction in combined space heating, cooling, and water-heating energy compared to 2008 Title 24 Standards.
>
> **Water:** Provide a minimum 20% reduction in indoor potable water use and 50% reduction in outdoor potable water used for landscape irrigation over the water use level projected by the methodology in the California Green Building Code, Section 603.2 (indoor) and 604.2 (outdoor).
>
> **Waste:** Where local recycling and/or composting programs exist design facilities and structures to encourage participation in the program, install adequate, accessible recycling and composting receptacles in common or public areas, AND provide easy access to central recycling and composting receptacles or collections areas.
>
> **Transportation:** Residential projects demonstrate that the average vehicle miles traveled per household year is projected not to exceed 14,000 miles. Commercial projects must be within ½ mile of residential zone with average density of 10 du/net acre AND within ½ mile of at least 10 neighborhood services AND provide pedestrian access between project and services AND institute a comprehensive transportation demand management (TDM) program to reduce employee trips by at least 20%.

In mid-December CARB announced that it was extending the deadline for public comments until January 9, 2009 and after that a revised draft would be prepared and circulated for public comment prior to taking the proposal to the board for approval. However, CARBs work on developing the thresholds ceased soon after this due to the conclusions reached by OPR discussed above.

2.1.2 SCAQMD's Significance Thresholds

On December 5, 2008, the South Coast Air Quality Management District (SCAQMD) adopted GHG significance threshold for Stationary Sources, Rules and Plans where the SCAQMD is lead agency. The threshold uses a tiered approach. The project is compared with the requirements of each tier sequentially and if it complies with any tier, it is determined to not result in a significant impact.

Tier 1 excludes projects that are specifically exempt from SB97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. Tier 4 consists of

three decision tree options. Under the first option, the project would be excluded if design features and/or mitigation measures resulted in emissions 30 percent lower than business as usual emissions. Under the second option, the project would be excluded if it had early compliance with AB 32 through early implementation of CARB's Scoping Plan measures. Under the third option, project would be excluded if it met sector based performance standards. However, the specifics of the Tier 4 compliance options were not adopted by the SCAQMD board to allow further time to develop the options and coordinate with CARB's GHG significance threshold development efforts. Tier 5 would exclude projects that implement offsite mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level.

The guidance document prepared for the stationary source threshold recommended using the same tiered approach for residential and commercial projects with a 3,000 metric ton CO_2 Equivalent per year ($MTCO_2EQ$/yr.) Tier 3 screening threshold. However, this was not adopted as the SCAQMD Board felt that more analysis was required along with coordination with CARB's GHG significance threshold development. At subsequent meetings of the SCAQMD GHG Working Group SCAQMD staff recommended two options for the Tier 3 screening threshold for residential and commercial projects. The first option would use a 3,500 $MTCO_2EQ$/yr. threshold for residential projects, a 1,400 $MTCO_2EQ$/yr. threshold for commercial projects and a 3,000 $MTCO_2EQ$/yr. for mixed-use projects. The second option would apply the 3,000 $MTCO_2EQ$/yr. for all commercial and residential projects.

The SCAQMD proposed compliance options for Tier 4 of the significance thresholds at subsequent GHG Working Group meetings. The first option would be a reduction of 23.9% in GHG emissions over the base case. This percentage reduction is the land use sector portion of the CARB Scoping Plan's overall reduction of 28%. This target would be updated as the AB 32 Scoping Plan is revised. The base case scenario for this reduction still needs to be defined. Residual emissions would need to be less than 25,000 $MTCO_2EQ$/year to comply with the option. Staff proposed efficiency targets for the third option of 4.6 $MTCO_2EQ$/year per service population (the population of residential portions of projects plus the number of employees of commercial portions of projects.) for project level analysis and 6.6 $MTCO_2EQ$/year for plan level analyses. For project level analyses, residual emissions would need to be less than 25,000 $MTCO_2EQ$/year to comply with this option.

2.1.3 Project Significance Threshold

In December 5, 2008, the South Coast Air Quality Management District (SCAQMD) adopted GHG significance threshold for Stationary Sources, Rules and Plans where the SCAQMD is lead agency. The threshold utilizes a tiered approach, with a screening significance threshold of 10,000 MT CO_2EQ for industrial projects. The SCAQMD has also developed draft thresholds for commercial and residential projects, where it is not the lead. The draft recommends a 3,000 $MTCO_2EQ$/yr screening threshold for residential and commercial projects. This project most closely represents the industrial projects used by the SCAQMD

for their industrial projects. Therefore, the 10,000 MT CO_2EQ per year will be used for the significance threshold for this project. The methodology recommends that total construction emissions be amortized over a 30-year period or the project's expected lifetime if it is less than 30 years. The SCAQMD's working group has not set a date for finalizing the recommendations.

2.2 Construction Emissions

2.2.1 Methodology

Emissions during the phases of construction were calculated using the California Emissions Estimator Model (CalEEMod). CalEEMod is a computer program developed by the SCAQMD in conjunction with the California Air Resources Board (CARB). The model calculates emissions for construction of various projects. For on-road vehicular emissions, the CalEEMod model utilizes the EMFAC2007 emission rates that have also been developed by CARB. CalEEMod considers the following phases in its calculation of construction emissions; demolition, site preparation, grading, building construction, paving, and painting. Not all of the construction activities have all of the phases contained in the CalEEMod. Scheduling and off-road equipment were provided by SPEC Services in their "Draft Project Description Information," (dated April 21, 2016). The SPEC document was the primary resource that describes the activities associated with each phase of the construction project.

2.2.2 Phases of Construction

The construction of the proposed project will consist of the following nine phases. Each phase is briefly described below. For a more thorough discussion the reader is referred to the SPEC document identified above.

1. Demolition/Site Preparation
2. Construction of Well Cellars
3. Installation of Process Equipment
4. Construction of Tanks
5. Off-Site Construction
6. Construction of Office, Warehouse, and Parking Lot
7. Wetland Restoration
8. Turbine Commissioning
9. Landfill Excavation and Fill

Demolition and Site Preparation. Demolition and site preparation is the first phase of construction. It is estimated to last approximately 4 months. During this time, pipelines and

tanks will be removed, cut into manageable size pieces, and hauled to the nearest appropriate landfill. At this time the landfill in Montebello has been flagged as the likely depository. Tanks and pumpjacks will need to be dismantled and removed also. Currently it is estimated that 19 tanks on the Synergy and City Sites will be removed along with 53 pumpjacks. Existing on-site pipelines will be removed. An estimated 1,062 tons of material (including a 30% safety factor) will be hauled away. Some removal of impaired soils from the Synergy and City sites may be necessary. It is estimated that approximately 1,091 round trips will be needed to Simi Valley and 9 round trips to Kettleman Landfill to remove the impaired soil.

Construction of Well Cellars. The construction of well cellars and associated piping will be initiated next. The well cellars represent significant concrete structures and will be constructed at both the LCWA and Pumpkin Patch Sites. The well cellars will be approximately 8 feet deep and are designed to provide containment for a 25-year 24-hour rainstorm. Eventually the well cellars will contain the oil and gas production wells and also the water injection wells. The well cellars allow equipment, such as a drill rig, to move over the wells with no aboveground obstructions. Construction of the well cellars could take up to 12 months.

Installation of Process Equipment. The process area will consist of concrete pads and the processing equipment. Processing equipment includes pumps, gas compression systems, water treatment systems, turbines and other systems. This phase could last up to 15 months. Typical construction equipment that is likely to be used during this phase include trackhoes, loader, dozer, roller, backhoe, cranes, portable generators, forklift, air compressor, and welding equipment powered by diesel engines.

Construction of Tanks. Six tanks will need to be constructed; two at the Pumpkin Patch Site and four at the LCWA Site. Two aerial lifts, two cranes, two forklifts, and two welders were assumed for the construction.

Off-Site Construction. The project will include the installation of separate gas supply and oil shipping pipelines from the project facilities to the off-site tie-in points. Pipelines are expected to be constructed sequentially. A traffic plan will be prepared and construction of will occur as approved by the City. A crude oil pipeline approximately 2,700 feet will be installed. Two lines roughly totaling 10,600 feet will handle gas sales and purchase. Horizontal directional drill (HDD) piping will be used to go under roadways and other sensitive areas without the need for surface excavation. Approximately 2,400 feet of HDD piping will be installed. Trenches will be needed the LP gas, LP clean water, and power and communication lines. A 5-foot deep and 3 foot wide ditch will be excavated. Broken asphalt will be hauled away, and roughly 3,000 cubic yards of sand and slurry back fill will need to be imported.

Construction of Office, Warehouse, and Parking Lot. A 5,200 square foot office building and a 9,750 square foot warehouse will be constructed on the Pumpkin Patch Site. A 47-space parking lot will also be constructed. On both the Pumpkin Patch and LCWA Sites 22-foot high perimeter walls will be built. Standard construction techniques will be employed.

Wetlands Restoration. Minor modifications to the 77.3-acre mitigation bank area will be made to enhance tidal flows necessary for reestablishment of coastal salt marsh habitat. Some grading will be necessary to establish tidal channels, remove some existing berms and construct other berms, and lower some areas. Additionally, sheet piles will be installed to stabilize channels. The work will be conducted during a 6 month period outside of the nesting season. The earthwork necessary to complete each of these tasks will be accomplished through standard earth-moving equipment including excavators, bulldozers, front-end loaders, and trucks for hauling material. Additionally, sidewalk installation will be required Studebaker for both the Synergy and LCWA sites, along 2nd Street for the Synergy, LCWA, and City sites, and along Pacific Coast Highway for the Synergy site. Paving will be needed for driveway and parking area for the Visitor Center on the Synergy site.

Turbine Commissioning. Each of the four turbines will go through a commissioning process. Commissioning involves starting and stopping the turbine up to 10 times during the day and running the turbine for up to 20 hours. Turbine commissioning would occur after most, if not all, of the other phases have been completed.

Landfill Excavation and Fill. In addition to pipeline removal, it may be necessary to remove the buried landfill under the western two-thirds of the Pumpkin Patch site. If needed, this work would consist of the following phases: (1) remove the dry trash from the site and haul to a transfer station for disposal; and (2) using excavation equipment with a dredging bucket, remove wet trash so the water would be allowed to drain within the confines of the excavation. Any residual water brought to the surface would be contained for transfer to an on-site liquid retention Baker-type tank; the collected water would be sampled and subsequently disposed at an approved offsite facility.

Based upon a visual determination to identify the appropriate disposal method, inert waste would be hauled to a transfer facility within 5 to 10 miles, potentially hazardous waste would be hauled to a Class I or Class II facility, likely the Kettleman Hills Landfill. It is assumed that approximately 63,000 cubic yards of waste would be exported, and approximately 45,000 cubic yards of clean dirt would be imported. This fill material would likely be obtained from a site within a 10 to 50 mile radius.

2.2.3 Construction Emissions

Table 4 presents the results of the emissions calculations for the construction activities discussed above. Additionally, the emissions when amortized over a 30-year period are also shown. CalEEMod printouts are included in the Appendix.

Table 4 GHG Emissions for Construction (Metric Tons Per Year)

	CO2	CH4	N2O	CO2EQ
1. Demolition/Site Prep	464.5	0.1	0.0	466.1
2. Well Cellars	771.6	0.1	0.0	774.7
3. Process Equipment	1027.7	0.2	0.0	1031.7
4. Tank Construction	58.2	0.0	0.0	58.5
5. Off-Site Construction	331.7	0.1	0.0	333.2
6. Office/Warehouse	100.5	0.0	0.0	101.0
7. Wetlands Restoration	646.8	0.2	0.0	650.0
8. Turbine Commission	206.6	0.0	0.0	206.6
Subtotal	3,607.5	0.7	0.0	3,621.8
9. Landfill Excavation	1096.6	0.1	0.0	1098.7
Total Construction Emissions (Metric Tons)	4,704.2	0.8	0.0	4,720.5
Averaged Over 30 Years (Metric Tons Per Year)	156.8	0.0	0.0	157.4

2.3 Operational Emissions

Operational air pollutant emissions due to the project were calculated using the CalEEMod program and spreadsheets. The program calculated operational emissions for the various phases of the proposed project. For the Pumpkin Patch site emission sources include cars and trucks going to and from the site, natural gas for space heating, a diesel-powered drilling rig, and other miscellaneous sources. The site will not normally consume electricity from the public grid, but rather electricity will be generated by turbines at the LCWA site. A drilling rig will be in operation on a regular basis at both the LCWA and Pumpkin Patch sites, but will be electric (not diesel powered). Also at both the LCWA and Pumpkin Patch sites will be diesel powered workover drilling rigs. The workover rigs are anticipated to be approximately 500 hp and drill up to 12 hours per day. Tanks at both Pumpkin Patch and LCWA sites will be fixed-roof gas blanket design, which eliminates the direct emissions from tanks. Oil-containing tanks will be permitted through SCAQMD and equipped with BACT (Best

Available Control Technology). A flare system and an emergency generator will be located at the LCWA site, but will only be used in emergencies, and therefore, and not included in the emission projections. At the LCWA site there will be four gas turbine generator sets to convert natural gas from the wells to electricity. Currently it is envisioned that these generators will provide all of the electricity needed at the LCWA and Pumpkin Patch sites most of the time. Occasionally, additional power will need to be drawn from the SCE grid. At the Visitor Center on the Synergy site, emissions will be generated by electric consumption for lighting and natural gas consumption for space heating. The vast majority of emissions will be associated with cars traveling to and from the Visitor Center. Re-current painting of the facilities at all of the sites will also contribute to the emissions.

CalEEMod was used to calculate the annual emissions except for the emissions from the gas turbine generator sets. Output files from the CalEEMod program are presented in the appendix.

Emission calculations were provided by Solar Turbines (manufacturer of the Mercury 50 turbines) and dated November 7, 2016). The turbines will be part of a microgrid. The microgrid controls integration of multiple energy sources and uses to maximize efficiency, environmental benefits, cost savings and reliability. The energy source components will include a SCE grid connection, four 4.5 MW gas turbines (e.g., Solar Turbines Mercury 50) with heat recovery steam generators for cogeneration with potential generation of 18 MW, and solar photovoltaic with generation potential of 158 kW. The microgrid system will provide all of the energy needed for the facilities including drilling rigs and supporting equipment, pumps, two electric vehicle charging stations, and other equipment. The turbines will be required by the SCAQMD to meet the BACT standards, and this will likely require that the turbines have emission control features including lean-premix and selective catalytic reduction (SCR).

Table 5 presents the results of the emission projections showing the average annual air pollutant emissions for each site. The turbines, which will be at the LCWA site, are broken out separately.

Table 5 GHG Emissions for Operations (Metric Tons Per Year)

	CO2	CH4	N2O	CO2EQ
Pumpkin Patch	603	0.8	0.0	621
Visitor Center	606	0.2	0.0	611
LCWA Site	499	1.2	0.0	529
Turbines @ LCWA	67,581	0.0	0.0	67,581
SCE Power	1,011	0.0	0.0	1,014
Total Operational Emissions	70,300	2	0	70,356

2.4 Construction Plus Operational Emissions

The GHG emissions due to the project, both operational and construction are shown in Table 6. The operational emissions presented previously in Table 5, are combined with the annualized construction emissions presented in Table 4. The turbines, which will be at the LCWA site, are broken out separately. The existing oil field well sites would be phased out over a 40-year period, starting upon the completion and occupation of the new office building and warehouse on the Pumpkin Patch site. The emissions associated with the assumed baseline oil operations will be reduced by 75 percent once building permits are obtained for the office building on the Pumpkin Patch site. Over the next 20 years, half of the existing 53 wells will be abandoned. This represents an 87.5 percent reduction from the assumed baseline emission levels. By year 40, all wells will be abandoned, which represents a 100 percent reduction of the baseline emissions.

Table 6 Change in GHG Emissions (MTCO2EQ/Yr)

Activity	First 20 Years	Years 20 to 40	After 40 Years
Operational Emissions	70,356	70,356	70,356
Annualized Construction Emissions	157	157	0
New Annualized Emissions	70,513	70,513	70,356
Curtailed Emissions	16,871	19,558	22,211
Project Emissions	53,642	50,955	48,145

Table 6 shows that the change in GHG emissions for the project will be about 53,642 MTCO2EQ per year in the first year. The emissions are primarily due to the gas turbine sets. At 20 years when 87.5% of the existing oil field operations will be shutdown, the GHG emissions are reduced to 50,955 MTCO2EQ per year. And finally, when all existing oil field operations are stopped, the GHG emissions are reduced to 48,145. These levels are above the SCAQMD screening thresholds of 10,000 MTCO2EQ per year. The project emissions are above the threshold requirements of 10,000 MTCO2EQ per year, and therefore, climate change impacts will be significant.

2.5 Alternatives

Two alternatives are considered below. The first alternative, No Cogeneration, assumes that the waste heat from the turbines would simply be exhausted. No cogeneration is the more common field installation, but results in a lower overall efficiency and higher air emissions. Second, all power for the LCWA and Pumpkin Patch facilities could be obtained from Southern California Edison (SCE). This alternative is also considered for its impacts on greenhouse gas production.

2.5.1 No Cogeneration

Most oil production facilities of the type proposed do not utilize cogeneration. The use of cogeneration represents the utilization of advanced technology and an additional capital expense. However, the proposed project has included the use of cogeneration to minimize greenhouse gas emissions.

The primary focus of the cogeneration process will be to heat oil and water, and cool gas as part of the oil production/separation process. The water reclaimed from this process is

injected back into the oil production formation, and the gas and oil is sold for use and further processing, respectively. As the oil/water mixture enters the separation chamber it is heated and chemicals may be applied to enhance separation. Gas coming off of this process is cooled to remove water and heavy hydrocarbons. Without cogeneration, natural gas would be combusted in a boiler to heat the oil/water mixture. With cogeneration, waste heat from the turbine exhaust is used to heat the oil/water mixture rather than being exhausted to the atmosphere. Again without cogeneration, refrigeration units powered by electricity would be utilized. With cogeneration, the steam from the turbines powers the refrigeration units.

Therefore, without cogeneration additional greenhouse gases would be generated by the combustion of natural gas for heating and by electric consumption for cooling. These additional emissions were calculated. SPEC Services (email dated December 20, 2016) estimated that 41,160 kwh per day would be needed for cooling and that 480 mscfd (thousand standard cubic feet per day) of natural gas would need to be combusted for heating. Emission factors in CalEEMod (version 2016.3.1) were used to calculate the GHG emissions from electrical consumption. Emission factors from the U.S. Environmental Protection Agency ("Compilation of Air Emission Factors, AP-42", https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emission-factors) were used to compute emissions from the combustion of natural gas for heating. The results are presented in Table 7. The table provides the additional greenhouse gas emissions for heating and cooling and the total additional emissions.

Table 7 Emissions With and Without Cogeneration (metric tons per year)

	CO2EQ
Additional Heating Emissions	9,541
Additional Cooling Emissions	4,804
Additional Emissions Without Cogen	14,345
Power Emissions With Cogen	68,595
Power Emissions Without Cogen	82,941
Percent Increase Without Cogen	21%

The data in Table 7 indicates that 14,343 metric tons per year of equivalent carbon dioxide (MTCO2EQ/Yr) would be generated if cogeneration was not used. Without cogeneration, an additional 21% of GHG emissions would be generated. Therefore, the use of cogeneration as proposed for the project results in a significant GHG emission savings.

2.5.2 All Power from Southern California Edison

Instead of converting the natural gas produced from the oil operations to electrical power, all power could be obtained from the SCE network. Over the next 20 years the average power forecast for the LCWA and Pumpkin Patch facilities is 14.3 MW. Emission factors in CalEEMod (version 2016.3.1) were used to calculate the emissions if all of this power was purchased from SCE. The emission rate used in CalEEMod is a composite rate; it would include a mix of natural gas, oil, and possibly wind, solar, and nuclear. When reducing the power generation supplied to the grid, it is preferable to reduce sources of power that are higher polluting. Therefore, using the CalEEMod composite factors represent a low estimate of the power emissions that would be generated if SCE power was used instead of the proposed turbines. More realistically, the additional power would be generated by fossil fuel sources exclusively. The fossil fuel emission rate for the California region was used to generate the high estimate for the SCE Alternative Emissions ("eGRID2014 Summary Tables", http://epa.gov.egrid). The results are presented in Table 8. For comparison, the emissions associated with the power usage of the Proposed Project is also presented.

Table 8 Emissions from SCE Power Generation (MTCO2EQ/Yr)

	Low	High
SCE Alternative Emissions	40,058	53,720
Proposed Project Power Emissions	68,595	68,595
Percent Lower With SCE	42%	22%

The analysis shows that the GHG emissions generated by the SCE alternative are lower than the Proposed Project. In fact, the GHG emissions are reduced by 22% to 42% in comparison to the emissions generated by the project for power generation. Most like for reasons stated above the emissions would be reduced by an amount closer to 22% than the higher rate.

However, the analysis ignores the fact that the oil production process will result in natural gas production. This natural gas will be burnt somewhere. Previously, much of this natural gas would have been flared off which is a dirty and wasteful process and is not allowed by the SCAQMD anymore. The natural gas may be burned in water heaters and space heaters in homes, sold to a power company to combust and generate power, or combusted by other sources. The point is that the natural gas generated by the project will be combusted somewhere and additional GHG emissions generated. These additional GHG emissions are not considered in this alternative. As a worst-case, it is assumed that the Proposed Project does not include the turbines for electrical generation. SCE would need to generate power to supply the Proposed Project. It is very likely that they would need to use fossil fueled plants to supply that power since renewable power is already at maximum usage. This would result in SCE generating 53,720 MTCO2EQ/Yr of GHG emissions as shown above in Table 8.

The natural gas that will be produced needs to go somewhere, and for this example it is assumed that it will be burned in homes for space heating. CalEEMod was used to estimate the GHG emissions generated by space heating. The estimate is that 90,255 MTCO2EQ/Yr of GHG emissions would be generated by space heating. Therefore, the total of GHG emissions that might be generated if the turbines were not used is 143,975 MTCO2EQ/Yr. This is more than twice as high as the emissions generated by the Proposed Project for power generation. This analysis is summarized in the table below (Table 9). Therefore, the use of the turbines for the Proposed Project could represent a large emission savings when the total situation is considered.

Table 9 Potential GHG Emissions Generated Without Turbines (MTCO2EQ/Yr)

	GHG Emissions
SCE Emissions	53,720
Residential Space Heating	90,255
Total Emissions	143,975
Proposed Project Power Emissions	68,595
Percent Lower With Project	52%

3.0 MITIGATION MEASURES

Mitigation measures are required since the project will result in greenhouse gas emissions well above the SCAQMD thresholds. The exceedance is due primarily to the gas turbine generator sets. This equipment already use the Best Available Control Technology (BACT) so further reduction of emissions for the turbines is not possible.

As described above California's AB 32 GHG mitigation program includes a Cap and Trade regulation threshold of 25,000 metric tons of GHG. Because the Project exceeds that threshold it must comply with CARB's Cap and Trade regulation. In addition, the Project may be subject to additional reporting requirements and GHG reduction and trading requirements as these regulations continue to evolve. The primary mitigation vehicle for the project will be through th Cap and Trade program.

3.1 California Air Resources Board AB 32 Cap and Trade Credits/Offsets

Because the Project will comply with AB 32 and CARB's Cap and Trade regulation it will be required to retire GHG allowances or offsets equal to the Project's GHG emissions. Retiring the GHG allowances or offsets means the Project has to acquire them through a number of means carefully controlled by CARB, including the purchase of allowances in CARB-controlled auctions with variable and increasing cost, according to projections and decreasing supply.

Regarding the amount of required allowances/offsets, the Cap and Trade regulation uses measured operational GHG emissions as annually reported to CARB. Per the table in section III.c. above the annual measured operational GHG emissions are calculated to be between 67,581 (turbines only) and 70,356 (all sources) metric tons. For comparison, the calculation of annual GHG emissions calculated per EIR protocols shows GHG emissions of 53,642 metric tons, which accounts for construction and operational emissions, and ceasation of certain GHG generating activities. This means the Cap and Trade regulation will require the Project to mitigate GHG emissions beyond the amount identified per EIR protocols and in the Project EIR.

Table 10 Cap and Trade GHG Mitigation Compared to Project EIR GHG Emissions

GHG Emission Calculation Source	CO2 Emissions per Year (Metric Tons CO2/yr)
CARB Cap and Trade Mitigation	67,581 to 70,356
Project Construction and Operations/EIR	53,642
Excess GHG Mitigation with Cap and Trade (low)	13,970
Excess GHG Mitigation with Cap and Trade (high)	16,745

Thus, CARB's Cap and Trade regulation provides GHG mitigation beyond the GHG emissions amount identified in the Project EIR.

4.0 REFERENCES

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APPENDIX

Wetlands Facility Construction - Demolition/Site Prep Only

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	190.70	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acreage for project

Construction Phase - Demolition and Site Prep will occur simultaneously. Therefore everything put under Demolition.

Off-road Equipment - Per SPEC equipment schedule

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Haul truck distance to Montebello disposal site.

Demolition - Estimate by G&A and reviewed by SPEC. Includes pipe removal from Synergy, City and Pumpkin Patch sites.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	5.00

tblConstructionPhase	NumDays	3,100.00	100.00
tblConstructionPhase	NumDays	200.00	85.00
tblConstructionPhase	NumDays	310.00	2.00
tblConstructionPhase	NumDays	220.00	5.00
tblConstructionPhase	NumDays	120.00	1.00
tblConstructionPhase	PhaseEndDate	5/1/2017	1/16/2017
tblConstructionPhase	PhaseStartDate	4/29/2017	1/14/2017
tblGrading	AcresOfGrading	5.00	0.00
tblLandUse	LotAcreage	0.02	190.70
tblOffRoadEquipment	HorsePower	162.00	175.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	LoadFactor	0.38	0.73
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblTripsAndVMT	HaulingTripLength	20.00	23.10

tblTripsAndVMT	WorkerTripNumber	13.00	5.00
tblTripsAndVMT	WorkerTripNumber	23.00	10.00
tblTripsAndVMT	WorkerTripNumber	23.00	18.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.3053	2.7625	2.2388	3.3800e-003	0.0361	0.1690	0.2051	0.0111	0.1572	0.1683	0.0000	305.4421	305.4421	0.0817	0.0000	307.1581
Total	**0.3053**	**2.7625**	**2.2388**	**3.3800e-003**	**0.0361**	**0.1690**	**0.2051**	**0.0111**	**0.1572**	**0.1683**	**0.0000**	**305.4421**	**305.4421**	**0.0817**	**0.0000**	**307.1581**

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					
2017	0.3053	2.7625	2.2388	3.3800e-003	0.0361	0.1690	0.2051	0.0111	0.1572	0.1683	0.0000	305.4417	305.4417	0.0817	0.0000	307.1577
Total	**0.3053**	**2.7625**	**2.2388**	**3.3800e-003**	**0.0361**	**0.1690**	**0.2051**	**0.0111**	**0.1572**	**0.1683**	**0.0000**	**305.4417**	**305.4417**	**0.0817**	**0.0000**	**307.1577**

	ROG	NOx	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	tons/yr										MT/yr					
Area	4.7700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	4.4521	4.4521	1.8000e-004	5.0000e-005	4.4717
Mobile	4.7700e-003	0.0172	0.0629	1.3000e-004	8.8300e-003	2.6000e-004	9.0900e-003	2.3600e-003	2.4000e-004	2.6000e-003	0.0000	10.7250	10.7250	4.9000e-004	0.0000	10.7352
Waste						0.0000	0.0000		0.0000	0.0000	0.2517	0.0000	0.2517	0.0149	0.0000	0.5641
Water						0.0000	0.0000		0.0000	0.0000	0.0734	0.8617	0.9350	7.5700e-003	1.9000e-004	1.1518
Total	**9.6400e-003**	**0.0181**	**0.0637**	**1.4000e-004**	**8.8300e-003**	**3.3000e-004**	**9.1600e-003**	**2.3600e-003**	**3.1000e-004**	**2.6700e-003**	**0.3251**	**16.0388**	**16.3638**	**0.0231**	**2.4000e-004**	**16.9228**

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	4.7700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	4.4521	4.4521	1.8000e-004	5.0000e-005	4.4717
Mobile	4.7700e-003	0.0172	0.0629	1.3000e-004	8.8300e-003	2.6000e-004	9.0900e-003	2.3600e-003	2.4000e-004	2.6000e-003	0.0000	10.7250	10.7250	4.9000e-004	0.0000	10.7352

Waste						0.0000	0.0000		0.0000	0.0000	0.2517	0.0000	0.2517	0.0149	0.0000	0.5641
Water						0.0000	0.0000		0.0000	0.0000	0.0734	0.8617	0.9350	7.5700e-003	1.9000e-004	1.1517
Total	**9.6400e-003**	**0.0181**	**0.0637**	**1.4000e-004**	**8.8300e-003**	**3.3000e-004**	**9.1600e-003**	**2.3600e-003**	**3.1000e-004**	**2.6700e-003**	**0.3251**	**16.0388**	**16.3638**	**0.0231**	**2.4000e-004**	**16.9227**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	4/28/2017	5	85	
2	Site Preparation	Site Preparation	1/14/2017	1/16/2017	5	1	
3	Grading	Grading	1/17/2017	1/18/2017	5	2	
4	Building Construction	Building Construction	1/19/2017	6/7/2017	5	100	
5	Paving	Paving	6/8/2017	6/14/2017	5	5	
6	Architectural Coating	Architectural Coating	6/15/2017	6/21/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,500; Non-Residential Outdoor: 500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	3	8.00	175	0.73
Demolition	Rubber Tired Dozers	0	1.00	255	0.40

Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	8	6.00	75	0.37
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	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
Demolition	11	28.00	0.00	105.00	14.70	6.90	23.10	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Paving	9	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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					0.0114	0.0000	0.0114	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1583	1.6630	1.3772	2.0100e-003		0.0974	0.0974		0.0896	0.0896	0.0000	186.8463	186.8463	0.0573	0.0000	188.0486
Total	**0.1583**	**1.6630**	**1.3772**	**2.0100e-003**	**0.0114**	**0.0974**	**0.1088**	**1.7200e-003**	**0.0896**	**0.0914**	**0.0000**	**186.8463**	**186.8463**	**0.0573**	**0.0000**	**188.0486**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.7000e-004	0.0159	0.0117	4.0000e-005	1.0400e-003	2.4000e-004	1.2800e-003	2.9000e-004	2.2000e-004	5.1000e-004	0.0000	4.0043	4.0043	3.0000e-005	0.0000	4.0049
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2800e-003	6.3400e-003	0.0659	1.6000e-004	0.0131	1.1000e-004	0.0132	3.4700e-003	1.0000e-004	3.5700e-003	0.0000	11.7621	11.7621	6.1000e-004	0.0000	11.7749
Total	**5.2500e-003**	**0.0222**	**0.0775**	**2.0000e-004**	**0.0141**	**3.5000e-004**	**0.0144**	**3.7600e-003**	**3.2000e-004**	**4.0800e-003**	**0.0000**	**15.7664**	**15.7664**	**6.4000e-004**	**0.0000**	**15.7797**

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					0.0114	0.0000	0.0114	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1583	1.6630	1.3772	2.0100e-003		0.0974	0.0974		0.0896	0.0896	0.0000	186.8461	186.8461	0.0573	0.0000	188.0484
Total	**0.1583**	**1.6630**	**1.3772**	**2.0100e-003**	**0.0114**	**0.0974**	**0.1088**	**1.7200e-003**	**0.0896**	**0.0914**	**0.0000**	**186.8461**	**186.8461**	**0.0573**	**0.0000**	**188.0484**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.7000e-004	0.0159	0.0117	4.0000e-005	1.0400e-003	2.4000e-004	1.2800e-003	2.9000e-004	2.2000e-004	5.1000e-004	0.0000	4.0043	4.0043	3.0000e-005	0.0000	4.0049
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2800e-003	6.3400e-003	0.0659	1.6000e-004	0.0131	1.1000e-004	0.0132	3.4700e-003	1.0000e-004	3.5700e-003	0.0000	11.7621	11.7621	6.1000e-004	0.0000	11.7749
Total	**5.2500e-003**	**0.0222**	**0.0775**	**2.0000e-004**	**0.0141**	**3.5000e-004**	**0.0144**	**3.7600e-003**	**3.2000e-004**	**4.0800e-003**	**0.0000**	**15.7664**	**15.7664**	**6.4000e-004**	**0.0000**	**15.7797**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

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

Category	tons/yr										MT/yr					
Fugitive Dust					9.3000e-003	0.0000	9.3000e-003	4.9900e-003	0.0000	4.9900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0261	0.0185	2.0000e-005		1.3000e-003	1.3000e-003		1.2000e-003	1.2000e-003	0.0000	1.6719	1.6719	5.1000e-004	0.0000	1.6827
Total	**2.4200e-003**	**0.0261**	**0.0185**	**2.0000e-005**	**9.3000e-003**	**1.3000e-003**	**0.0106**	**4.9900e-003**	**1.2000e-003**	**6.1900e-003**	**0.0000**	**1.6719**	**1.6719**	**5.1000e-004**	**0.0000**	**1.6827**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total	**1.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.3000e-003	0.0000	9.3000e-003	4.9900e-003	0.0000	4.9900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0261	0.0185	2.0000e-005		1.3000e-003	1.3000e-003		1.2000e-003	1.2000e-003	0.0000	1.6719	1.6719	5.1000e-004	0.0000	1.6827
Total	**2.4200e-003**	**0.0261**	**0.0185**	**2.0000e-005**	**9.3000e-003**	**1.3000e-003**	**0.0106**	**4.9900e-003**	**1.2000e-003**	**6.1900e-003**	**0.0000**	**1.6719**	**1.6719**	**5.1000e-004**	**0.0000**	**1.6827**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total	**1.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

3.4 Grading - 2017

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					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4800e-003	0.0608	0.0407	6.0000e-005		2.9700e-003	2.9700e-003		2.7600e-003	2.7600e-003	0.0000	5.3983	5.3983	1.5400e-003	0.0000	5.4306
Total	**5.4800e-003**	**0.0608**	**0.0407**	**6.0000e-005**	**7.5000e-004**	**2.9700e-003**	**3.7200e-003**	**4.1000e-004**	**2.7600e-003**	**3.1700e-003**	**0.0000**	**5.3983**	**5.3983**	**1.5400e-003**	**0.0000**	**5.4306**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	1.0000e-005	0.0000	0.0990
Total	**4.0000e-005**	**5.0000e-005**	**5.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0988**	**0.0988**	**1.0000e-005**	**0.0000**	**0.0990**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4800e-003	0.0608	0.0407	6.0000e-005		2.9700e-003	2.9700e-003		2.7600e-003	2.7600e-003	0.0000	5.3983	5.3983	1.5400e-003	0.0000	5.4306
Total	**5.4800e-003**	**0.0608**	**0.0407**	**6.0000e-005**	**7.5000e-004**	**2.9700e-003**	**3.7200e-003**	**4.1000e-004**	**2.7600e-003**	**3.1700e-003**	**0.0000**	**5.3983**	**5.3983**	**1.5400e-003**	**0.0000**	**5.4306**

Mitigated Construction Off-Site

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

Worker	4.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	1.0000e-005	0.0000	0.0990
Total	**4.0000e-005**	**5.0000e-005**	**5.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0988**	**0.0988**	**1.0000e-005**	**0.0000**	**0.0990**

3.5 Building Construction - 2017

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	0.1173	0.9439	0.6863	1.0200e-003		0.0642	0.0642		0.0608	0.0608	0.0000	90.2669	90.2669	0.0204	0.0000	90.6961
Total	**0.1173**	**0.9439**	**0.6863**	**1.0200e-003**		**0.0642**	**0.0642**		**0.0608**	**0.0608**	**0.0000**	**90.2669**	**90.2669**	**0.0204**	**0.0000**	**90.6961**

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1173	0.9439	0.6863	1.0200e-003		0.0642	0.0642		0.0608	0.0608	0.0000	90.2667	90.2667	0.0204	0.0000	90.6960
Total	**0.1173**	**0.9439**	**0.6863**	**1.0200e-003**		**0.0642**	**0.0642**		**0.0608**	**0.0608**	**0.0000**	**90.2667**	**90.2667**	**0.0204**	**0.0000**	**90.6960**

Mitigated Construction Off-Site

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

3.6 Paving - 2017

Unmitigated Construction On-Site

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

Off-Road	4.0100e-003	0.0407	0.0308	5.0000e-005		2.3100e-003	2.3100e-003		2.1300e-003	2.1300e-003	0.0000	4.2856	4.2856	1.2400e-003	0.0000	4.3117
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.0100e-003**	**0.0407**	**0.0308**	**5.0000e-005**		**2.3100e-003**	**2.3100e-003**		**2.1300e-003**	**2.1300e-003**	**0.0000**	**4.2856**	**4.2856**	**1.2400e-003**	**0.0000**	**4.3117**

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	1.6000e-004	2.4000e-004	2.4900e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4448	0.4448	2.0000e-005	0.0000	0.4453
Total	**1.6000e-004**	**2.4000e-004**	**2.4900e-003**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4448**	**0.4448**	**2.0000e-005**	**0.0000**	**0.4453**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0100e-003	0.0407	0.0308	5.0000e-005		2.3100e-003	2.3100e-003		2.1300e-003	2.1300e-003	0.0000	4.2856	4.2856	1.2400e-003	0.0000	4.3117
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.0100e-003**	**0.0407**	**0.0308**	**5.0000e-005**		**2.3100e-003**	**2.3100e-003**		**2.1300e-003**	**2.1300e-003**	**0.0000**	**4.2856**	**4.2856**	**1.2400e-003**	**0.0000**	**4.3117**

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	1.6000e-004	2.4000e-004	2.4900e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4448	0.4448	2.0000e-005	0.0000	0.4453
Total	**1.6000e-004**	**2.4000e-004**	**2.4900e-003**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4448**	**0.4448**	**2.0000e-005**	**0.0000**	**0.4453**

3.7 Architectural Coating - 2017

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	0.0116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total	**0.0124**	**5.4600e-003**	**4.6700e-003**	**1.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**0.6383**	**0.6383**	**7.0000e-005**	**0.0000**	**0.6397**

Unmitigated Construction Off-Site

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

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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total	**0.0124**	**5.4600e-003**	**4.6700e-003**	**1.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**0.6383**	**0.6383**	**7.0000e-005**	**0.0000**	**0.6397**

Mitigated Construction Off-Site

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

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.7700e-003	0.0172	0.0629	1.3000e-004	8.8300e-003	2.6000e-004	9.0900e-003	2.3600e-003	2.4000e-004	2.6000e-003	0.0000	10.7250	10.7250	4.9000e-004	0.0000	10.7352
Unmitigated	4.7700e-003	0.0172	0.0629	1.3000e-004	8.8300e-003	2.6000e-004	9.0900e-003	2.3600e-003	2.4000e-004	2.6000e-003	0.0000	10.7250	10.7250	4.9000e-004	0.0000	10.7352

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	6.97	1.32	0.68	23,312	23,312
Total	6.97	1.32	0.68	23,312	23,312

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515683	0.060583	0.179994	0.140474	0.041721	0.006653	0.015053	0.028382	0.001919	0.002521	0.004323	0.000600	0.002094

5.0 Energy Detail

4.4 Fleet Mix

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	3.4483	3.4483	1.6000e-004	3.0000e-005	3.4618
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3.4483	3.4483	1.6000e-004	3.0000e-005	3.4618
NaturalGas Mitigated	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0038	1.0038	2.0000e-005	2.0000e-005	1.0099
NaturalGas Unmitigated	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0038	1.0038	2.0000e-005	2.0000e-005	1.0099

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	18810	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0038	1.0038	2.0000e-005	2.0000e-005	1.0099
Total		**1.0000e-004**	**9.2000e-004**	**7.7000e-004**	**1.0000e-005**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**1.0038**	**1.0038**	**2.0000e-005**	**2.0000e-005**	**1.0099**

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	18810	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0038	1.0038	2.0000e-005	2.0000e-005	1.0099
Total		**1.0000e-004**	**9.2000e-004**	**7.7000e-004**	**1.0000e-005**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**1.0038**	**1.0038**	**2.0000e-005**	**2.0000e-005**	**1.0099**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	12050	3.4483	1.6000e-004	3.0000e-005	3.4618
Total		**3.4483**	**1.6000e-004**	**3.0000e-005**	**3.4618**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	12050	3.4483	1.6000e-004	3.0000e-005	3.4618

Total		**3.4483**	**1.6000e-004**	**3.0000e-005**	**3.4618**

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	4.7700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Unmitigated	4.7700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.1600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.6100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	**4.7700e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**3.0000e-005**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Consumer Products	3.6100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Architectural Coating	1.1600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7700e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**3.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.9350	7.5700e-003	1.9000e-004	1.1517
Unmitigated	0.9350	7.5700e-003	1.9000e-004	1.1518

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.23125 / 0	0.9350	7.5700e-003	1.9000e-004	1.1518
Total		**0.9350**	**7.5700e-003**	**1.9000e-004**	**1.1518**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.23125 / 0	0.9350	7.5700e-003	1.9000e-004	1.1517
Total		**0.9350**	**7.5700e-003**	**1.9000e-004**	**1.1517**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			

Mitigated	0.2517	0.0149	0.0000	0.5641
Unmitigated	0.2517	0.0149	0.0000	0.5641

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1.24	0.2517	0.0149	0.0000	0.5641
Total		**0.2517**	**0.0149**	**0.0000**	**0.5641**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1.24	0.2517	0.0149	0.0000	0.5641
Total		**0.2517**	**0.0149**	**0.0000**	**0.5641**

9.0 Operational Offroad

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

10.0 Vegetation

Synergy - Remediation Truck Haul Trips Only

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	10.00	Acre	10.00	435,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Trips and VMT - Weighted average for Kettleman and Simi Valley Landfills

Grading - Synergy remediatiion

Construction Off-road Equipment Mitigation - Tier IV is required mitigation.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblGrading	AcresOfGrading	50.00	10.00
tblGrading	MaterialExported	0.00	17,600.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblTripsAndVMT	HaulingTripLength	20.00	68.20

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	0.3424	3.8224	2.3362	7.3200e-003	0.3513	0.1435	0.4948	0.1362	0.1340	0.2702	0.0000	685.5781	685.5781	0.0873	0.0000	687.7612
2019	0.2453	2.0966	1.9064	4.5200e-003	0.1628	0.0966	0.2595	0.0439	0.0908	0.1347	0.0000	410.6712	410.6712	0.0550	0.0000	412.0470
Maximum	**0.3424**	**3.8224**	**2.3362**	**7.3200e-003**	**0.3513**	**0.1435**	**0.4948**	**0.1362**	**0.1340**	**0.2702**	**0.0000**	**685.5781**	**685.5781**	**0.0873**	**0.0000**	**687.7612**

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	0.1261	1.5871	2.3109	7.3200e-003	0.2557	0.0124	0.2680	0.0853	0.0120	0.0973	0.0000	685.5778	685.5778	0.0873	0.0000	687.7609
2019	0.1010	0.7332	1.9516	4.5200e-003	0.1628	7.5500e-003	0.1704	0.0439	7.3200e-003	0.0512	0.0000	410.6710	410.6710	0.0550	0.0000	412.0467
Maximum	**0.1261**	**1.5871**	**2.3109**	**7.3200e-003**	**0.2557**	**0.0124**	**0.2680**	**0.0853**	**0.0120**	**0.0973**	**0.0000**	**685.5778**	**685.5778**	**0.0873**	**0.0000**	**687.7609**

	ROG	**NOx**	**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	**61.35**	**60.80**	**-0.47**	**0.00**	**18.61**	**91.70**	**41.87**	**28.27**	**91.41**	**63.32**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)

1	**6-1-2018**	**8-31-2018**	2.5274	1.0901
2	**9-1-2018**	**11-30-2018**	1.1957	0.4317
3	**12-1-2018**	**2-28-2019**	1.1142	0.4140
4	**3-1-2019**	**5-31-2019**	1.0978	0.4118
5	**6-1-2019**	**8-31-2019**	0.5140	0.1412
		Highest	2.5274	1.0901

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	4.1100e-003	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0224	0.1225	0.2875	9.7000e-004	0.0764	9.9000e-004	0.0774	0.0205	9.3000e-004	0.0214	0.0000	89.5033	89.5033	4.6900e-003	0.0000	89.6205
Waste						0.0000	0.0000		0.0000	0.0000	0.1746	0.0000	0.1746	0.0103	0.0000	0.4325
Water						0.0000	0.0000		0.0000	0.0000	0.0000	42.1771	42.1771	1.7400e-003	3.6000e-004	42.3280
Total	**0.0265**	**0.1225**	**0.2876**	**9.7000e-004**	**0.0764**	**9.9000e-004**	**0.0774**	**0.0205**	**9.3000e-004**	**0.0214**	**0.1746**	**131.6806**	**131.8552**	**0.0168**	**3.6000e-004**	**132.3812**

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	4.1100e-003	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0224	0.1225	0.2875	9.7000e-004	0.0764	9.9000e-004	0.0774	0.0205	9.3000e-004	0.0214	0.0000	89.5033	89.5033	4.6900e-003	0.0000	89.6205
Waste						0.0000	0.0000		0.0000	0.0000	0.1746	0.0000	0.1746	0.0103	0.0000	0.4325
Water						0.0000	0.0000		0.0000	0.0000	0.0000	42.1771	42.1771	1.7400e-003	3.6000e-004	42.3280
Total	**0.0265**	**0.1225**	**0.2876**	**9.7000e-004**	**0.0764**	**9.9000e-004**	**0.0774**	**0.0205**	**9.3000e-004**	**0.0214**	**0.1746**	**131.6806**	**131.8552**	**0.0168**	**3.6000e-004**	**132.3812**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2018	6/28/2018	5	20	
2	Site Preparation	Site Preparation	6/29/2018	7/12/2018	5	10	
3	Grading	Grading	7/13/2018	8/9/2018	5	20	
4	Building Construction	Building Construction	8/10/2018	6/27/2019	5	230	
5	Paving	Paving	6/28/2019	7/25/2019	5	20	
6	Architectural Coating	Architectural Coating	7/26/2019	8/22/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

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

OffRoad Equipment

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

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	37.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	183.00	71.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	2,200.00	14.70	6.90	68.20	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 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	0.0372	0.3832	0.2230	3.9000e-004		0.0194	0.0194		0.0181	0.0181	0.0000	35.1241	35.1241	9.6800e-003	0.0000	35.3660
Total	**0.0372**	**0.3832**	**0.2230**	**3.9000e-004**		**0.0194**	**0.0194**		**0.0181**	**0.0181**	**0.0000**	**35.1241**	**35.1241**	**9.6800e-003**	**0.0000**	**35.3660**

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	8.0000e-004	6.5000e-004	7.0000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5788	1.5788	5.0000e-005	0.0000	1.5801
Total	**8.0000e-004**	**6.5000e-004**	**7.0000e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5788**	**1.5788**	**5.0000e-005**	**0.0000**	**1.5801**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.6200e-003	0.0200	0.2328	3.9000e-004		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	35.1240	35.1240	9.6800e-003	0.0000	35.3660
Total	**4.6200e-003**	**0.0200**	**0.2328**	**3.9000e-004**		**6.2000e-004**	**6.2000e-004**		**6.2000e-004**	**6.2000e-004**	**0.0000**	**35.1240**	**35.1240**	**9.6800e-003**	**0.0000**	**35.3660**

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	8.0000e-004	6.5000e-004	7.0000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5788	1.5788	5.0000e-005	0.0000	1.5801
Total	**8.0000e-004**	**6.5000e-004**	**7.0000e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5788**	**1.5788**	**5.0000e-005**	**0.0000**	**1.5801**

3.3 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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total	**0.0228**	**0.2410**	**0.1124**	**1.9000e-004**	**0.0903**	**0.0129**	**0.1032**	**0.0497**	**0.0119**	**0.0615**	**0.0000**	**17.3800**	**17.3800**	**5.4100e-003**	**0.0000**	**17.5152**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	3.9000e-004	4.2000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9473	0.9473	3.0000e-005	0.0000	0.9481
Total	**4.8000e-004**	**3.9000e-004**	**4.2000e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9473**	**0.9473**	**3.0000e-005**	**0.0000**	**0.9481**

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					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3300e-003	0.0101	0.1043	1.9000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

Total	**2.3300e-003**	**0.0101**	**0.1043**	**1.9000e-004**	**0.0352**	**3.1000e-004**	**0.0355**	**0.0194**	**3.1000e-004**	**0.0197**	**0.0000**	**17.3799**	**17.3799**	**5.4100e-003**	**0.0000**	**17.5152**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	3.9000e-004	4.2000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9473	0.9473	3.0000e-005	0.0000	0.9481
Total	**4.8000e-004**	**3.9000e-004**	**4.2000e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9473**	**0.9473**	**3.0000e-005**	**0.0000**	**0.9481**

3.4 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					0.0665	0.0000	0.0665	0.0338	0.0000	0.0338	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0509	0.5952	0.3509	6.2000e-004		0.0263	0.0263		0.0242	0.0242	0.0000	56.6485	56.6485	0.0176	0.0000	57.0894
Total	**0.0509**	**0.5952**	**0.3509**	**6.2000e-004**	**0.0665**	**0.0263**	**0.0929**	**0.0338**	**0.0242**	**0.0581**	**0.0000**	**56.6485**	**56.6485**	**0.0176**	**0.0000**	**57.0894**

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	0.0272	0.9198	0.1818	2.6800e-003	0.0644	4.2600e-003	0.0687	0.0177	4.0800e-003	0.0218	0.0000	261.8564	261.8564	0.0150	0.0000	262.2301
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	8.7000e-004	9.3300e-003	2.0000e-005	2.1900e-003	2.0000e-005	2.2100e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	2.1050	2.1050	7.0000e-005	0.0000	2.1068
Total	**0.0282**	**0.9207**	**0.1911**	**2.7000e-003**	**0.0666**	**4.2800e-003**	**0.0709**	**0.0183**	**4.1000e-003**	**0.0224**	**0.0000**	**263.9614**	**263.9614**	**0.0150**	**0.0000**	**264.3369**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0259	0.0000	0.0259	0.0132	0.0000	0.0132	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6200e-003	0.0330	0.3300	6.2000e-004		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	56.6484	56.6484	0.0176	0.0000	57.0893
Total	**7.6200e-003**	**0.0330**	**0.3300**	**6.2000e-004**	**0.0259**	**1.0200e-003**	**0.0270**	**0.0132**	**1.0200e-003**	**0.0142**	**0.0000**	**56.6484**	**56.6484**	**0.0176**	**0.0000**	**57.0893**

Mitigated Construction Off-Site

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

Hauling	0.0272	0.9198	0.1818	2.6800e-003	0.0644	4.2600e-003	0.0687	0.0177	4.0800e-003	0.0218	0.0000	261.8564	261.8564	0.0150	0.0000	262.2301
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	8.7000e-004	9.3300e-003	2.0000e-005	2.1900e-003	2.0000e-005	2.2100e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	2.1050	2.1050	7.0000e-005	0.0000	2.1068
Total	**0.0282**	**0.9207**	**0.1911**	**2.7000e-003**	**0.0666**	**4.2800e-003**	**0.0709**	**0.0183**	**4.1000e-003**	**0.0224**	**0.0000**	**263.9614**	**263.9614**	**0.0150**	**0.0000**	**264.3369**

3.5 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	0.1367	1.1929	0.8966	1.3700e-003		0.0765	0.0765		0.0719	0.0719	0.0000	121.2613	121.2613	0.0297	0.0000	122.0040
Total	**0.1367**	**1.1929**	**0.8966**	**1.3700e-003**		**0.0765**	**0.0765**		**0.0719**	**0.0719**	**0.0000**	**121.2613**	**121.2613**	**0.0297**	**0.0000**	**122.0040**

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	0.0157	0.4477	0.1153	9.4000e-004	0.0228	3.2300e-003	0.0261	6.5900e-003	3.0900e-003	9.6700e-003	0.0000	90.4467	90.4467	6.4400e-003	0.0000	90.6076
Worker	0.0496	0.0406	0.4356	1.0900e-003	0.1024	8.3000e-004	0.1032	0.0272	7.7000e-004	0.0280	0.0000	98.2301	98.2301	3.3500e-003	0.0000	98.3139

Total	**0.0653**	**0.4883**	**0.5509**	**2.0300e-003**	**0.1252**	**4.0600e-003**	**0.1293**	**0.0338**	**3.8600e-003**	**0.0376**	**0.0000**	**188.6768**	**188.6768**	**9.7900e-003**	**0.0000**	**188.9215**

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	0.0167	0.1140	0.8905	1.3700e-003		2.0800e-003	2.0800e-003		2.0800e-003	2.0800e-003	0.0000	121.2612	121.2612	0.0297	0.0000	122.0039
Total	**0.0167**	**0.1140**	**0.8905**	**1.3700e-003**		**2.0800e-003**	**2.0800e-003**		**2.0800e-003**	**2.0800e-003**	**0.0000**	**121.2612**	**121.2612**	**0.0297**	**0.0000**	**122.0039**

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	0.0157	0.4477	0.1153	9.4000e-004	0.0228	3.2300e-003	0.0261	6.5900e-003	3.0900e-003	9.6700e-003	0.0000	90.4467	90.4467	6.4400e-003	0.0000	90.6076
Worker	0.0496	0.0406	0.4356	1.0900e-003	0.1024	8.3000e-004	0.1032	0.0272	7.7000e-004	0.0280	0.0000	98.2301	98.2301	3.3500e-003	0.0000	98.3139
Total	**0.0653**	**0.4883**	**0.5509**	**2.0300e-003**	**0.1252**	**4.0600e-003**	**0.1293**	**0.0338**	**3.8600e-003**	**0.0376**	**0.0000**	**188.6768**	**188.6768**	**9.7900e-003**	**0.0000**	**188.9215**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1511	1.3490	1.0985	1.7200e-003		0.0826	0.0826		0.0776	0.0776	0.0000	150.4667	150.4667	0.0367	0.0000	151.3831
Total	**0.1511**	**1.3490**	**1.0985**	**1.7200e-003**		**0.0826**	**0.0826**		**0.0776**	**0.0776**	**0.0000**	**150.4667**	**150.4667**	**0.0367**	**0.0000**	**151.3831**

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	0.0179	0.5298	0.1329	1.1600e-003	0.0286	3.4700e-003	0.0321	8.2600e-003	3.3200e-003	0.0116	0.0000	112.4963	112.4963	7.7800e-003	0.0000	112.6909
Worker	0.0566	0.0449	0.4883	1.3200e-003	0.1285	1.0200e-003	0.1295	0.0341	9.4000e-004	0.0351	0.0000	119.3795	119.3795	3.7300e-003	0.0000	119.4728
Total	**0.0744**	**0.5748**	**0.6212**	**2.4800e-003**	**0.1571**	**4.4900e-003**	**0.1616**	**0.0424**	**4.2600e-003**	**0.0466**	**0.0000**	**231.8758**	**231.8758**	**0.0115**	**0.0000**	**232.1637**

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	0.0210	0.1430	1.1175	1.7200e-003		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003	0.0000	150.4665	150.4665	0.0367	0.0000	151.3829
Total	**0.0210**	**0.1430**	**1.1175**	**1.7200e-003**		**2.6100e-003**	**2.6100e-003**		**2.6100e-003**	**2.6100e-003**	**0.0000**	**150.4665**	**150.4665**	**0.0367**	**0.0000**	**151.3829**

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	0.0179	0.5298	0.1329	1.1600e-003	0.0286	3.4700e-003	0.0321	8.2600e-003	3.3200e-003	0.0116	0.0000	112.4963	112.4963	7.7800e-003	0.0000	112.6909
Worker	0.0566	0.0449	0.4883	1.3200e-003	0.1285	1.0200e-003	0.1295	0.0341	9.4000e-004	0.0351	0.0000	119.3795	119.3795	3.7300e-003	0.0000	119.4728
Total	**0.0744**	**0.5748**	**0.6212**	**2.4800e-003**	**0.1571**	**4.4900e-003**	**0.1616**	**0.0424**	**4.2600e-003**	**0.0466**	**0.0000**	**231.8758**	**231.8758**	**0.0115**	**0.0000**	**232.1637**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0145**	**0.1524**	**0.1467**	**2.3000e-004**		**8.2500e-003**	**8.2500e-003**		**7.5900e-003**	**7.5900e-003**	**0.0000**	**20.4752**	**20.4752**	**6.4800e-003**	**0.0000**	**20.6371**

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	7.2000e-004	5.8000e-004	6.2500e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5289	1.5289	5.0000e-005	0.0000	1.5301
Total	**7.2000e-004**	**5.8000e-004**	**6.2500e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5289**	**1.5289**	**5.0000e-005**	**0.0000**	**1.5301**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.8000e-003	0.0122	0.1730	2.3000e-004		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.8000e-003**	**0.0122**	**0.1730**	**2.3000e-004**		**3.7000e-004**	**3.7000e-004**		**3.7000e-004**	**3.7000e-004**	**0.0000**	**20.4752**	**20.4752**	**6.4800e-003**	**0.0000**	**20.6371**

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	7.2000e-004	5.8000e-004	6.2500e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5289	1.5289	5.0000e-005	0.0000	1.5301
Total	**7.2000e-004**	**5.8000e-004**	**6.2500e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5289**	**1.5289**	**5.0000e-005**	**0.0000**	**1.5301**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total	**2.6600e-003**	**0.0184**	**0.0184**	**3.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**2.5533**	**2.5533**	**2.2000e-004**	**0.0000**	**2.5587**

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	1.7900e-003	1.4200e-003	0.0154	4.0000e-005	4.0600e-003	3.0000e-005	4.0900e-003	1.0800e-003	3.0000e-005	1.1100e-003	0.0000	3.7714	3.7714	1.2000e-004	0.0000	3.7743
Total	**1.7900e-003**	**1.4200e-003**	**0.0154**	**4.0000e-005**	**4.0600e-003**	**3.0000e-005**	**4.0900e-003**	**1.0800e-003**	**3.0000e-005**	**1.1100e-003**	**0.0000**	**3.7714**	**3.7714**	**1.2000e-004**	**0.0000**	**3.7743**

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0000e-004	1.2900e-003	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total	**3.0000e-004**	**1.2900e-003**	**0.0183**	**3.0000e-005**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**2.5533**	**2.5533**	**2.2000e-004**	**0.0000**	**2.5586**

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	1.7900e-003	1.4200e-003	0.0154	4.0000e-005	4.0600e-003	3.0000e-005	4.0900e-003	1.0800e-003	3.0000e-005	1.1100e-003	0.0000	3.7714	3.7714	1.2000e-004	0.0000	3.7743
Total	**1.7900e-003**	**1.4200e-003**	**0.0154**	**4.0000e-005**	**4.0600e-003**	**3.0000e-005**	**4.0900e-003**	**1.0800e-003**	**3.0000e-005**	**1.1100e-003**	**0.0000**	**3.7714**	**3.7714**	**1.2000e-004**	**0.0000**	**3.7743**

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	0.0224	0.1225	0.2875	9.7000e-004	0.0764	9.9000e-004	0.0774	0.0205	9.3000e-004	0.0214	0.0000	89.5033	89.5033	4.6900e-003	0.0000	89.6205
Unmitigated	0.0224	0.1225	0.2875	9.7000e-004	0.0764	9.9000e-004	0.0774	0.0205	9.3000e-004	0.0214	0.0000	89.5033	89.5033	4.6900e-003	0.0000	89.6205

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	18.90	227.50	167.40	201,181	201,181
Total	18.90	227.50	167.40	201,181	201,181

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000

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

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	4.1100e-003	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.6000e-004
Unmitigated	4.1100e-003	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.6000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.1000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.6000e-004

Total	**4.1100e-003**	**0.0000**	**1.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.5000e-004**	**2.5000e-004**	**0.0000**	**0.0000**	**2.6000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.1000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.6000e-004
Total	**4.1100e-003**	**0.0000**	**1.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.5000e-004**	**2.5000e-004**	**0.0000**	**0.0000**	**2.6000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	42.1771	1.7400e-003	3.6000e-004	42.3280
Unmitigated	42.1771	1.7400e-003	3.6000e-004	42.3280

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 11.9148	42.1771	1.7400e-003	3.6000e-004	42.3280
Total		**42.1771**	**1.7400e-003**	**3.6000e-004**	**42.3280**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 11.9148	42.1771	1.7400e-003	3.6000e-004	42.3280
Total		**42.1771**	**1.7400e-003**	**3.6000e-004**	**42.3280**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1746	0.0103	0.0000	0.4325
Unmitigated	0.1746	0.0103	0.0000	0.4325

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.86	0.1746	0.0103	0.0000	0.4325
Total		**0.1746**	**0.0103**	**0.0000**	**0.4325**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.86	0.1746	0.0103	0.0000	0.4325

Total		**0.1746**	**0.0103**	**0.0000**	**0.4325**

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

Wetlands Facility Construction - Well Cellars Only

South Coast AQMD Air District, Annual

Note: All emissions calculated under "Building Construction"

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	15.00	1000sqft	0.34	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per SPEC schedule

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Per SPEC equipment schedule

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	261.00
tblConstructionPhase	PhaseEndDate	1/18/2018	1/31/2018
tblConstructionPhase	PhaseEndDate	2/7/2018	6/14/2017
tblConstructionPhase	PhaseStartDate	1/19/2017	2/1/2017
tblConstructionPhase	PhaseStartDate	2/1/2018	6/8/2017
tblOffRoadEquipment	HorsePower	81.00	80.00
tblOffRoadEquipment	HorsePower	226.00	208.00
tblOffRoadEquipment	HorsePower	89.00	149.00
tblOffRoadEquipment	HorsePower	255.00	226.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	80.00	84.00

tblOffRoadEquipment	LoadFactor	0.73	0.38
tblOffRoadEquipment	LoadFactor	0.40	0.29
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	6.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	1.0380	6.9738	5.2121	8.1600e-003	0.0115	0.4614	0.4729	3.2600e-003	0.4422	0.4454	0.0000	715.1263	715.1263	0.1374	0.0000	718.0109
2018	0.0716	0.5924	0.4830	7.8000e-004	9.0000e-004	0.0372	0.0381	2.4000e-004	0.0357	0.0360	0.0000	67.5097	67.5097	0.0126	0.0000	67.7752
Total	**1.1096**	**7.5662**	**5.6951**	**8.9400e-003**	**0.0124**	**0.4986**	**0.5110**	**3.5000e-003**	**0.4779**	**0.4814**	**0.0000**	**782.6360**	**782.6360**	**0.1500**	**0.0000**	**785.7861**

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					
2017	1.0380	6.9738	5.2121	8.1600e-003	0.0115	0.4614	0.4729	3.2600e-003	0.4422	0.4454	0.0000	715.1255	715.1255	0.1374	0.0000	718.0101
2018	0.0716	0.5924	0.4830	7.8000e-004	9.0000e-004	0.0372	0.0381	2.4000e-004	0.0357	0.0360	0.0000	67.5096	67.5096	0.0126	0.0000	67.7751
Total	**1.1096**	**7.5662**	**5.6951**	**8.9400e-003**	**0.0124**	**0.4986**	**0.5110**	**3.5000e-003**	**0.4779**	**0.4814**	**0.0000**	**782.6351**	**782.6351**	**0.1500**	**0.0000**	**785.7852**

	ROG	**NOx**	**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	tons/yr										MT/yr					
Area	0.0716	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	4.0000e-004
Energy	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	66.7813	66.7813	2.6700e-003	7.7000e-004	67.0753
Mobile	0.0716	0.2583	0.9440	1.9100e-003	0.1324	3.9200e-003	0.1363	0.0354	3.6000e-003	0.0390	0.0000	160.8748	160.8748	7.3000e-003	0.0000	161.0281
Waste						0.0000	0.0000		0.0000	0.0000	3.7756	0.0000	3.7756	0.2231	0.0000	8.4614
Water						0.0000	0.0000		0.0000	0.0000	1.1005	12.9252	14.0257	0.1136	2.7900e-003	17.2772
Total	**0.1447**	**0.2721**	**0.9558**	**1.9900e-003**	**0.1324**	**4.9700e-003**	**0.1374**	**0.0354**	**4.6500e-003**	**0.0401**	**4.8761**	**240.5816**	**245.4577**	**0.3467**	**3.5600e-003**	**253.8424**

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	0.0716	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	4.0000e-004
Energy	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	66.7813	66.7813	2.6700e-003	7.7000e-004	67.0753
Mobile	0.0716	0.2583	0.9440	1.9100e-003	0.1324	3.9200e-003	0.1363	0.0354	3.6000e-003	0.0390	0.0000	160.8748	160.8748	7.3000e-003	0.0000	161.0281
Waste						0.0000	0.0000		0.0000	0.0000	3.7756	0.0000	3.7756	0.2231	0.0000	8.4614
Water						0.0000	0.0000		0.0000	0.0000	1.1005	12.9252	14.0257	0.1136	2.7900e-003	17.2755
Total	**0.1447**	**0.2721**	**0.9558**	**1.9900e-003**	**0.1324**	**4.9700e-003**	**0.1374**	**0.0354**	**4.6500e-003**	**0.0401**	**4.8761**	**240.5816**	**245.4577**	**0.3467**	**3.5600e-003**	**253.8407**

	ROG	**NOx**	**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**	**0.01**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/13/2017	5	10	
2	Site Preparation	Site Preparation	1/14/2017	1/16/2017	5	1	
3	Grading	Grading	1/17/2017	1/18/2017	5	2	
4	Building Construction	Building Construction	2/1/2017	1/31/2018	5	261	
5	Paving	Paving	6/8/2017	6/14/2017	5	5	
6	Architectural Coating	Architectural Coating	6/15/2017	6/21/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 22,500; Non-Residential Outdoor: 7,500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	80	0.38
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	3	4.00	208	0.29
Building Construction	Forklifts	1	6.00	149	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	226	0.29
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	6	8.00	75	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition		0		84	0.74
Demolition		0		89	0.20
Demolition		0		78	0.48
Demolition		0		46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	255	0.40

Building Construction	Rollers	2	6.00	84	0.38
Building Construction	Generator Sets	4	8.00	84	0.74
Building Construction	Air Compressors	2	6.00	78	0.48
Building Construction	Welders	3	6.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	21	6.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	6.0200e-003	0.0524	0.0429	6.0000e-005		3.6300e-003	3.6300e-003		3.4600e-003	3.4600e-003	0.0000	5.3697	5.3697	1.0600e-003	0.0000	5.3919
Total	**6.0200e-003**	**0.0524**	**0.0429**	**6.0000e-005**		**3.6300e-003**	**3.6300e-003**		**3.4600e-003**	**3.4600e-003**	**0.0000**	**5.3697**	**5.3697**	**1.0600e-003**	**0.0000**	**5.3919**

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	1.8000e-004	2.7000e-004	2.7700e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4942	0.4942	3.0000e-005	0.0000	0.4947
Total	**1.8000e-004**	**2.7000e-004**	**2.7700e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4942**	**0.4942**	**3.0000e-005**	**0.0000**	**0.4947**

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	6.0200e-003	0.0524	0.0429	6.0000e-005		3.6300e-003	3.6300e-003		3.4600e-003	3.4600e-003	0.0000	5.3697	5.3697	1.0600e-003	0.0000	5.3919
Total	**6.0200e-003**	**0.0524**	**0.0429**	**6.0000e-005**		**3.6300e-003**	**3.6300e-003**		**3.4600e-003**	**3.4600e-003**	**0.0000**	**5.3697**	**5.3697**	**1.0600e-003**	**0.0000**	**5.3919**

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	1.8000e-004	2.7000e-004	2.7700e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4942	0.4942	3.0000e-005	0.0000	0.4947
Total	**1.8000e-004**	**2.7000e-004**	**2.7700e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4942**	**0.4942**	**3.0000e-005**	**0.0000**	**0.4947**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3000e-004	6.3400e-003	3.6200e-003	0.0000		3.9000e-004	3.9000e-004		3.5000e-004	3.5000e-004	0.0000	0.4336	0.4336	1.3000e-004	0.0000	0.4364
Total	**6.3000e-004**	**6.3400e-003**	**3.6200e-003**	**0.0000**	**2.7000e-004**	**3.9000e-004**	**6.6000e-004**	**3.0000e-005**	**3.5000e-004**	**3.8000e-004**	**0.0000**	**0.4336**	**0.4336**	**1.3000e-004**	**0.0000**	**0.4364**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total	**1.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3000e-004	6.3400e-003	3.6200e-003	0.0000		3.9000e-004	3.9000e-004		3.5000e-004	3.5000e-004	0.0000	0.4336	0.4336	1.3000e-004	0.0000	0.4364
Total	**6.3000e-004**	**6.3400e-003**	**3.6200e-003**	**0.0000**	**2.7000e-004**	**3.9000e-004**	**6.6000e-004**	**3.0000e-005**	**3.5000e-004**	**3.8000e-004**	**0.0000**	**0.4336**	**0.4336**	**1.3000e-004**	**0.0000**	**0.4364**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total	**1.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

3.4 Grading - 2017

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					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e-003	0.0105	8.5800e-003	1.0000e-005		7.3000e-004	7.3000e-004		6.9000e-004	6.9000e-004	0.0000	1.0739	1.0739	2.1000e-004	0.0000	1.0784
Total	**1.2000e-003**	**0.0105**	**8.5800e-003**	**1.0000e-005**	**7.5000e-004**	**7.3000e-004**	**1.4800e-003**	**4.1000e-004**	**6.9000e-004**	**1.1000e-003**	**0.0000**	**1.0739**	**1.0739**	**2.1000e-004**	**0.0000**	**1.0784**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	1.0000e-005	0.0000	0.0990
Total	**4.0000e-005**	**5.0000e-005**	**5.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0988**	**0.0988**	**1.0000e-005**	**0.0000**	**0.0990**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e-003	0.0105	8.5800e-003	1.0000e-005		7.3000e-004	7.3000e-004		6.9000e-004	6.9000e-004	0.0000	1.0739	1.0739	2.1000e-004	0.0000	1.0784
Total	**1.2000e-003**	**0.0105**	**8.5800e-003**	**1.0000e-005**	**7.5000e-004**	**7.3000e-004**	**1.4800e-003**	**4.1000e-004**	**6.9000e-004**	**1.1000e-003**	**0.0000**	**1.0739**	**1.0739**	**2.1000e-004**	**0.0000**	**1.0784**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	1.0000e-005	0.0000	0.0990
Total	**4.0000e-005**	**5.0000e-005**	**5.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0988**	**0.0988**	**1.0000e-005**	**0.0000**	**0.0990**

3.5 Building Construction - 2017

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	0.8480	6.8506	5.0623	7.8900e-003		0.4544	0.4544		0.4355	0.4355	0.0000	692.4271	692.4271	0.1348	0.0000	695.2572
Total	**0.8480**	**6.8506**	**5.0623**	**7.8900e-003**		**0.4544**	**0.4544**		**0.4355**	**0.4355**	**0.0000**	**692.4271**	**692.4271**	**0.1348**	**0.0000**	**695.2572**

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	1.9300e-003	0.0195	0.0263	5.0000e-005	1.4600e-003	3.0000e-004	1.7700e-003	4.2000e-004	2.8000e-004	7.0000e-004	0.0000	4.6149	4.6149	3.0000e-005	0.0000	4.6156
Worker	2.5700e-003	3.8100e-003	0.0395	1.0000e-004	7.8300e-003	6.0000e-005	7.9000e-003	2.0800e-003	6.0000e-005	2.1400e-003	0.0000	7.0573	7.0573	3.6000e-004	0.0000	7.0649
Total	**4.5000e-003**	**0.0234**	**0.0658**	**1.5000e-004**	**9.2900e-003**	**3.6000e-004**	**9.6700e-003**	**2.5000e-003**	**3.4000e-004**	**2.8400e-003**	**0.0000**	**11.6721**	**11.6721**	**3.9000e-004**	**0.0000**	**11.6805**

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	0.8480	6.8506	5.0623	7.8900e-003		0.4544	0.4544		0.4355	0.4355	0.0000	692.4263	692.4263	0.1348	0.0000	695.2564
Total	**0.8480**	**6.8506**	**5.0623**	**7.8900e-003**		**0.4544**	**0.4544**		**0.4355**	**0.4355**	**0.0000**	**692.4263**	**692.4263**	**0.1348**	**0.0000**	**695.2564**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9300e-003	0.0195	0.0263	5.0000e-005	1.4600e-003	3.0000e-004	1.7700e-003	4.2000e-004	2.8000e-004	7.0000e-004	0.0000	4.6149	4.6149	3.0000e-005	0.0000	4.6156
Worker	2.5700e-003	3.8100e-003	0.0395	1.0000e-004	7.8300e-003	6.0000e-005	7.9000e-003	2.0800e-003	6.0000e-005	2.1400e-003	0.0000	7.0573	7.0573	3.6000e-004	0.0000	7.0649
Total	**4.5000e-003**	**0.0234**	**0.0658**	**1.5000e-004**	**9.2900e-003**	**3.6000e-004**	**9.6700e-003**	**2.5000e-003**	**3.4000e-004**	**2.8400e-003**	**0.0000**	**11.6721**	**11.6721**	**3.9000e-004**	**0.0000**	**11.6805**

3.5 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	0.0712	0.5904	0.4771	7.6000e-004		0.0372	0.0372		0.0357	0.0357	0.0000	66.4147	66.4147	0.0126	0.0000	66.6794
Total	**0.0712**	**0.5904**	**0.4771**	**7.6000e-004**		**0.0372**	**0.0372**		**0.0357**	**0.0357**	**0.0000**	**66.4147**	**66.4147**	**0.0126**	**0.0000**	**66.6794**

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	1.7000e-004	1.7300e-003	2.4300e-003	0.0000	1.4000e-004	3.0000e-005	1.7000e-004	4.0000e-005	3.0000e-005	7.0000e-005	0.0000	0.4385	0.4385	0.0000	0.0000	0.4386
Worker	2.2000e-004	3.3000e-004	3.4600e-003	1.0000e-005	7.6000e-004	1.0000e-005	7.6000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6566	0.6566	3.0000e-005	0.0000	0.6572
Total	**3.9000e-004**	**2.0600e-003**	**5.8900e-003**	**1.0000e-005**	**9.0000e-004**	**4.0000e-005**	**9.3000e-004**	**2.4000e-004**	**4.0000e-005**	**2.8000e-004**	**0.0000**	**1.0950**	**1.0950**	**3.0000e-005**	**0.0000**	**1.0958**

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	0.0712	0.5904	0.4771	7.6000e-004		0.0372	0.0372		0.0357	0.0357	0.0000	66.4146	66.4146	0.0126	0.0000	66.6793
Total	**0.0712**	**0.5904**	**0.4771**	**7.6000e-004**		**0.0372**	**0.0372**		**0.0357**	**0.0357**	**0.0000**	**66.4146**	**66.4146**	**0.0126**	**0.0000**	**66.6793**

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	1.7000e-004	1.7300e-003	2.4300e-003	0.0000	1.4000e-004	3.0000e-005	1.7000e-004	4.0000e-005	3.0000e-005	7.0000e-005	0.0000	0.4385	0.4385	0.0000	0.0000	0.4386
Worker	2.2000e-004	3.3000e-004	3.4600e-003	1.0000e-005	7.6000e-004	1.0000e-005	7.6000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6566	0.6566	3.0000e-005	0.0000	0.6572
Total	**3.9000e-004**	**2.0600e-003**	**5.8900e-003**	**1.0000e-005**	**9.0000e-004**	**4.0000e-005**	**9.3000e-004**	**2.4000e-004**	**4.0000e-005**	**2.8000e-004**	**0.0000**	**1.0950**	**1.0950**	**3.0000e-005**	**0.0000**	**1.0958**

3.6 Paving - 2017

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	2.6000e-003	0.0246	0.0181	3.0000e-005		1.5000e-003	1.5000e-003		1.3900e-003	1.3900e-003	0.0000	2.4243	2.4243	6.7000e-004	0.0000	2.4384
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.6000e-003**	**0.0246**	**0.0181**	**3.0000e-005**		**1.5000e-003**	**1.5000e-003**		**1.3900e-003**	**1.3900e-003**	**0.0000**	**2.4243**	**2.4243**	**6.7000e-004**	**0.0000**	**2.4384**

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	1.6000e-004	2.4000e-004	2.4900e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4448	0.4448	2.0000e-005	0.0000	0.4453
Total	**1.6000e-004**	**2.4000e-004**	**2.4900e-003**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4448**	**0.4448**	**2.0000e-005**	**0.0000**	**0.4453**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.6000e-003	0.0246	0.0181	3.0000e-005		1.5000e-003	1.5000e-003		1.3900e-003	1.3900e-003	0.0000	2.4243	2.4243	6.7000e-004	0.0000	2.4384
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.6000e-003**	**0.0246**	**0.0181**	**3.0000e-005**		**1.5000e-003**	**1.5000e-003**		**1.3900e-003**	**1.3900e-003**	**0.0000**	**2.4243**	**2.4243**	**6.7000e-004**	**0.0000**	**2.4384**

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	1.6000e-004	2.4000e-004	2.4900e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4448	0.4448	2.0000e-005	0.0000	0.4453
Total	**1.6000e-004**	**2.4000e-004**	**2.4900e-003**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4448**	**0.4448**	**2.0000e-005**	**0.0000**	**0.4453**

3.7 Architectural Coating - 2017

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	0.1738					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total	**0.1746**	**5.4600e-003**	**4.6700e-003**	**1.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**0.6383**	**0.6383**	**7.0000e-005**	**0.0000**	**0.6397**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total	**1.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

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	0.1738					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total	**0.1746**	**5.4600e-003**	**4.6700e-003**	**1.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**0.6383**	**0.6383**	**7.0000e-005**	**0.0000**	**0.6397**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total	**1.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

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	0.0716	0.2583	0.9440	1.9100e-003	0.1324	3.9200e-003	0.1363	0.0354	3.6000e-003	0.0390	0.0000	160.8748	160.8748	7.3000e-003	0.0000	161.0281
Unmitigated	0.0716	0.2583	0.9440	1.9100e-003	0.1324	3.9200e-003	0.1363	0.0354	3.6000e-003	0.0390	0.0000	160.8748	160.8748	7.3000e-003	0.0000	161.0281

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	104.55	19.80	10.20	349,676	349,676
Total	104.55	19.80	10.20	349,676	349,676

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515683	0.060583	0.179994	0.140474	0.041721	0.006653	0.015053	0.028382	0.001919	0.002521	0.004323	0.000600	0.002094

5.0 Energy Detail

4.4 Fleet Mix

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	51.7247	51.7247	2.3800e-003	4.9000e-004	51.9271
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	51.7247	51.7247	2.3800e-003	4.9000e-004	51.9271
NaturalGas Mitigated	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	15.0566	15.0566	2.9000e-004	2.8000e-004	15.1482
NaturalGas Unmitigated	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	15.0566	15.0566	2.9000e-004	2.8000e-004	15.1482

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	282150	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	15.0566	15.0566	2.9000e-004	2.8000e-004	15.1482
Total		**1.5200e-003**	**0.0138**	**0.0116**	**8.0000e-005**		**1.0500e-003**	**1.0500e-003**		**1.0500e-003**	**1.0500e-003**	**0.0000**	**15.0566**	**15.0566**	**2.9000e-004**	**2.8000e-004**	**15.1482**

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	282150	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	15.0566	15.0566	2.9000e-004	2.8000e-004	15.1482
Total		**1.5200e-003**	**0.0138**	**0.0116**	**8.0000e-005**		**1.0500e-003**	**1.0500e-003**		**1.0500e-003**	**1.0500e-003**	**0.0000**	**15.0566**	**15.0566**	**2.9000e-004**	**2.8000e-004**	**15.1482**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	180750	51.7247	2.3800e-003	4.9000e-004	51.9271
Total		**51.7247**	**2.3800e-003**	**4.9000e-004**	**51.9271**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	180750	51.7247	2.3800e-003	4.9000e-004	51.9271
Total		**51.7247**	**2.3800e-003**	**4.9000e-004**	**51.9271**

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	0.0716	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	4.0000e-004
Unmitigated	0.0716	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	4.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0174					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0542					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	4.0000e-004
Total	**0.0716**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.7000e-004**	**3.7000e-004**	**0.0000**	**0.0000**	**4.0000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0174					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0542					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	4.0000e-004
Total	**0.0716**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.7000e-004**	**3.7000e-004**	**0.0000**	**0.0000**	**4.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e

Category	MT/yr			
Mitigated	14.0257	0.1136	2.7900e-003	17.2755
Unmitigated	14.0257	0.1136	2.7900e-003	17.2772

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	3.46875 / 0	14.0257	0.1136	2.7900e-003	17.2772
Total		**14.0257**	**0.1136**	**2.7900e-003**	**17.2772**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	3.46875 / 0	14.0257	0.1136	2.7900e-003	17.2755
Total		**14.0257**	**0.1136**	**2.7900e-003**	**17.2755**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e

	MT/yr			
Mitigated	3.7756	0.2231	0.0000	8.4614
Unmitigated	3.7756	0.2231	0.0000	8.4614

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	18.6	3.7756	0.2231	0.0000	8.4614
Total		**3.7756**	**0.2231**	**0.0000**	**8.4614**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	18.6	3.7756	0.2231	0.0000	8.4614
Total		**3.7756**	**0.2231**	**0.0000**	**8.4614**

9.0 Operational Offroad

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

10.0 Vegetation

Wetlands Facility Construction - Process Equipment Only

South Coast AQMD Air District, Annual

Note: All emissions calculated in "Building Construction" category.

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	64.80	1000sqft	1.49	64,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per SPEC schedule

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Per SPEC equipment schedule

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	325.00
tblConstructionPhase	PhaseEndDate	5/7/2018	6/29/2018
tblConstructionPhase	PhaseEndDate	7/13/2018	11/27/2017
tblConstructionPhase	PhaseStartDate	2/7/2017	4/3/2017
tblConstructionPhase	PhaseStartDate	6/30/2018	11/14/2017
tblOffRoadEquipment	HorsePower	226.00	208.00
tblOffRoadEquipment	HorsePower	89.00	149.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	255.00	358.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	LoadFactor	0.40	0.40

tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	1.5706	6.8030	5.2758	7.6800e-003	0.0543	0.4066	0.4609	0.0184	0.3883	0.4067	0.0000	669.2998	669.2998	0.1292	0.0000	672.0128
2018	0.4451	3.7152	3.0721	4.7400e-003	0.0237	0.2135	0.2371	6.3700e-003	0.2044	0.2108	0.0000	408.7931	408.7931	0.0756	0.0000	410.3813
Total	**2.0156**	**10.5183**	**8.3478**	**0.0124**	**0.0780**	**0.6200**	**0.6980**	**0.0248**	**0.5927**	**0.6175**	**0.0000**	**1,078.0929**	**1,078.0929**	**0.2048**	**0.0000**	**1,082.3941**

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					
2017	1.5706	6.8030	5.2757	7.6800e-003	0.0543	0.4066	0.4609	0.0184	0.3883	0.4067	0.0000	669.2991	669.2991	0.1292	0.0000	672.0121
2018	0.4451	3.7152	3.0721	4.7400e-003	0.0237	0.2135	0.2371	6.3700e-003	0.2044	0.2108	0.0000	408.7927	408.7927	0.0756	0.0000	410.3808
Total	**2.0156**	**10.5182**	**8.3478**	**0.0124**	**0.0780**	**0.6200**	**0.6980**	**0.0248**	**0.5927**	**0.6175**	**0.0000**	**1,078.0917**	**1,078.0917**	**0.2048**	**0.0000**	**1,082.3929**

	ROG	**NOx**	**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	tons/yr										MT/yr					
Area	0.3093	1.0000e-005	8.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6100e-003	1.6100e-003	0.0000	0.0000	1.7100e-003
Energy	6.5700e-003	0.0598	0.0502	3.6000e-004		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003	0.0000	288.4951	288.4951	0.0115	3.3200e-003	289.7654
Mobile	0.3093	1.1157	4.0781	8.2600e-003	0.5721	0.0170	0.5890	0.1530	0.0156	0.1686	0.0000	694.9791	694.9791	0.0315	0.0000	695.6413
Waste						0.0000	0.0000		0.0000	0.0000	16.3103	0.0000	16.3103	0.9639	0.0000	36.5525
Water						0.0000	0.0000		0.0000	0.0000	4.7541	55.8368	60.5908	0.4909	0.0121	74.6375
Total	**0.6252**	**1.1754**	**4.1291**	**8.6200e-003**	**0.5721**	**0.0215**	**0.5936**	**0.1530**	**0.0201**	**0.1732**	**21.0644**	**1,039.3126**	**1,060.3770**	**1.4978**	**0.0154**	**1,096.5984**

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	0.3093	1.0000e-005	8.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6100e-003	1.6100e-003	0.0000	0.0000	1.7100e-003
Energy	6.5700e-003	0.0598	0.0502	3.6000e-004		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003	0.0000	288.4951	288.4951	0.0115	3.3200e-003	289.7654
Mobile	0.3093	1.1157	4.0781	8.2600e-003	0.5721	0.0170	0.5890	0.1530	0.0156	0.1686	0.0000	694.9791	694.9791	0.0315	0.0000	695.6413
Waste						0.0000	0.0000		0.0000	0.0000	16.3103	0.0000	16.3103	0.9639	0.0000	36.5525
Water						0.0000	0.0000		0.0000	0.0000	4.7541	55.8368	60.5908	0.4908	0.0120	74.6299
Total	**0.6252**	**1.1754**	**4.1291**	**8.6200e-003**	**0.5721**	**0.0215**	**0.5936**	**0.1530**	**0.0201**	**0.1732**	**21.0644**	**1,039.3126**	**1,060.3770**	**1.4977**	**0.0154**	**1,096.5909**

	ROG	**NOx**	**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**	**0.01**	**0.13**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	1/31/2017	5	2	
3	Grading	Grading	2/1/2017	2/6/2017	5	4	
4	Building Construction	Building Construction	4/3/2017	6/29/2018	5	325	
5	Paving	Paving	11/14/2017	11/27/2017	5	10	
6	Architectural Coating	Architectural Coating	11/28/2017	12/11/2017	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 97,200; Non-Residential Outdoor: 32,400 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Graders	1	6.00	174	0.41
Building Construction	Cranes	2	6.00	208	0.29
Building Construction	Forklifts	1	6.00	149	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	6.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	5	6.00	75	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Building Construction	Rubber Tired Dozers	1	6.00	358	0.40
Building Construction	Rollers	1	6.00	84	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Air Compressors	1	6.00	78	0.48
Building Construction	Generator Sets	4	8.00	84	0.74

Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	27.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	0.0449	0.4404	0.3456	4.0000e-004		0.0253	0.0253		0.0237	0.0237	0.0000	35.9258	35.9258	8.6600e-003	0.0000	36.1076
Total	**0.0449**	**0.4404**	**0.3456**	**4.0000e-004**		**0.0253**	**0.0253**		**0.0237**	**0.0237**	**0.0000**	**35.9258**	**35.9258**	**8.6600e-003**	**0.0000**	**36.1076**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	9.6000e-004	9.9600e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7791	1.7791	9.0000e-005	0.0000	1.7811
Total	**6.5000e-004**	**9.6000e-004**	**9.9600e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7791**	**1.7791**	**9.0000e-005**	**0.0000**	**1.7811**

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	0.0449	0.4404	0.3456	4.0000e-004		0.0253	0.0253		0.0237	0.0237	0.0000	35.9258	35.9258	8.6600e-003	0.0000	36.1076
Total	**0.0449**	**0.4404**	**0.3456**	**4.0000e-004**		**0.0253**	**0.0253**		**0.0237**	**0.0237**	**0.0000**	**35.9258**	**35.9258**	**8.6600e-003**	**0.0000**	**36.1076**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	9.6000e-004	9.9600e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7791	1.7791	9.0000e-005	0.0000	1.7811
Total	**6.5000e-004**	**9.6000e-004**	**9.9600e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7791**	**1.7791**	**9.0000e-005**	**0.0000**	**1.7811**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3100e-003	0.0242	0.0159	2.0000e-005		1.3100e-003	1.3100e-003		1.2000e-003	1.2000e-003	0.0000	1.5895	1.5895	4.9000e-004	0.0000	1.5997
Total	**2.3100e-003**	**0.0242**	**0.0159**	**2.0000e-005**	**5.8000e-003**	**1.3100e-003**	**7.1100e-003**	**2.9500e-003**	**1.2000e-003**	**4.1500e-003**	**0.0000**	**1.5895**	**1.5895**	**4.9000e-004**	**0.0000**	**1.5997**

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	4.0000e-005	4.4000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0791	0.0791	0.0000	0.0000	0.0792
Total	**3.0000e-005**	**4.0000e-005**	**4.4000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0791**	**0.0791**	**0.0000**	**0.0000**	**0.0792**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3100e-003	0.0242	0.0159	2.0000e-005		1.3100e-003	1.3100e-003		1.2000e-003	1.2000e-003	0.0000	1.5895	1.5895	4.9000e-004	0.0000	1.5997
Total	**2.3100e-003**	**0.0242**	**0.0159**	**2.0000e-005**	**5.8000e-003**	**1.3100e-003**	**7.1100e-003**	**2.9500e-003**	**1.2000e-003**	**4.1500e-003**	**0.0000**	**1.5895**	**1.5895**	**4.9000e-004**	**0.0000**	**1.5997**

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	4.0000e-005	4.4000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0791	0.0791	0.0000	0.0000	0.0792
Total	**3.0000e-005**	**4.0000e-005**	**4.4000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0791**	**0.0791**	**0.0000**	**0.0000**	**0.0792**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7700e-003	0.0396	0.0264	3.0000e-005		2.1300e-003	2.1300e-003		1.9600e-003	1.9600e-003	0.0000	2.6112	2.6112	8.0000e-004	0.0000	2.6280
Total	**3.7700e-003**	**0.0396**	**0.0264**	**3.0000e-005**	**9.8300e-003**	**2.1300e-003**	**0.0120**	**5.0500e-003**	**1.9600e-003**	**7.0100e-003**	**0.0000**	**2.6112**	**2.6112**	**8.0000e-004**	**0.0000**	**2.6280**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	9.0000e-005	8.9000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1582	0.1582	1.0000e-005	0.0000	0.1583
Total	**6.0000e-005**	**9.0000e-005**	**8.9000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1582**	**0.1582**	**1.0000e-005**	**0.0000**	**0.1583**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7700e-003	0.0396	0.0264	3.0000e-005		2.1300e-003	2.1300e-003		1.9600e-003	1.9600e-003	0.0000	2.6112	2.6112	8.0000e-004	0.0000	2.6280
Total	**3.7700e-003**	**0.0396**	**0.0264**	**3.0000e-005**	**9.8300e-003**	**2.1300e-003**	**0.0120**	**5.0500e-003**	**1.9600e-003**	**7.0100e-003**	**0.0000**	**2.6112**	**2.6112**	**8.0000e-004**	**0.0000**	**2.6280**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	9.0000e-005	8.9000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1582	0.1582	1.0000e-005	0.0000	0.1583
Total	**6.0000e-005**	**9.0000e-005**	**8.9000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1582**	**0.1582**	**1.0000e-005**	**0.0000**	**0.1583**

3.5 Building Construction - 2017

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	0.7419	6.1237	4.5531	6.5300e-003		0.3717	0.3717		0.3557	0.3557	0.0000	572.0620	572.0620	0.1156	0.0000	574.4902
Total	**0.7419**	**6.1237**	**4.5531**	**6.5300e-003**		**0.3717**	**0.3717**		**0.3557**	**0.3557**	**0.0000**	**572.0620**	**572.0620**	**0.1156**	**0.0000**	**574.4902**

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	8.7000e-003	0.0881	0.1183	2.3000e-004	6.6000e-003	1.3700e-003	7.9700e-003	1.8800e-003	1.2600e-003	3.1400e-003	0.0000	20.7960	20.7960	1.5000e-004	0.0000	20.7991
Worker	9.4700e-003	0.0140	0.1457	3.5000e-004	0.0289	2.4000e-004	0.0291	7.6700e-003	2.2000e-004	7.8900e-003	0.0000	26.0199	26.0199	1.3400e-003	0.0000	26.0481
Total	**0.0182**	**0.1021**	**0.2640**	**5.8000e-004**	**0.0355**	**1.6100e-003**	**0.0371**	**9.5500e-003**	**1.4800e-003**	**0.0110**	**0.0000**	**46.8159**	**46.8159**	**1.4900e-003**	**0.0000**	**46.8472**

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	0.7419	6.1237	4.5531	6.5300e-003		0.3717	0.3717		0.3557	0.3557	0.0000	572.0613	572.0613	0.1156	0.0000	574.4895
Total	**0.7419**	**6.1237**	**4.5531**	**6.5300e-003**		**0.3717**	**0.3717**		**0.3557**	**0.3557**	**0.0000**	**572.0613**	**572.0613**	**0.1156**	**0.0000**	**574.4895**

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	8.7000e-003	0.0881	0.1183	2.3000e-004	6.6000e-003	1.3700e-003	7.9700e-003	1.8800e-003	1.2600e-003	3.1400e-003	0.0000	20.7960	20.7960	1.5000e-004	0.0000	20.7991
Worker	9.4700e-003	0.0140	0.1457	3.5000e-004	0.0289	2.4000e-004	0.0291	7.6700e-003	2.2000e-004	7.8900e-003	0.0000	26.0199	26.0199	1.3400e-003	0.0000	26.0481
Total	**0.0182**	**0.1021**	**0.2640**	**5.8000e-004**	**0.0355**	**1.6100e-003**	**0.0371**	**9.5500e-003**	**1.4800e-003**	**0.0110**	**0.0000**	**46.8159**	**46.8159**	**1.4900e-003**	**0.0000**	**46.8472**

3.5 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	0.4340	3.6529	2.9086	4.3500e-003		0.2125	0.2125		0.2035	0.2035	0.0000	378.4627	378.4627	0.0747	0.0000	380.0314
Total	**0.4340**	**3.6529**	**2.9086**	**4.3500e-003**		**0.2125**	**0.2125**		**0.2035**	**0.2035**	**0.0000**	**378.4627**	**378.4627**	**0.0747**	**0.0000**	**380.0314**

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	5.4200e-003	0.0539	0.0755	1.5000e-004	4.4000e-003	8.6000e-004	5.2600e-003	1.2600e-003	7.9000e-004	2.0500e-003	0.0000	13.6312	13.6312	1.0000e-004	0.0000	13.6333
Worker	5.6700e-003	8.4800e-003	0.0879	2.4000e-004	0.0193	1.5000e-004	0.0194	5.1100e-003	1.4000e-004	5.2600e-003	0.0000	16.6992	16.6992	8.3000e-004	0.0000	16.7166
Total	**0.0111**	**0.0623**	**0.1635**	**3.9000e-004**	**0.0237**	**1.0100e-003**	**0.0247**	**6.3700e-003**	**9.3000e-004**	**7.3100e-003**	**0.0000**	**30.3304**	**30.3304**	**9.3000e-004**	**0.0000**	**30.3499**

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	0.4340	3.6529	2.9086	4.3500e-003		0.2125	0.2125		0.2035	0.2035	0.0000	378.4623	378.4623	0.0747	0.0000	380.0309
Total	**0.4340**	**3.6529**	**2.9086**	**4.3500e-003**		**0.2125**	**0.2125**		**0.2035**	**0.2035**	**0.0000**	**378.4623**	**378.4623**	**0.0747**	**0.0000**	**380.0309**

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	5.4200e-003	0.0539	0.0755	1.5000e-004	4.4000e-003	8.6000e-004	5.2600e-003	1.2600e-003	7.9000e-004	2.0500e-003	0.0000	13.6312	13.6312	1.0000e-004	0.0000	13.6333
Worker	5.6700e-003	8.4800e-003	0.0879	2.4000e-004	0.0193	1.5000e-004	0.0194	5.1100e-003	1.4000e-004	5.2600e-003	0.0000	16.6992	16.6992	8.3000e-004	0.0000	16.7166
Total	**0.0111**	**0.0623**	**0.1635**	**3.9000e-004**	**0.0237**	**1.0100e-003**	**0.0247**	**6.3700e-003**	**9.3000e-004**	**7.3100e-003**	**0.0000**	**30.3304**	**30.3304**	**9.3000e-004**	**0.0000**	**30.3499**

3.6 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9300e-003	0.0605	0.0452	7.0000e-005		3.6700e-003	3.6700e-003		3.3800e-003	3.3800e-003	0.0000	6.1129	6.1129	1.8400e-003	0.0000	6.1515

Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.9300e-003**	**0.0605**	**0.0452**	**7.0000e-005**		**3.6700e-003**	**3.6700e-003**		**3.3800e-003**	**3.3800e-003**	**0.0000**	**6.1129**	**6.1129**	**1.8400e-003**	**0.0000**	**6.1515**

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	2.3000e-004	3.5000e-004	3.6000e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6425	0.6425	3.0000e-005	0.0000	0.6432
Total	**2.3000e-004**	**3.5000e-004**	**3.6000e-003**	**1.0000e-005**	**7.1000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**1.0000e-005**	**1.9000e-004**	**0.0000**	**0.6425**	**0.6425**	**3.0000e-005**	**0.0000**	**0.6432**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9300e-003	0.0605	0.0452	7.0000e-005		3.6700e-003	3.6700e-003		3.3800e-003	3.3800e-003	0.0000	6.1129	6.1129	1.8400e-003	0.0000	6.1515
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.9300e-003**	**0.0605**	**0.0452**	**7.0000e-005**		**3.6700e-003**	**3.6700e-003**		**3.3800e-003**	**3.3800e-003**	**0.0000**	**6.1129**	**6.1129**	**1.8400e-003**	**0.0000**	**6.1515**

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	2.3000e-004	3.5000e-004	3.6000e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6425	0.6425	3.0000e-005	0.0000	0.6432

Total	**2.3000e-004**	**3.5000e-004**	**3.6000e-003**	**1.0000e-005**	**7.1000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**1.0000e-005**	**1.9000e-004**	**0.0000**	**0.6425**	**0.6425**	**3.0000e-005**	**0.0000**	**0.6432**

3.7 Architectural Coating - 2017

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	0.7509					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6600e-003	0.0109	9.3400e-003	1.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	1.2766	1.2766	1.3000e-004	0.0000	1.2795
Total	**0.7525**	**0.0109**	**9.3400e-003**	**1.0000e-005**		**8.7000e-004**	**8.7000e-004**		**8.7000e-004**	**8.7000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.3000e-004**	**0.0000**	**1.2795**

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	9.0000e-005	1.3000e-004	1.3800e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2471	0.2471	1.0000e-005	0.0000	0.2474
Total	**9.0000e-005**	**1.3000e-004**	**1.3800e-003**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2471**	**0.2471**	**1.0000e-005**	**0.0000**	**0.2474**

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	0.7509					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6600e-003	0.0109	9.3400e-003	1.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	1.2766	1.2766	1.3000e-004	0.0000	1.2795
Total	**0.7525**	**0.0109**	**9.3400e-003**	**1.0000e-005**		**8.7000e-004**	**8.7000e-004**		**8.7000e-004**	**8.7000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.3000e-004**	**0.0000**	**1.2795**

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	9.0000e-005	1.3000e-004	1.3800e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2471	0.2471	1.0000e-005	0.0000	0.2474
Total	**9.0000e-005**	**1.3000e-004**	**1.3800e-003**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2471**	**0.2471**	**1.0000e-005**	**0.0000**	**0.2474**

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	0.3093	1.1157	4.0781	8.2600e-003	0.5721	0.0170	0.5890	0.1530	0.0156	0.1686	0.0000	694.9791	694.9791	0.0315	0.0000	695.6413
Unmitigated	0.3093	1.1157	4.0781	8.2600e-003	0.5721	0.0170	0.5890	0.1530	0.0156	0.1686	0.0000	694.9791	694.9791	0.0315	0.0000	695.6413

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	451.66	85.54	44.06	1,510,599	1,510,599
Total	451.66	85.54	44.06	1,510,599	1,510,599

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH

0.515683	0.060583	0.179994	0.140474	0.041721	0.006653	0.015053	0.028382	0.001919	0.002521	0.004323	0.000600	0.002094

5.0 Energy Detail

4.4 Fleet Mix

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	223.4506	223.4506	0.0103	2.1300e-003	224.3250
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	223.4506	223.4506	0.0103	2.1300e-003	224.3250
NaturalGas Mitigated	6.5700e-003	0.0598	0.0502	3.6000e-004		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003	0.0000	65.0445	65.0445	1.2500e-003	1.1900e-003	65.4404
NaturalGas Unmitigated	6.5700e-003	0.0598	0.0502	3.6000e-004		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003	0.0000	65.0445	65.0445	1.2500e-003	1.1900e-003	65.4404

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.21889e+006	6.5700e-003	0.0598	0.0502	3.6000e-004		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003	0.0000	65.0445	65.0445	1.2500e-003	1.1900e-003	65.4404
Total		**6.5700e-003**	**0.0598**	**0.0502**	**3.6000e-004**		**4.5400e-003**	**4.5400e-003**		**4.5400e-003**	**4.5400e-003**	**0.0000**	**65.0445**	**65.0445**	**1.2500e-003**	**1.1900e-003**	**65.4404**

Mitigated

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

General Light Industry	1.21889e+006	6.5700e-003	0.0598	0.0502	3.6000e-004		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003	0.0000	65.0445	65.0445	1.2500e-003	1.1900e-003	65.4404
Total		**6.5700e-003**	**0.0598**	**0.0502**	**3.6000e-004**		**4.5400e-003**	**4.5400e-003**		**4.5400e-003**	**4.5400e-003**	**0.0000**	**65.0445**	**65.0445**	**1.2500e-003**	**1.1900e-003**	**65.4404**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	780840	223.4506	0.0103	2.1300e-003	224.3250
Total		**223.4506**	**0.0103**	**2.1300e-003**	**224.3250**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	780840	223.4506	0.0103	2.1300e-003	224.3250
Total		**223.4506**	**0.0103**	**2.1300e-003**	**224.3250**

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	0.3093	1.0000e-005	8.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6100e-003	1.6100e-003	0.0000	0.0000	1.7100e-003

Unmitigated	0.3093	1.0000e-005	8.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6100e-003	1.6100e-003	0.0000	0.0000	1.7100e-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	0.0751					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2342					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	8.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6100e-003	1.6100e-003	0.0000	0.0000	1.7100e-003
Total	**0.3093**	**1.0000e-005**	**8.6000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.6100e-003**	**1.6100e-003**	**0.0000**	**0.0000**	**1.7100e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0751					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2342					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	8.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6100e-003	1.6100e-003	0.0000	0.0000	1.7100e-003
Total	**0.3093**	**1.0000e-005**	**8.6000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.6100e-003**	**1.6100e-003**	**0.0000**	**0.0000**	**1.7100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	60.5908	0.4908	0.0120	74.6299

Unmitigated	60.5908	0.4909	0.0121	74.6375

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	14.985 / 0	60.5908	0.4909	0.0121	74.6375
Total		**60.5908**	**0.4909**	**0.0121**	**74.6375**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	14.985 / 0	60.5908	0.4908	0.0120	74.6299
Total		**60.5908**	**0.4908**	**0.0120**	**74.6299**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	16.3103	0.9639	0.0000	36.5525
Unmitigated	16.3103	0.9639	0.0000	36.5525

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	80.35	16.3103	0.9639	0.0000	36.5525
Total		**16.3103**	**0.9639**	**0.0000**	**36.5525**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	80.35	16.3103	0.9639	0.0000	36.5525
Total		**16.3103**	**0.9639**	**0.0000**	**36.5525**

9.0 Operational Offroad

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

10.0 Vegetation

Wetlands Facility Construction - Tank Construction Only

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	9.78	1000sqft	0.22	9,777.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per SPEC schedule. Painting duration is estimate.

Off-road Equipment - Per SPEC equipment schedule

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment -

Off-road Equipment -

Architectural Coating - Surface area of all six tanks.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	4,889.00	43,078.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	14,666.00	0.00

tblConstructionPhase	NumDays	5.00	20.00
tblLandUse	LandUseSquareFeet	9,780.00	9,777.00
tblProjectCharacteristics	OperationalYear	2014	2019

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	0.3208	0.6870	0.5281	8.1000e-004	5.3900e-003	0.0439	0.0493	1.6200e-003	0.0407	0.0424	0.0000	71.8420	71.8420	0.0189	0.0000	72.2395
Total	**0.3208**	**0.6870**	**0.5281**	**8.1000e-004**	**5.3900e-003**	**0.0439**	**0.0493**	**1.6200e-003**	**0.0407**	**0.0424**	**0.0000**	**71.8420**	**71.8420**	**0.0189**	**0.0000**	**72.2395**

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	0.3208	0.6870	0.5281	8.1000e-004	5.3900e-003	0.0439	0.0493	1.6200e-003	0.0407	0.0424	0.0000	71.8419	71.8419	0.0189	0.0000	72.2394
Total	**0.3208**	**0.6870**	**0.5281**	**8.1000e-004**	**5.3900e-003**	**0.0439**	**0.0493**	**1.6200e-003**	**0.0407**	**0.0424**	**0.0000**	**71.8419**	**71.8419**	**0.0189**	**0.0000**	**72.2394**

	ROG	NOx	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	tons/yr										MT/yr					
Area	0.0467	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4000e-004	2.4000e-004	0.0000	0.0000	2.6000e-004
Energy	9.9000e-004	9.0100e-003	7.5700e-003	5.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	43.5280	43.5280	1.7400e-003	5.0000e-004	43.7197
Mobile	0.0312	0.1137	0.4085	1.2600e-003	0.0864	1.7600e-003	0.0882	0.0231	1.6200e-003	0.0248	0.0000	91.5623	91.5623	3.2800e-003	0.0000	91.6313
Waste						0.0000	0.0000		0.0000	0.0000	2.4623	0.0000	2.4623	0.1455	0.0000	5.5181
Water						0.0000	0.0000		0.0000	0.0000	0.7175	8.4272	9.1447	0.0741	1.8200e-003	11.2647
Total	**0.0789**	**0.1227**	**0.4162**	**1.3100e-003**	**0.0864**	**2.4500e-003**	**0.0889**	**0.0231**	**2.3100e-003**	**0.0254**	**3.1798**	**143.5178**	**146.6976**	**0.2246**	**2.3200e-003**	**152.1341**

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	0.0467	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4000e-004	2.4000e-004	0.0000	0.0000	2.6000e-004
Energy	9.9000e-004	9.0100e-003	7.5700e-003	5.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	43.5280	43.5280	1.7400e-003	5.0000e-004	43.7197
Mobile	0.0312	0.1137	0.4085	1.2600e-003	0.0864	1.7600e-003	0.0882	0.0231	1.6200e-003	0.0248	0.0000	91.5623	91.5623	3.2800e-003	0.0000	91.6313

Waste						0.0000	0.0000		0.0000	0.0000	2.4623	0.0000	2.4623	0.1455	0.0000	5.5181
Water						0.0000	0.0000		0.0000	0.0000	0.7175	8.4272	9.1447	0.0741	1.8200e-003	11.2636
Total	**0.0789**	**0.1227**	**0.4162**	**1.3100e-003**	**0.0864**	**2.4500e-003**	**0.0889**	**0.0231**	**2.3100e-003**	**0.0254**	**3.1798**	**143.5178**	**146.6976**	**0.2246**	**2.3200e-003**	**152.1330**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2018	1/12/2018	5	10	
2	Site Preparation	Site Preparation	1/13/2018	1/15/2018	5	1	
3	Grading	Grading	1/16/2018	1/17/2018	5	2	
4	Building Construction	Building Construction	1/18/2018	6/6/2018	5	100	
5	Paving	Paving	6/7/2018	6/13/2018	5	5	
6	Architectural Coating	Architectural Coating	6/14/2018	7/11/2018	5	20	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 43,078 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	255	0.40

Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	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
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	4.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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	8.5300e-003	0.0735	0.0660	1.0000e-004		4.7400e-003	4.7400e-003		4.5800e-003	4.5800e-003	0.0000	8.5210	8.5210	1.4000e-003	0.0000	8.5503
Total	**8.5300e-003**	**0.0735**	**0.0660**	**1.0000e-004**		**4.7400e-003**	**4.7400e-003**		**4.5800e-003**	**4.5800e-003**	**0.0000**	**8.5210**	**8.5210**	**1.4000e-003**	**0.0000**	**8.5503**

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	2.4000e-004	3.6000e-004	3.7600e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7136	0.7136	4.0000e-005	0.0000	0.7144
Total	**2.4000e-004**	**3.6000e-004**	**3.7600e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.3000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7136**	**0.7136**	**4.0000e-005**	**0.0000**	**0.7144**

Mitigated Construction On-Site

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

Off-Road	8.5300e-003	0.0735	0.0660	1.0000e-004		4.7400e-003	4.7400e-003		4.5800e-003	4.5800e-003	0.0000	8.5209	8.5209	1.4000e-003	0.0000	8.5502
Total	**8.5300e-003**	**0.0735**	**0.0660**	**1.0000e-004**		**4.7400e-003**	**4.7400e-003**		**4.5800e-003**	**4.5800e-003**	**0.0000**	**8.5209**	**8.5209**	**1.4000e-003**	**0.0000**	**8.5502**

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	2.4000e-004	3.6000e-004	3.7600e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7136	0.7136	4.0000e-005	0.0000	0.7144
Total	**2.4000e-004**	**3.6000e-004**	**3.7600e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.3000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7136**	**0.7136**	**4.0000e-005**	**0.0000**	**0.7144**

3.3 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					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	5.4700e-003	3.5000e-003	0.0000		3.3000e-004	3.3000e-004		3.0000e-004	3.0000e-004	0.0000	0.4257	0.4257	1.3000e-004	0.0000	0.4285
Total	**5.5000e-004**	**5.4700e-003**	**3.5000e-003**	**0.0000**	**2.7000e-004**	**3.3000e-004**	**6.0000e-004**	**3.0000e-005**	**3.0000e-004**	**3.3000e-004**	**0.0000**	**0.4257**	**0.4257**	**1.3000e-004**	**0.0000**	**0.4285**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0238	0.0238	0.0000	0.0000	0.0238
Total	**1.0000e-005**	**1.0000e-005**	**1.3000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0238**	**0.0238**	**0.0000**	**0.0000**	**0.0238**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	5.4700e-003	3.5000e-003	0.0000		3.3000e-004	3.3000e-004		3.0000e-004	3.0000e-004	0.0000	0.4257	0.4257	1.3000e-004	0.0000	0.4285
Total	**5.5000e-004**	**5.4700e-003**	**3.5000e-003**	**0.0000**	**2.7000e-004**	**3.3000e-004**	**6.0000e-004**	**3.0000e-005**	**3.0000e-004**	**3.3000e-004**	**0.0000**	**0.4257**	**0.4257**	**1.3000e-004**	**0.0000**	**0.4285**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0238	0.0238	0.0000	0.0000	0.0238
Total	**1.0000e-005**	**1.0000e-005**	**1.3000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0238**	**0.0238**	**0.0000**	**0.0000**	**0.0238**

3.4 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					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0500e-003	9.3200e-003	8.3500e-003	1.0000e-005		6.1000e-004	6.1000e-004		5.9000e-004	5.9000e-004	0.0000	1.0649	1.0649	2.1000e-004	0.0000	1.0692
Total	**1.0500e-003**	**9.3200e-003**	**8.3500e-003**	**1.0000e-005**	**7.5000e-004**	**6.1000e-004**	**1.3600e-003**	**4.1000e-004**	**5.9000e-004**	**1.0000e-003**	**0.0000**	**1.0649**	**1.0649**	**2.1000e-004**	**0.0000**	**1.0692**

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	5.0000e-005	5.0000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0952	0.0952	0.0000	0.0000	0.0953

Total	**3.0000e-005**	**5.0000e-005**	**5.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0952**	**0.0952**	**0.0000**	**0.0000**	**0.0953**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0500e-003	9.3200e-003	8.3500e-003	1.0000e-005		6.1000e-004	6.1000e-004		5.9000e-004	5.9000e-004	0.0000	1.0649	1.0649	2.1000e-004	0.0000	1.0692
Total	**1.0500e-003**	**9.3200e-003**	**8.3500e-003**	**1.0000e-005**	**7.5000e-004**	**6.1000e-004**	**1.3600e-003**	**4.1000e-004**	**5.9000e-004**	**1.0000e-003**	**0.0000**	**1.0649**	**1.0649**	**2.1000e-004**	**0.0000**	**1.0692**

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	5.0000e-005	5.0000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0952	0.0952	0.0000	0.0000	0.0953
Total	**3.0000e-005**	**5.0000e-005**	**5.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0952**	**0.0952**	**0.0000**	**0.0000**	**0.0953**

3.5 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	0.0539	0.5479	0.3862	5.7000e-004		0.0353	0.0353		0.0325	0.0325	0.0000	51.7208	51.7208	0.0161	0.0000	52.0589
Total	**0.0539**	**0.5479**	**0.3862**	**5.7000e-004**		**0.0353**	**0.0353**		**0.0325**	**0.0325**	**0.0000**	**51.7208**	**51.7208**	**0.0161**	**0.0000**	**52.0589**

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	7.6000e-004	7.5300e-003	0.0106	2.0000e-005	6.2000e-004	1.2000e-004	7.4000e-004	1.8000e-004	1.1000e-004	2.9000e-004	0.0000	1.9065	1.9065	1.0000e-005	0.0000	1.9068
Worker	6.5000e-004	9.7000e-004	0.0100	3.0000e-005	2.1900e-003	2.0000e-005	2.2100e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	1.9030	1.9030	9.0000e-005	0.0000	1.9050
Total	**1.4100e-003**	**8.5000e-003**	**0.0206**	**5.0000e-005**	**2.8100e-003**	**1.4000e-004**	**2.9500e-003**	**7.6000e-004**	**1.3000e-004**	**8.9000e-004**	**0.0000**	**3.8095**	**3.8095**	**1.0000e-004**	**0.0000**	**3.8118**

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	0.0539	0.5479	0.3862	5.7000e-004		0.0353	0.0353		0.0325	0.0325	0.0000	51.7208	51.7208	0.0161	0.0000	52.0589
Total	**0.0539**	**0.5479**	**0.3862**	**5.7000e-004**		**0.0353**	**0.0353**		**0.0325**	**0.0325**	**0.0000**	**51.7208**	**51.7208**	**0.0161**	**0.0000**	**52.0589**

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	7.6000e-004	7.5300e-003	0.0106	2.0000e-005	6.2000e-004	1.2000e-004	7.4000e-004	1.8000e-004	1.1000e-004	2.9000e-004	0.0000	1.9065	1.9065	1.0000e-005	0.0000	1.9068
Worker	6.5000e-004	9.7000e-004	0.0100	3.0000e-005	2.1900e-003	2.0000e-005	2.2100e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	1.9030	1.9030	9.0000e-005	0.0000	1.9050
Total	**1.4100e-003**	**8.5000e-003**	**0.0206**	**5.0000e-005**	**2.8100e-003**	**1.4000e-004**	**2.9500e-003**	**7.6000e-004**	**1.3000e-004**	**8.9000e-004**	**0.0000**	**3.8095**	**3.8095**	**1.0000e-004**	**0.0000**	**3.8118**

3.6 Paving - 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	2.2700e-003	0.0216	0.0178	3.0000e-005		1.2600e-003	1.2600e-003		1.1700e-003	1.1700e-003	0.0000	2.3909	2.3909	6.7000e-004	0.0000	2.4051
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.2700e-003**	**0.0216**	**0.0178**	**3.0000e-005**		**1.2600e-003**	**1.2600e-003**		**1.1700e-003**	**1.1700e-003**	**0.0000**	**2.3909**	**2.3909**	**6.7000e-004**	**0.0000**	**2.4051**

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	1.5000e-004	2.2000e-004	2.2500e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4282	0.4282	2.0000e-005	0.0000	0.4286
Total	**1.5000e-004**	**2.2000e-004**	**2.2500e-003**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4282**	**0.4282**	**2.0000e-005**	**0.0000**	**0.4286**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.2700e-003	0.0216	0.0178	3.0000e-005		1.2600e-003	1.2600e-003		1.1700e-003	1.1700e-003	0.0000	2.3909	2.3909	6.7000e-004	0.0000	2.4051
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.2700e-003**	**0.0216**	**0.0178**	**3.0000e-005**		**1.2600e-003**	**1.2600e-003**		**1.1700e-003**	**1.1700e-003**	**0.0000**	**2.3909**	**2.3909**	**6.7000e-004**	**0.0000**	**2.4051**

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	1.5000e-004	2.2000e-004	2.2500e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4282	0.4282	2.0000e-005	0.0000	0.4286
Total	**1.5000e-004**	**2.2000e-004**	**2.2500e-003**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4282**	**0.4282**	**2.0000e-005**	**0.0000**	**0.4286**

3.7 Architectural Coating - 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					
Archit. Coating	0.2496					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0185	3.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	2.5533	2.5533	2.4000e-004	0.0000	2.5584
Total	**0.2526**	**0.0201**	**0.0185**	**3.0000e-005**		**1.5100e-003**	**1.5100e-003**		**1.5100e-003**	**1.5100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.4000e-004**	**0.0000**	**2.5584**

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	5.0000e-005	5.0000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0952	0.0952	0.0000	0.0000	0.0953

Total	**3.0000e-005**	**5.0000e-005**	**5.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0952**	**0.0952**	**0.0000**	**0.0000**	**0.0953**

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	0.2496					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0185	3.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	2.5533	2.5533	2.4000e-004	0.0000	2.5584
Total	**0.2526**	**0.0201**	**0.0185**	**3.0000e-005**		**1.5100e-003**	**1.5100e-003**		**1.5100e-003**	**1.5100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.4000e-004**	**0.0000**	**2.5584**

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	5.0000e-005	5.0000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0952	0.0952	0.0000	0.0000	0.0953
Total	**3.0000e-005**	**5.0000e-005**	**5.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0952**	**0.0952**	**0.0000**	**0.0000**	**0.0953**

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	0.0312	0.1137	0.4085	1.2600e-003	0.0864	1.7600e-003	0.0882	0.0231	1.6200e-003	0.0248	0.0000	91.5623	91.5623	3.2800e-003	0.0000	91.6313
Unmitigated	0.0312	0.1137	0.4085	1.2600e-003	0.0864	1.7600e-003	0.0882	0.0231	1.6200e-003	0.0248	0.0000	91.5623	91.5623	3.2800e-003	0.0000	91.6313

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	68.17	12.91	6.65	227,989	227,989
Total	68.17	12.91	6.65	227,989	227,989

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.510142	0.059804	0.180842	0.139058	0.042603	0.006701	0.016107	0.033206	0.001939	0.002487	0.004384	0.000580	0.002146

5.0 Energy Detail

4.4 Fleet Mix

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	33.7141	33.7141	1.5500e-003	3.2000e-004	33.8461
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	33.7141	33.7141	1.5500e-003	3.2000e-004	33.8461
NaturalGas Mitigated	9.9000e-004	9.0100e-003	7.5700e-003	5.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	9.8139	9.8139	1.9000e-004	1.8000e-004	9.8736
NaturalGas Unmitigated	9.9000e-004	9.0100e-003	7.5700e-003	5.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	9.8139	9.8139	1.9000e-004	1.8000e-004	9.8736

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	183905	9.9000e-004	9.0100e-003	7.5700e-003	5.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	9.8139	9.8139	1.9000e-004	1.8000e-004	9.8736
Total		**9.9000e-004**	**9.0100e-003**	**7.5700e-003**	**5.0000e-005**		**6.9000e-004**	**6.9000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**9.8139**	**9.8139**	**1.9000e-004**	**1.8000e-004**	**9.8736**

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	183905	9.9000e-004	9.0100e-003	7.5700e-003	5.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	9.8139	9.8139	1.9000e-004	1.8000e-004	9.8736
Total		**9.9000e-004**	**9.0100e-003**	**7.5700e-003**	**5.0000e-005**		**6.9000e-004**	**6.9000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**9.8139**	**9.8139**	**1.9000e-004**	**1.8000e-004**	**9.8736**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	117813	33.7141	1.5500e-003	3.2000e-004	33.8461
Total		**33.7141**	**1.5500e-003**	**3.2000e-004**	**33.8461**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	117813	33.7141	1.5500e-003	3.2000e-004	33.8461
Total		**33.7141**	**1.5500e-003**	**3.2000e-004**	**33.8461**

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	0.0467	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4000e-004	2.4000e-004	0.0000	0.0000	2.6000e-004
Unmitigated	0.0467	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4000e-004	2.4000e-004	0.0000	0.0000	2.6000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0113					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0353					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4000e-004	2.4000e-004	0.0000	0.0000	2.6000e-004
Total	**0.0467**	**0.0000**	**1.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.4000e-004**	**2.4000e-004**	**0.0000**	**0.0000**	**2.6000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0113					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0353					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4000e-004	2.4000e-004	0.0000	0.0000	2.6000e-004
Total	**0.0467**	**0.0000**	**1.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.4000e-004**	**2.4000e-004**	**0.0000**	**0.0000**	**2.6000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.1447	0.0741	1.8200e-003	11.2636
Unmitigated	9.1447	0.0741	1.8200e-003	11.2647

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	2.26163 / 0	9.1447	0.0741	1.8200e-003	11.2647

Total		**9.1447**	**0.0741**	**1.8200e-003**	**11.2647**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	2.26163 / 0	9.1447	0.0741	1.8200e-003	11.2636
Total		**9.1447**	**0.0741**	**1.8200e-003**	**11.2636**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.4623	0.1455	0.0000	5.5181
Unmitigated	2.4623	0.1455	0.0000	5.5181

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	12.13	2.4623	0.1455	0.0000	5.5181
Total		**2.4623**	**0.1455**	**0.0000**	**5.5181**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	12.13	2.4623	0.1455	0.0000	5.5181
Total		**2.4623**	**0.1455**	**0.0000**	**5.5181**

9.0 Operational Offroad

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

10.0 Vegetation

Wetlands Facility Construction - Off-Site Construction Only

South Coast AQMD Air District, Annual

Note: All emissions calculated in "Building Construction" category.

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0
Other Asphalt Surfaces	47.10	1000sqft	1.08	47,100.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per SPEC schedule
Only Grading and Paving are relevant

Off-road Equipment -

Off-road Equipment - Per SPEC equipment schedule

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment - Equipment per SPEC

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Per SPEC

Demolition -

Grading - Per SPEC

Architectural Coating -

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	72150	1500
tblConstructionPhase	NumDays	4.00	87.00
tblConstructionPhase	NumDays	10.00	87.00
tblConstructionPhase	PhaseEndDate	11/8/2017	6/21/2017
tblConstructionPhase	PhaseEndDate	10/24/2017	10/25/2017
tblConstructionPhase	PhaseEndDate	10/20/2017	10/31/2017
tblConstructionPhase	PhaseEndDate	3/1/2018	10/31/2017
tblConstructionPhase	PhaseEndDate	1/31/2017	1/17/2017
tblConstructionPhase	PhaseStartDate	10/26/2017	6/15/2017
tblConstructionPhase	PhaseStartDate	1/18/2017	1/19/2017
tblConstructionPhase	PhaseStartDate	6/22/2017	7/3/2017
tblConstructionPhase	PhaseStartDate	11/1/2017	7/3/2017
tblConstructionPhase	PhaseStartDate	1/28/2017	1/14/2017
tblGrading	AcresOfGrading	65.25	1.00
tblGrading	AcresOfGrading	1.00	0.50
tblGrading	MaterialExported	0.00	872.00
tblGrading	MaterialImported	0.00	3,000.00
tblOffRoadEquipment	HorsePower	97.00	95.00
tblOffRoadEquipment	HorsePower	78.00	100.00
tblOffRoadEquipment	HorsePower	208.00	240.00
tblOffRoadEquipment	HorsePower	162.00	270.00
tblOffRoadEquipment	HorsePower	89.00	90.00
tblOffRoadEquipment	HorsePower	84.00	125.00
tblOffRoadEquipment	HorsePower	84.00	25.00

tblOffRoadEquipment	HorsePower	199.00	115.00
tblOffRoadEquipment	HorsePower	46.00	50.00
tblOffRoadEquipment	UsageHours	6.00	1.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2018

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					
2017	0.9729	5.3204	4.0746	6.8700e-003	0.1013	0.3173	0.4187	0.0377	0.3022	0.3399	0.0000	591.6734	591.6734	0.1197	0.0000	594.1868
Total	**0.9729**	**5.3204**	**4.0746**	**6.8700e-003**	**0.1013**	**0.3173**	**0.4187**	**0.0377**	**0.3022**	**0.3399**	**0.0000**	**591.6734**	**591.6734**	**0.1197**	**0.0000**	**594.1868**

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					
2017	0.9729	5.3204	4.0746	6.8700e-003	0.1013	0.3173	0.4187	0.0377	0.3022	0.3399	0.0000	591.6728	591.6728	0.1197	0.0000	594.1862
Total	**0.9729**	**5.3204**	**4.0746**	**6.8700e-003**	**0.1013**	**0.3173**	**0.4187**	**0.0377**	**0.3022**	**0.3399**	**0.0000**	**591.6728**	**591.6728**	**0.1197**	**0.0000**	**594.1862**

	ROG	NOx	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	tons/yr										MT/yr					
Area	0.1887	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1900e-003	1.1900e-003	0.0000	0.0000	1.2600e-003
Energy	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	4.4521	4.4521	1.8000e-004	5.0000e-005	4.4717
Mobile	3.4100e-003	0.0124	0.0449	1.3000e-004	8.8400e-003	1.8000e-004	9.0200e-003	2.3600e-003	1.7000e-004	2.5300e-003	0.0000	9.6564	9.6564	3.6000e-004	0.0000	9.6639
Waste						0.0000	0.0000		0.0000	0.0000	0.2517	0.0000	0.2517	0.0149	0.0000	0.5641
Water						0.0000	0.0000		0.0000	0.0000	0.0734	0.8617	0.9350	7.5700e-003	1.9000e-004	1.1518
Total	**0.1922**	**0.0134**	**0.0463**	**1.4000e-004**	**8.8400e-003**	**2.5000e-004**	**9.0900e-003**	**2.3600e-003**	**2.4000e-004**	**2.6000e-003**	**0.3251**	**14.9714**	**15.2964**	**0.0230**	**2.4000e-004**	**15.8528**

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	0.1887	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1900e-003	1.1900e-003	0.0000	0.0000	1.2600e-003
Energy	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	4.4521	4.4521	1.8000e-004	5.0000e-005	4.4717
Mobile	3.4100e-003	0.0124	0.0449	1.3000e-004	8.8400e-003	1.8000e-004	9.0200e-003	2.3600e-003	1.7000e-004	2.5300e-003	0.0000	9.6564	9.6564	3.6000e-004	0.0000	9.6639

Waste						0.0000	0.0000		0.0000	0.0000	0.2517	0.0000	0.2517	0.0149	0.0000	0.5641
Water						0.0000	0.0000		0.0000	0.0000	0.0734	0.8617	0.9350	7.5700e-003	1.9000e-004	1.1517
Total	**0.1922**	**0.0134**	**0.0463**	**1.4000e-004**	**8.8400e-003**	**2.5000e-004**	**9.0900e-003**	**2.3600e-003**	**2.4000e-004**	**2.6000e-003**	**0.3251**	**14.9714**	**15.2964**	**0.0230**	**2.4000e-004**	**15.8527**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/14/2017	1/17/2017	5	2	
3	Building Construction	Building Construction	1/19/2017	10/25/2017	5	200	
4	Architectural Coating	Architectural Coating	6/15/2017	6/21/2017	5	10	
5	Grading	Grading	7/3/2017	10/31/2017	5	87	
6	Paving	Paving	7/3/2017	10/31/2017	5	87	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 72,150; Non-Residential Outdoor: 24,050 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Demolition	Rubber Tired Dozers	1	8.00	255	0.40

Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Air Compressors	1	6.00	78	0.48
Grading	Air Compressors	1	6.00	100	0.48
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Crawler Tractors	1	6.00	240	0.43
Grading	Excavators	2	6.00	270	0.38
Grading	Forklifts	1	6.00	90	0.20
Grading	Generator Sets	1	6.00	125	0.74
Grading	Generator Sets	2	2.00	25	0.74
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Loaders	2	6.00	115	0.36
Grading	Tractors/Loaders/Backhoes	1	6.00	95	0.37
Grading	Welders	4	4.00	50	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	20.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	19	48.00	0.00	484.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	0.0449	0.4404	0.3456	4.0000e-004		0.0253	0.0253		0.0237	0.0237	0.0000	35.9258	35.9258	8.6600e-003	0.0000	36.1076
Total	**0.0449**	**0.4404**	**0.3456**	**4.0000e-004**		**0.0253**	**0.0253**		**0.0237**	**0.0237**	**0.0000**	**35.9258**	**35.9258**	**8.6600e-003**	**0.0000**	**36.1076**

Unmitigated Construction Off-Site

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

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	9.6000e-004	9.9600e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7791	1.7791	9.0000e-005	0.0000	1.7811
Total	**6.5000e-004**	**9.6000e-004**	**9.9600e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7791**	**1.7791**	**9.0000e-005**	**0.0000**	**1.7811**

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	0.0449	0.4404	0.3456	4.0000e-004		0.0253	0.0253		0.0237	0.0237	0.0000	35.9258	35.9258	8.6600e-003	0.0000	36.1076
Total	**0.0449**	**0.4404**	**0.3456**	**4.0000e-004**		**0.0253**	**0.0253**		**0.0237**	**0.0237**	**0.0000**	**35.9258**	**35.9258**	**8.6600e-003**	**0.0000**	**36.1076**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	9.6000e-004	9.9600e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7791	1.7791	9.0000e-005	0.0000	1.7811
Total	**6.5000e-004**	**9.6000e-004**	**9.9600e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7791**	**1.7791**	**9.0000e-005**	**0.0000**	**1.7811**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.5300e-003	0.0000	5.5300e-003	2.9300e-003	0.0000	2.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3100e-003	0.0242	0.0159	2.0000e-005		1.3100e-003	1.3100e-003		1.2000e-003	1.2000e-003	0.0000	1.5895	1.5895	4.9000e-004	0.0000	1.5997
Total	**2.3100e-003**	**0.0242**	**0.0159**	**2.0000e-005**	**5.5300e-003**	**1.3100e-003**	**6.8400e-003**	**2.9300e-003**	**1.2000e-003**	**4.1300e-003**	**0.0000**	**1.5895**	**1.5895**	**4.9000e-004**	**0.0000**	**1.5997**

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	4.0000e-005	4.4000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0791	0.0791	0.0000	0.0000	0.0792
Total	**3.0000e-005**	**4.0000e-005**	**4.4000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0791**	**0.0791**	**0.0000**	**0.0000**	**0.0792**

Mitigated Construction On-Site

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

Fugitive Dust					5.5300e-003	0.0000	5.5300e-003	2.9300e-003	0.0000	2.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3100e-003	0.0242	0.0159	2.0000e-005		1.3100e-003	1.3100e-003		1.2000e-003	1.2000e-003	0.0000	1.5895	1.5895	4.9000e-004	0.0000	1.5997
Total	**2.3100e-003**	**0.0242**	**0.0159**	**2.0000e-005**	**5.5300e-003**	**1.3100e-003**	**6.8400e-003**	**2.9300e-003**	**1.2000e-003**	**4.1300e-003**	**0.0000**	**1.5895**	**1.5895**	**4.9000e-004**	**0.0000**	**1.5997**

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	4.0000e-005	4.4000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0791	0.0791	0.0000	0.0000	0.0792
Total	**3.0000e-005**	**4.0000e-005**	**4.4000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0791**	**0.0791**	**0.0000**	**0.0000**	**0.0792**

3.4 Building Construction - 2017

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	0.2955	1.9109	1.4311	2.2000e-003		0.1226	0.1226		0.1182	0.1182	0.0000	184.5473	184.5473	0.0387	0.0000	185.3605
Total	**0.2955**	**1.9109**	**1.4311**	**2.2000e-003**		**0.1226**	**0.1226**		**0.1182**	**0.1182**	**0.0000**	**184.5473**	**184.5473**	**0.0387**	**0.0000**	**185.3605**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4900e-003	0.0657	0.0882	1.7000e-004	4.9200e-003	1.0200e-003	5.9400e-003	1.4100e-003	9.4000e-004	2.3400e-003	0.0000	15.5121	15.5121	1.1000e-004	0.0000	15.5145
Worker	7.2000e-003	0.0107	0.1107	2.7000e-004	0.0219	1.8000e-004	0.0221	5.8300e-003	1.7000e-004	5.9900e-003	0.0000	19.7682	19.7682	1.0200e-003	0.0000	19.7897
Total	**0.0137**	**0.0763**	**0.1989**	**4.4000e-004**	**0.0269**	**1.2000e-003**	**0.0281**	**7.2400e-003**	**1.1100e-003**	**8.3300e-003**	**0.0000**	**35.2804**	**35.2804**	**1.1300e-003**	**0.0000**	**35.3041**

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	0.2955	1.9109	1.4311	2.2000e-003		0.1226	0.1226		0.1182	0.1182	0.0000	184.5471	184.5471	0.0387	0.0000	185.3603
Total	**0.2955**	**1.9109**	**1.4311**	**2.2000e-003**		**0.1226**	**0.1226**		**0.1182**	**0.1182**	**0.0000**	**184.5471**	**184.5471**	**0.0387**	**0.0000**	**185.3603**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4900e-003	0.0657	0.0882	1.7000e-004	4.9200e-003	1.0200e-003	5.9400e-003	1.4100e-003	9.4000e-004	2.3400e-003	0.0000	15.5121	15.5121	1.1000e-004	0.0000	15.5145
Worker	7.2000e-003	0.0107	0.1107	2.7000e-004	0.0219	1.8000e-004	0.0221	5.8300e-003	1.7000e-004	5.9900e-003	0.0000	19.7682	19.7682	1.0200e-003	0.0000	19.7897
Total	**0.0137**	**0.0763**	**0.1989**	**4.4000e-004**	**0.0269**	**1.2000e-003**	**0.0281**	**7.2400e-003**	**1.1100e-003**	**8.3300e-003**	**0.0000**	**35.2804**	**35.2804**	**1.1300e-003**	**0.0000**	**35.3041**

3.5 Architectural Coating - 2017

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	0.2787					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total	**0.2795**	**5.4600e-003**	**4.6700e-003**	**1.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**0.6383**	**0.6383**	**7.0000e-005**	**0.0000**	**0.6397**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	1.0000e-005	0.0000	0.0990
Total	**4.0000e-005**	**5.0000e-005**	**5.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0988**	**0.0988**	**1.0000e-005**	**0.0000**	**0.0990**

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	0.2787					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total	**0.2795**	**5.4600e-003**	**4.6700e-003**	**1.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**0.6383**	**0.6383**	**7.0000e-005**	**0.0000**	**0.6397**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	1.0000e-005	0.0000	0.0990
Total	**4.0000e-005**	**5.0000e-005**	**5.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0988**	**0.0988**	**1.0000e-005**	**0.0000**	**0.0990**

3.6 Grading - 2017

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					0.0335	0.0000	0.0335	0.0181	0.0000	0.0181	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2697	2.2575	1.4769	2.6700e-003		0.1335	0.1335		0.1270	0.1270	0.0000	236.2945	236.2945	0.0531	0.0000	237.4086
Total	**0.2697**	**2.2575**	**1.4769**	**2.6700e-003**	**0.0335**	**0.1335**	**0.1670**	**0.0181**	**0.1270**	**0.1451**	**0.0000**	**236.2945**	**236.2945**	**0.0531**	**0.0000**	**237.4086**

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	4.0600e-003	0.0641	0.0510	1.8000e-004	4.1500e-003	9.6000e-004	5.1100e-003	1.1400e-003	8.9000e-004	2.0200e-003	0.0000	16.0312	16.0312	1.1000e-004	0.0000	16.0336
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5200e-003	0.0111	0.1155	2.8000e-004	0.0229	1.9000e-004	0.0231	6.0800e-003	1.7000e-004	6.2600e-003	0.0000	20.6380	20.6380	1.0700e-003	0.0000	20.6604
Total	**0.0116**	**0.0752**	**0.1665**	**4.6000e-004**	**0.0271**	**1.1500e-003**	**0.0282**	**7.2200e-003**	**1.0600e-003**	**8.2800e-003**	**0.0000**	**36.6692**	**36.6692**	**1.1800e-003**	**0.0000**	**36.6940**

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					0.0335	0.0000	0.0335	0.0181	0.0000	0.0181	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2697	2.2575	1.4769	2.6700e-003		0.1335	0.1335		0.1270	0.1270	0.0000	236.2942	236.2942	0.0531	0.0000	237.4083
Total	**0.2697**	**2.2575**	**1.4769**	**2.6700e-003**	**0.0335**	**0.1335**	**0.1670**	**0.0181**	**0.1270**	**0.1451**	**0.0000**	**236.2942**	**236.2942**	**0.0531**	**0.0000**	**237.4083**

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	4.0600e-003	0.0641	0.0510	1.8000e-004	4.1500e-003	9.6000e-004	5.1100e-003	1.1400e-003	8.9000e-004	2.0200e-003	0.0000	16.0312	16.0312	1.1000e-004	0.0000	16.0336
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5200e-003	0.0111	0.1155	2.8000e-004	0.0229	1.9000e-004	0.0231	6.0800e-003	1.7000e-004	6.2600e-003	0.0000	20.6380	20.6380	1.0700e-003	0.0000	20.6604
Total	**0.0116**	**0.0752**	**0.1665**	**4.6000e-004**	**0.0271**	**1.1500e-003**	**0.0282**	**7.2200e-003**	**1.0600e-003**	**8.2800e-003**	**0.0000**	**36.6692**	**36.6692**	**1.1800e-003**	**0.0000**	**36.6940**

3.7 Paving - 2017

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	0.0516	0.5263	0.3928	5.8000e-004		0.0319	0.0319		0.0294	0.0294	0.0000	53.1820	53.1820	0.0160	0.0000	53.5178
Paving	1.4100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0530**	**0.5263**	**0.3928**	**5.8000e-004**		**0.0319**	**0.0319**		**0.0294**	**0.0294**	**0.0000**	**53.1820**	**53.1820**	**0.0160**	**0.0000**	**53.5178**

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	2.0400e-003	3.0100e-003	0.0313	8.0000e-005	6.2000e-003	5.0000e-005	6.2600e-003	1.6500e-003	5.0000e-005	1.6900e-003	0.0000	5.5895	5.5895	2.9000e-004	0.0000	5.5955
Total	**2.0400e-003**	**3.0100e-003**	**0.0313**	**8.0000e-005**	**6.2000e-003**	**5.0000e-005**	**6.2600e-003**	**1.6500e-003**	**5.0000e-005**	**1.6900e-003**	**0.0000**	**5.5895**	**5.5895**	**2.9000e-004**	**0.0000**	**5.5955**

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	0.0516	0.5263	0.3928	5.8000e-004		0.0319	0.0319		0.0294	0.0294	0.0000	53.1819	53.1819	0.0160	0.0000	53.5178
Paving	1.4100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0530**	**0.5263**	**0.3928**	**5.8000e-004**		**0.0319**	**0.0319**		**0.0294**	**0.0294**	**0.0000**	**53.1819**	**53.1819**	**0.0160**	**0.0000**	**53.5178**

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	2.0400e-003	3.0100e-003	0.0313	8.0000e-005	6.2000e-003	5.0000e-005	6.2600e-003	1.6500e-003	5.0000e-005	1.6900e-003	0.0000	5.5895	5.5895	2.9000e-004	0.0000	5.5955

Total	**2.0400e-003**	**3.0100e-003**	**0.0313**	**8.0000e-005**	**6.2000e-003**	**5.0000e-005**	**6.2600e-003**	**1.6500e-003**	**5.0000e-005**	**1.6900e-003**	**0.0000**	**5.5895**	**5.5895**	**2.9000e-004**	**0.0000**	**5.5955**

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	3.4100e-003	0.0124	0.0449	1.3000e-004	8.8400e-003	1.8000e-004	9.0200e-003	2.3600e-003	1.7000e-004	2.5300e-003	0.0000	9.6564	9.6564	3.6000e-004	0.0000	9.6639
Unmitigated	3.4100e-003	0.0124	0.0449	1.3000e-004	8.8400e-003	1.8000e-004	9.0200e-003	2.3600e-003	1.7000e-004	2.5300e-003	0.0000	9.6564	9.6564	3.6000e-004	0.0000	9.6639

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	6.97	1.32	0.68	23,312	23,312
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	6.97	1.32	0.68	23,312	23,312

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511172	0.060004	0.180590	0.138995	0.042398	0.006681	0.016070	0.032568	0.001938	0.002493	0.004370	0.000586	0.002135

5.0 Energy Detail

4.4 Fleet Mix

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	3.4483	3.4483	1.6000e-004	3.0000e-005	3.4618
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3.4483	3.4483	1.6000e-004	3.0000e-005	3.4618
NaturalGas Mitigated	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0038	1.0038	2.0000e-005	2.0000e-005	1.0099
NaturalGas Unmitigated	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0038	1.0038	2.0000e-005	2.0000e-005	1.0099

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					
Other 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
General Light Industry	18810	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0038	1.0038	2.0000e-005	2.0000e-005	1.0099
Total		**1.0000e-004**	**9.2000e-004**	**7.7000e-004**	**1.0000e-005**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**1.0038**	**1.0038**	**2.0000e-005**	**2.0000e-005**	**1.0099**

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					
Other 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
General Light Industry	18810	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0038	1.0038	2.0000e-005	2.0000e-005	1.0099
Total		**1.0000e-004**	**9.2000e-004**	**7.7000e-004**	**1.0000e-005**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**1.0038**	**1.0038**	**2.0000e-005**	**2.0000e-005**	**1.0099**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	12050	3.4483	1.6000e-004	3.0000e-005	3.4618
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**3.4483**	**1.6000e-004**	**3.0000e-005**	**3.4618**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	12050	3.4483	1.6000e-004	3.0000e-005	3.4618

Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**3.4483**	**1.6000e-004**	**3.0000e-005**	**3.4618**

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	0.1887	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1900e-003	1.1900e-003	0.0000	0.0000	1.2600e-003
Unmitigated	0.1887	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1900e-003	1.1900e-003	0.0000	0.0000	1.2600e-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	0.0148					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1738					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e-005	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1900e-003	1.1900e-003	0.0000	0.0000	1.2600e-003
Total	**0.1887**	**1.0000e-005**	**6.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.1900e-003**	**1.1900e-003**	**0.0000**	**0.0000**	**1.2600e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0148					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1738					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e-005	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1900e-003	1.1900e-003	0.0000	0.0000	1.2600e-003
Total	**0.1887**	**1.0000e-005**	**6.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.1900e-003**	**1.1900e-003**	**0.0000**	**0.0000**	**1.2600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.9350	7.5700e-003	1.9000e-004	1.1517
Unmitigated	0.9350	7.5700e-003	1.9000e-004	1.1518

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr			
General Light Industry	0.23125 / 0	0.9350	7.5700e-003	1.9000e-004	1.1518
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.9350**	**7.5700e-003**	**1.9000e-004**	**1.1518**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.23125 / 0	0.9350	7.5700e-003	1.9000e-004	1.1517
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.9350**	**7.5700e-003**	**1.9000e-004**	**1.1517**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.2517	0.0149	0.0000	0.5641
Unmitigated	0.2517	0.0149	0.0000	0.5641

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1.24	0.2517	0.0149	0.0000	0.5641
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.2517**	**0.0149**	**0.0000**	**0.5641**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1.24	0.2517	0.0149	0.0000	0.5641
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.2517**	**0.0149**	**0.0000**	**0.5641**

9.0 Operational Offroad

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

10.0 Vegetation

Wetlands Facility Construction - Office/Warehouse/Parking Lot Only

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.20	1000sqft	0.12	5,200.00	0
Unrefrigerated Warehouse-No Rail	9.75	1000sqft	0.22	9,750.00	0
Parking Lot	47.00	Space	0.42	18,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Grading, demolition, and site preparation have already been covered in other analyses.
Building schedule based on SPEC

Grading -

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	150.00
tblConstructionPhase	PhaseEndDate	8/16/2017	4/27/2018
tblConstructionPhase	PhaseStartDate	5/5/2018	5/7/2018

tblConstructionPhase	PhaseStartDate	1/19/2017	10/2/2017
tblConstructionPhase	PhaseStartDate	4/28/2018	4/30/2018
tblProjectCharacteristics	OperationalYear	2014	2018

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					
2017	0.0527	0.4999	0.3665	5.6000e-004	7.9000e-003	0.0328	0.0407	2.2900e-003	0.0304	0.0327	0.0000	49.9603	49.9603	0.0122	0.0000	50.2159
2018	0.2332	0.5146	0.4101	6.6000e-004	8.6700e-003	0.0320	0.0407	2.3300e-003	0.0295	0.0318	0.0000	58.0145	58.0145	0.0148	0.0000	58.3245
Total	**0.2859**	**1.0145**	**0.7766**	**1.2200e-003**	**0.0166**	**0.0648**	**0.0814**	**4.6200e-003**	**0.0598**	**0.0645**	**0.0000**	**107.9748**	**107.9748**	**0.0269**	**0.0000**	**108.5404**

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					
2017	0.0527	0.4999	0.3665	5.6000e-004	7.9000e-003	0.0328	0.0407	2.2900e-003	0.0304	0.0327	0.0000	49.9603	49.9603	0.0122	0.0000	50.2158
2018	0.2332	0.5146	0.4101	6.6000e-004	8.6700e-003	0.0320	0.0407	2.3300e-003	0.0295	0.0318	0.0000	58.0144	58.0144	0.0148	0.0000	58.3244
Total	**0.2859**	**1.0145**	**0.7766**	**1.2200e-003**	**0.0166**	**0.0648**	**0.0814**	**4.6200e-003**	**0.0598**	**0.0645**	**0.0000**	**107.9747**	**107.9747**	**0.0269**	**0.0000**	**108.5403**

	ROG	**NOx**	**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	tons/yr										MT/yr					
Area	0.1400	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5400e-003	1.5400e-003	0.0000	0.0000	1.6300e-003
Energy	3.5000e-004	3.2200e-003	2.7100e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	42.0274	42.0274	1.8400e-003	4.3000e-004	42.1995
Mobile	0.0411	0.1355	0.5012	1.3800e-003	0.0940	1.9600e-003	0.0960	0.0252	1.8100e-003	0.0270	0.0000	103.1715	103.1715	3.8600e-003	0.0000	103.2526
Waste						0.0000	0.0000		0.0000	0.0000	2.8419	0.0000	2.8419	0.1680	0.0000	6.3688
Water						0.0000	0.0000		0.0000	0.0000	1.0085	13.6461	14.6546	0.1042	2.5800e-003	17.6415
Total	**0.1815**	**0.1388**	**0.5047**	**1.4000e-003**	**0.0940**	**2.2000e-003**	**0.0962**	**0.0252**	**2.0500e-003**	**0.0272**	**3.8504**	**158.8465**	**162.6969**	**0.2779**	**3.0100e-003**	**169.4641**

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	0.1400	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5400e-003	1.5400e-003	0.0000	0.0000	1.6300e-003
Energy	3.5000e-004	3.2200e-003	2.7100e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	42.0274	42.0274	1.8400e-003	4.3000e-004	42.1995
Mobile	0.0411	0.1355	0.5012	1.3800e-003	0.0940	1.9600e-003	0.0960	0.0252	1.8100e-003	0.0270	0.0000	103.1715	103.1715	3.8600e-003	0.0000	103.2526
Waste						0.0000	0.0000		0.0000	0.0000	2.8419	0.0000	2.8419	0.1680	0.0000	6.3688

Water						0.0000	0.0000		0.0000	0.0000	1.0085	13.6461	14.6546	0.1042	2.5700e-003	17.6399
Total	**0.1815**	**0.1388**	**0.5047**	**1.4000e-003**	**0.0940**	**2.2000e-003**	**0.0962**	**0.0252**	**2.0500e-003**	**0.0272**	**3.8504**	**158.8465**	**162.6969**	**0.2778**	**3.0000e-003**	**169.4625**

	ROG	NOx	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**	**0.01**	**0.33**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/13/2017	5	10	
2	Site Preparation	Site Preparation	1/14/2017	1/16/2017	5	1	
3	Grading	Grading	1/17/2017	1/18/2017	5	2	
4	Building Construction	Building Construction	10/2/2017	4/27/2018	5	150	
5	Paving	Paving	4/30/2018	5/4/2018	5	5	
6	Architectural Coating	Architectural Coating	5/7/2018	5/11/2018	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 23,271; Non-Residential Outdoor: 7,757 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29

Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	14.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	6.0200e-003	0.0524	0.0429	6.0000e-005		3.6300e-003	3.6300e-003		3.4600e-003	3.4600e-003	0.0000	5.3697	5.3697	1.0600e-003	0.0000	5.3919
Total	**6.0200e-003**	**0.0524**	**0.0429**	**6.0000e-005**		**3.6300e-003**	**3.6300e-003**		**3.4600e-003**	**3.4600e-003**	**0.0000**	**5.3697**	**5.3697**	**1.0600e-003**	**0.0000**	**5.3919**

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	1.8000e-004	2.7000e-004	2.7700e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4942	0.4942	3.0000e-005	0.0000	0.4947
Total	**1.8000e-004**	**2.7000e-004**	**2.7700e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4942**	**0.4942**	**3.0000e-005**	**0.0000**	**0.4947**

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	6.0200e-003	0.0524	0.0429	6.0000e-005		3.6300e-003	3.6300e-003		3.4600e-003	3.4600e-003	0.0000	5.3697	5.3697	1.0600e-003	0.0000	5.3919
Total	**6.0200e-003**	**0.0524**	**0.0429**	**6.0000e-005**		**3.6300e-003**	**3.6300e-003**		**3.4600e-003**	**3.4600e-003**	**0.0000**	**5.3697**	**5.3697**	**1.0600e-003**	**0.0000**	**5.3919**

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	1.8000e-004	2.7000e-004	2.7700e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4942	0.4942	3.0000e-005	0.0000	0.4947
Total	**1.8000e-004**	**2.7000e-004**	**2.7700e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4942**	**0.4942**	**3.0000e-005**	**0.0000**	**0.4947**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3000e-004	6.3400e-003	3.6200e-003	0.0000		3.9000e-004	3.9000e-004		3.5000e-004	3.5000e-004	0.0000	0.4336	0.4336	1.3000e-004	0.0000	0.4364
Total	**6.3000e-004**	**6.3400e-003**	**3.6200e-003**	**0.0000**	**2.7000e-004**	**3.9000e-004**	**6.6000e-004**	**3.0000e-005**	**3.5000e-004**	**3.8000e-004**	**0.0000**	**0.4336**	**0.4336**	**1.3000e-004**	**0.0000**	**0.4364**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total	**1.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3000e-004	6.3400e-003	3.6200e-003	0.0000		3.9000e-004	3.9000e-004		3.5000e-004	3.5000e-004	0.0000	0.4336	0.4336	1.3000e-004	0.0000	0.4364
Total	**6.3000e-004**	**6.3400e-003**	**3.6200e-003**	**0.0000**	**2.7000e-004**	**3.9000e-004**	**6.6000e-004**	**3.0000e-005**	**3.5000e-004**	**3.8000e-004**	**0.0000**	**0.4336**	**0.4336**	**1.3000e-004**	**0.0000**	**0.4364**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total	**1.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

3.4 Grading - 2017

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					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e-003	0.0105	8.5800e-003	1.0000e-005		7.3000e-004	7.3000e-004		6.9000e-004	6.9000e-004	0.0000	1.0739	1.0739	2.1000e-004	0.0000	1.0784
Total	**1.2000e-003**	**0.0105**	**8.5800e-003**	**1.0000e-005**	**7.5000e-004**	**7.3000e-004**	**1.4800e-003**	**4.1000e-004**	**6.9000e-004**	**1.1000e-003**	**0.0000**	**1.0739**	**1.0739**	**2.1000e-004**	**0.0000**	**1.0784**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	1.0000e-005	0.0000	0.0990
Total	**4.0000e-005**	**5.0000e-005**	**5.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0988**	**0.0988**	**1.0000e-005**	**0.0000**	**0.0990**

Mitigated Construction On-Site

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

Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e-003	0.0105	8.5800e-003	1.0000e-005		7.3000e-004	7.3000e-004		6.9000e-004	6.9000e-004	0.0000	1.0739	1.0739	2.1000e-004	0.0000	1.0784
Total	**1.2000e-003**	**0.0105**	**8.5800e-003**	**1.0000e-005**	**7.5000e-004**	**7.3000e-004**	**1.4800e-003**	**4.1000e-004**	**6.9000e-004**	**1.1000e-003**	**0.0000**	**1.0739**	**1.0739**	**2.1000e-004**	**0.0000**	**1.0784**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	1.0000e-005	0.0000	0.0990
Total	**4.0000e-005**	**5.0000e-005**	**5.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0988**	**0.0988**	**1.0000e-005**	**0.0000**	**0.0990**

3.5 Building Construction - 2017

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	0.0414	0.4119	0.2613	3.7000e-004		0.0278	0.0278		0.0256	0.0256	0.0000	34.1870	34.1870	0.0105	0.0000	34.4070
Total	**0.0414**	**0.4119**	**0.2613**	**3.7000e-004**		**0.0278**	**0.0278**		**0.0256**	**0.0256**	**0.0000**	**34.1870**	**34.1870**	**0.0105**	**0.0000**	**34.4070**

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	1.5800e-003	0.0160	0.0215	4.0000e-005	1.2000e-003	2.5000e-004	1.4500e-003	3.4000e-004	2.3000e-004	5.7000e-004	0.0000	3.7811	3.7811	3.0000e-005	0.0000	3.7817
Worker	1.6400e-003	2.4300e-003	0.0252	6.0000e-005	4.9900e-003	4.0000e-005	5.0300e-003	1.3300e-003	4.0000e-005	1.3600e-003	0.0000	4.4973	4.4973	2.3000e-004	0.0000	4.5022
Total	**3.2200e-003**	**0.0184**	**0.0467**	**1.0000e-004**	**6.1900e-003**	**2.9000e-004**	**6.4800e-003**	**1.6700e-003**	**2.7000e-004**	**1.9300e-003**	**0.0000**	**8.2784**	**8.2784**	**2.6000e-004**	**0.0000**	**8.2838**

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	0.0414	0.4119	0.2613	3.7000e-004		0.0278	0.0278		0.0256	0.0256	0.0000	34.1870	34.1870	0.0105	0.0000	34.4070
Total	**0.0414**	**0.4119**	**0.2613**	**3.7000e-004**		**0.0278**	**0.0278**		**0.0256**	**0.0256**	**0.0000**	**34.1870**	**34.1870**	**0.0105**	**0.0000**	**34.4070**

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	1.5800e-003	0.0160	0.0215	4.0000e-005	1.2000e-003	2.5000e-004	1.4500e-003	3.4000e-004	2.3000e-004	5.7000e-004	0.0000	3.7811	3.7811	3.0000e-005	0.0000	3.7817
Worker	1.6400e-003	2.4300e-003	0.0252	6.0000e-005	4.9900e-003	4.0000e-005	5.0300e-003	1.3300e-003	4.0000e-005	1.3600e-003	0.0000	4.4973	4.4973	2.3000e-004	0.0000	4.5022
Total	**3.2200e-003**	**0.0184**	**0.0467**	**1.0000e-004**	**6.1900e-003**	**2.9000e-004**	**6.4800e-003**	**1.6700e-003**	**2.7000e-004**	**1.9300e-003**	**0.0000**	**8.2784**	**8.2784**	**2.6000e-004**	**0.0000**	**8.2838**

3.5 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	0.0458	0.4657	0.3283	4.8000e-004		0.0300	0.0300		0.0276	0.0276	0.0000	43.9627	43.9627	0.0137	0.0000	44.2501
Total	**0.0458**	**0.4657**	**0.3283**	**4.8000e-004**		**0.0300**	**0.0300**		**0.0276**	**0.0276**	**0.0000**	**43.9627**	**43.9627**	**0.0137**	**0.0000**	**44.2501**

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	1.9300e-003	0.0192	0.0269	6.0000e-005	1.5700e-003	3.1000e-004	1.8800e-003	4.5000e-004	2.8000e-004	7.3000e-004	0.0000	4.8615	4.8615	4.0000e-005	0.0000	4.8622
Worker	1.9200e-003	2.8800e-003	0.0298	8.0000e-005	6.5300e-003	5.0000e-005	6.5800e-003	1.7300e-003	5.0000e-005	1.7800e-003	0.0000	5.6615	5.6615	2.8000e-004	0.0000	5.6675

Total	**3.8500e-003**	**0.0221**	**0.0568**	**1.4000e-004**	**8.1000e-003**	**3.6000e-004**	**8.4600e-003**	**2.1800e-003**	**3.3000e-004**	**2.5100e-003**	**0.0000**	**10.5230**	**10.5230**	**3.2000e-004**	**0.0000**	**10.5297**

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	0.0458	0.4657	0.3283	4.8000e-004		0.0300	0.0300		0.0276	0.0276	0.0000	43.9626	43.9626	0.0137	0.0000	44.2501
Total	**0.0458**	**0.4657**	**0.3283**	**4.8000e-004**		**0.0300**	**0.0300**		**0.0276**	**0.0276**	**0.0000**	**43.9626**	**43.9626**	**0.0137**	**0.0000**	**44.2501**

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	1.9300e-003	0.0192	0.0269	6.0000e-005	1.5700e-003	3.1000e-004	1.8800e-003	4.5000e-004	2.8000e-004	7.3000e-004	0.0000	4.8615	4.8615	4.0000e-005	0.0000	4.8622
Worker	1.9200e-003	2.8800e-003	0.0298	8.0000e-005	6.5300e-003	5.0000e-005	6.5800e-003	1.7300e-003	5.0000e-005	1.7800e-003	0.0000	5.6615	5.6615	2.8000e-004	0.0000	5.6675
Total	**3.8500e-003**	**0.0221**	**0.0568**	**1.4000e-004**	**8.1000e-003**	**3.6000e-004**	**8.4600e-003**	**2.1800e-003**	**3.3000e-004**	**2.5100e-003**	**0.0000**	**10.5230**	**10.5230**	**3.2000e-004**	**0.0000**	**10.5297**

3.6 Paving - 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	2.2700e-003	0.0216	0.0178	3.0000e-005		1.2600e-003	1.2600e-003		1.1700e-003	1.1700e-003	0.0000	2.3909	2.3909	6.7000e-004	0.0000	2.4051
Paving	5.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.8200e-003**	**0.0216**	**0.0178**	**3.0000e-005**		**1.2600e-003**	**1.2600e-003**		**1.1700e-003**	**1.1700e-003**	**0.0000**	**2.3909**	**2.3909**	**6.7000e-004**	**0.0000**	**2.4051**

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	1.5000e-004	2.2000e-004	2.2500e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4282	0.4282	2.0000e-005	0.0000	0.4286
Total	**1.5000e-004**	**2.2000e-004**	**2.2500e-003**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4282**	**0.4282**	**2.0000e-005**	**0.0000**	**0.4286**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.2700e-003	0.0216	0.0178	3.0000e-005		1.2600e-003	1.2600e-003		1.1700e-003	1.1700e-003	0.0000	2.3909	2.3909	6.7000e-004	0.0000	2.4051
Paving	5.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**2.8200e-003**	**0.0216**	**0.0178**	**3.0000e-005**		**1.2600e-003**	**1.2600e-003**		**1.1700e-003**	**1.1700e-003**	**0.0000**	**2.3909**	**2.3909**	**6.7000e-004**	**0.0000**	**2.4051**

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	1.5000e-004	2.2000e-004	2.2500e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4282	0.4282	2.0000e-005	0.0000	0.4286
Total	**1.5000e-004**	**2.2000e-004**	**2.2500e-003**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4282**	**0.4282**	**2.0000e-005**	**0.0000**	**0.4286**

3.7 Architectural Coating - 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					
Archit. Coating	0.1798					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5000e-004	5.0100e-003	4.6400e-003	1.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.6383	0.6383	6.0000e-005	0.0000	0.6396
Total	**0.1805**	**5.0100e-003**	**4.6400e-003**	**1.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**6.0000e-005**	**0.0000**	**0.6396**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	4.0000e-005	3.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0714	0.0714	0.0000	0.0000	0.0714
Total	**2.0000e-005**	**4.0000e-005**	**3.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0714**	**0.0714**	**0.0000**	**0.0000**	**0.0714**

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	0.1798					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5000e-004	5.0100e-003	4.6400e-003	1.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.6383	0.6383	6.0000e-005	0.0000	0.6396
Total	**0.1805**	**5.0100e-003**	**4.6400e-003**	**1.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**6.0000e-005**	**0.0000**	**0.6396**

Mitigated Construction Off-Site

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

Worker	2.0000e-005	4.0000e-005	3.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0714	0.0714	0.0000	0.0000	0.0714
Total	**2.0000e-005**	**4.0000e-005**	**3.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0714**	**0.0714**	**0.0000**	**0.0000**	**0.0714**

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	0.0411	0.1355	0.5012	1.3800e-003	0.0940	1.9600e-003	0.0960	0.0252	1.8100e-003	0.0270	0.0000	103.1715	103.1715	3.8600e-003	0.0000	103.2526
Unmitigated	0.0411	0.1355	0.5012	1.3800e-003	0.0940	1.9600e-003	0.0960	0.0252	1.8100e-003	0.0270	0.0000	103.1715	103.1715	3.8600e-003	0.0000	103.2526

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	57.25	12.32	5.10	139,756	139,756
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	25.25	25.25	25.25	108,225	108,225
Total	82.50	37.58	30.35	247,981	247,981

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511172	0.060004	0.180590	0.138995	0.042398	0.006681	0.016070	0.032568	0.001938	0.002493	0.004370	0.000586	0.002135

5.0 Energy Detail

4.4 Fleet Mix

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	38.5209	38.5209	1.7700e-003	3.7000e-004	38.6717
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	38.5209	38.5209	1.7700e-003	3.7000e-004	38.6717
NaturalGas Mitigated	3.5000e-004	3.2200e-003	2.7100e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	3.5065	3.5065	7.0000e-005	6.0000e-005	3.5278
NaturalGas Unmitigated	3.5000e-004	3.2200e-003	2.7100e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	3.5065	3.5065	7.0000e-005	6.0000e-005	3.5278

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	56836	3.1000e-004	2.7900e-003	2.3400e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	3.0330	3.0330	6.0000e-005	6.0000e-005	3.0514
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	8872.5	5.0000e-005	4.3000e-004	3.7000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4735	0.4735	1.0000e-005	1.0000e-005	0.4764

Total		**3.6000e-004**	**3.2200e-003**	**2.7100e-003**	**2.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**3.5065**	**3.5065**	**7.0000e-005**	**7.0000e-005**	**3.5278**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	8872.5	5.0000e-005	4.3000e-004	3.7000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4735	0.4735	1.0000e-005	1.0000e-005	0.4764
General Office Building	56836	3.1000e-004	2.7900e-003	2.3400e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	3.0330	3.0330	6.0000e-005	6.0000e-005	3.0514
Total		**3.6000e-004**	**3.2200e-003**	**2.7100e-003**	**2.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**3.5065**	**3.5065**	**7.0000e-005**	**7.0000e-005**	**3.5278**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	75556	21.6216	9.9000e-004	2.1000e-004	21.7062
Parking Lot	16544	4.7344	2.2000e-004	5.0000e-005	4.7529
Unrefrigerated Warehouse-No Rail	42510	12.1650	5.6000e-004	1.2000e-004	12.2126
Total		**38.5209**	**1.7700e-003**	**3.8000e-004**	**38.6717**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	75556	21.6216	9.9000e-004	2.1000e-004	21.7062
Parking Lot	16544	4.7344	2.2000e-004	5.0000e-005	4.7529
Unrefrigerated Warehouse-No Rail	42510	12.1650	5.6000e-004	1.2000e-004	12.2126
Total		**38.5209**	**1.7700e-003**	**3.8000e-004**	**38.6717**

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	0.1400	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5400e-003	1.5400e-003	0.0000	0.0000	1.6300e-003
Unmitigated	0.1400	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5400e-003	1.5400e-003	0.0000	0.0000	1.6300e-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	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5400e-003	1.5400e-003	0.0000	0.0000	1.6300e-003
Total	**0.1400**	**1.0000e-005**	**8.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.5400e-003**	**1.5400e-003**	**0.0000**	**0.0000**	**1.6300e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5400e-003	1.5400e-003	0.0000	0.0000	1.6300e-003
Total	**0.1400**	**1.0000e-005**	**8.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.5400e-003**	**1.5400e-003**	**0.0000**	**0.0000**	**1.6300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	14.6546	0.1042	2.5700e-003	17.6399
Unmitigated	14.6546	0.1042	2.5800e-003	17.6415

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.924215 / 0.566455	5.5379	0.0304	7.6000e-004	6.4113
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2.25469 / 0	9.1167	0.0739	1.8100e-003	11.2302
Total		**14.6546**	**0.1042**	**2.5700e-003**	**17.6415**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.924215 / 0.566455	5.5379	0.0304	7.6000e-004	6.4109
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2.25469 / 0	9.1167	0.0738	1.8100e-003	11.2290
Total		**14.6546**	**0.1042**	**2.5700e-003**	**17.6399**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.8419	0.1680	0.0000	6.3688
Unmitigated	2.8419	0.1680	0.0000	6.3688

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	4.84	0.9825	0.0581	0.0000	2.2018
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	9.16	1.8594	0.1099	0.0000	4.1670
Total		**2.8419**	**0.1680**	**0.0000**	**6.3688**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	4.84	0.9825	0.0581	0.0000	2.2018

Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	9.16	1.8594	0.1099	0.0000	4.1670
Total		**2.8419**	**0.1680**	**0.0000**	**6.3688**

9.0 Operational Offroad

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

10.0 Vegetation

Wetlands Facility Construction - Restoration Only

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	16.10	1,000.00	0
Parking Lot	34.50	1000sqft	0.79	34,500.00	0
Other Non-Asphalt Surfaces	69.90	1000sqft	1.60	69,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acreage of area to be graded. Non-asphalt surface is sidewalk.

Construction Phase - Only paving, grading and building construction is relevant (grading construction used for pile driving).

Off-road Equipment - Estimates of sheet pile driving equipment

Off-road Equipment - Per SPEC equipment list.

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Estimate of worker trips and vendor trips for sheet pile driving

Grading - Acreage to be graded

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	88.00
tblConstructionPhase	NumDays	30.00	132.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	PhaseEndDate	8/10/2018	7/13/2018
tblConstructionPhase	PhaseEndDate	6/4/2019	11/30/2018
tblConstructionPhase	PhaseEndDate	1/15/2019	1/31/2019
tblConstructionPhase	PhaseEndDate	4/7/2017	7/13/2018
tblConstructionPhase	PhaseStartDate	7/14/2018	6/16/2018
tblConstructionPhase	PhaseStartDate	2/1/2019	8/1/2018
tblConstructionPhase	PhaseStartDate	7/14/2018	8/1/2018
tblConstructionPhase	PhaseStartDate	2/11/2017	5/19/2018
tblGrading	AcresOfGrading	330.00	16.10
tblGrading	MaterialExported	0.00	37,000.00
tblLandUse	LotAcreage	0.02	16.10
tblOffRoadEquipment	HorsePower	171.00	275.00
tblOffRoadEquipment	LoadFactor	0.42	0.29
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	0.00	5.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0954	0.9939	0.7899	8.8000e-004	0.0938	0.0504	0.1442	0.0506	0.0468	0.0974	0.0000	79.8263	79.8263	0.0213	0.0000	80.2737
2018	0.4288	4.7222	3.4708	6.2000e-003	0.4643	0.2117	0.6760	0.2348	0.1949	0.4297	0.0000	557.7798	557.7798	0.1308	0.0000	560.5258
2019	0.0633	0.7168	0.5555	1.0400e-003	0.4422	0.0304	0.4727	0.2283	0.0280	0.2563	0.0000	91.6018	91.6018	0.0205	0.0000	92.0316
Total	**0.5876**	**6.4328**	**4.8163**	**8.1200e-003**	**1.0003**	**0.2925**	**1.2929**	**0.5138**	**0.2698**	**0.7835**	**0.0000**	**729.2079**	**729.2079**	**0.1725**	**0.0000**	**732.8311**

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					
2017	0.0954	0.9939	0.7899	8.8000e-004	0.0938	0.0504	0.1442	0.0506	0.0468	0.0974	0.0000	79.8262	79.8262	0.0213	0.0000	80.2736
2018	0.4288	4.7221	3.4708	6.2000e-003	0.4643	0.2117	0.6760	0.2348	0.1949	0.4297	0.0000	557.7793	557.7793	0.1308	0.0000	560.5253
2019	0.0633	0.7168	0.5555	1.0400e-003	0.4422	0.0304	0.4727	0.2283	0.0280	0.2563	0.0000	91.6017	91.6017	0.0205	0.0000	92.0315
Total	**0.5876**	**6.4328**	**4.8162**	**8.1200e-003**	**1.0003**	**0.2925**	**1.2929**	**0.5138**	**0.2698**	**0.7835**	**0.0000**	**729.2072**	**729.2072**	**0.1725**	**0.0000**	**732.8304**

	ROG	**NOx**	**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	tons/yr										MT/yr					
Area	0.3822	1.0000e-005	1.3600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6200e-003	2.6200e-003	1.0000e-005	0.0000	2.7600e-003
Energy	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	4.4521	4.4521	1.8000e-004	5.0000e-005	4.4717
Mobile	4.7700e-003	0.0172	0.0629	1.3000e-004	8.8300e-003	2.6000e-004	9.0900e-003	2.3600e-003	2.4000e-004	2.6000e-003	0.0000	10.7250	10.7250	4.9000e-004	0.0000	10.7352
Waste						0.0000	0.0000		0.0000	0.0000	0.2517	0.0000	0.2517	0.0149	0.0000	0.5641
Water						0.0000	0.0000		0.0000	0.0000	0.0734	0.8617	0.9350	7.5700e-003	1.9000e-004	1.1518
Total	**0.3870**	**0.0182**	**0.0651**	**1.4000e-004**	**8.8300e-003**	**3.3000e-004**	**9.1600e-003**	**2.3600e-003**	**3.1000e-004**	**2.6700e-003**	**0.3251**	**16.0414**	**16.3664**	**0.0231**	**2.4000e-004**	**16.9256**

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	0.3822	1.0000e-005	1.3600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6200e-003	2.6200e-003	1.0000e-005	0.0000	2.7600e-003
Energy	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	4.4521	4.4521	1.8000e-004	5.0000e-005	4.4717
Mobile	4.7700e-003	0.0172	0.0629	1.3000e-004	8.8300e-003	2.6000e-004	9.0900e-003	2.3600e-003	2.4000e-004	2.6000e-003	0.0000	10.7250	10.7250	4.9000e-004	0.0000	10.7352
Waste						0.0000	0.0000		0.0000	0.0000	0.2517	0.0000	0.2517	0.0149	0.0000	0.5641
Water						0.0000	0.0000		0.0000	0.0000	0.0734	0.8617	0.9350	7.5700e-003	1.9000e-004	1.1517
Total	**0.3870**	**0.0182**	**0.0651**	**1.4000e-004**	**8.8300e-003**	**3.3000e-004**	**9.1600e-003**	**2.3600e-003**	**3.1000e-004**	**2.6700e-003**	**0.3251**	**16.0414**	**16.3664**	**0.0231**	**2.4000e-004**	**16.9255**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	5	10	
3	Paving	Paving	5/19/2018	7/13/2018	5	40	
4	Architectural Coating	Architectural Coating	6/16/2018	7/13/2018	5	20	
5	Grading	Grading	8/1/2018	1/31/2019	5	132	
6	Building Construction	Building Construction	8/1/2018	11/30/2018	5	88	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 16.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,500; Non-Residential Outdoor: 500 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Paving	Pavers	2	8.00	125	0.42

Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Other Construction Equipment	1	7.00	275	0.29
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	9	23.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,625.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	0.0701	0.7334	0.5752	6.4000e-004		0.0366	0.0366		0.0341	0.0341	0.0000	58.5057	58.5057	0.0156	0.0000	58.8328
Total	**0.0701**	**0.7334**	**0.5752**	**6.4000e-004**		**0.0366**	**0.0366**		**0.0341**	**0.0341**	**0.0000**	**58.5057**	**58.5057**	**0.0156**	**0.0000**	**58.8328**

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	8.3000e-004	1.2300e-003	0.0127	3.0000e-005	2.5200e-003	2.0000e-005	2.5400e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.2733	2.2733	1.2000e-004	0.0000	2.2758
Total	**8.3000e-004**	**1.2300e-003**	**0.0127**	**3.0000e-005**	**2.5200e-003**	**2.0000e-005**	**2.5400e-003**	**6.7000e-004**	**2.0000e-005**	**6.9000e-004**	**0.0000**	**2.2733**	**2.2733**	**1.2000e-004**	**0.0000**	**2.2758**

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	0.0701	0.7334	0.5752	6.4000e-004		0.0366	0.0366		0.0341	0.0341	0.0000	58.5056	58.5056	0.0156	0.0000	58.8328
Total	**0.0701**	**0.7334**	**0.5752**	**6.4000e-004**		**0.0366**	**0.0366**		**0.0341**	**0.0341**	**0.0000**	**58.5056**	**58.5056**	**0.0156**	**0.0000**	**58.8328**

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	8.3000e-004	1.2300e-003	0.0127	3.0000e-005	2.5200e-003	2.0000e-005	2.5400e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.2733	2.2733	1.2000e-004	0.0000	2.2758
Total	**8.3000e-004**	**1.2300e-003**	**0.0127**	**3.0000e-005**	**2.5200e-003**	**2.0000e-005**	**2.5400e-003**	**6.7000e-004**	**2.0000e-005**	**6.9000e-004**	**0.0000**	**2.2733**	**2.2733**	**1.2000e-004**	**0.0000**	**2.2758**

3.3 Site Preparation - 2017

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
Total	**0.0242**	**0.2588**	**0.1970**	**2.0000e-004**	**0.0903**	**0.0138**	**0.1041**	**0.0497**	**0.0127**	**0.0623**	**0.0000**	**18.1577**	**18.1577**	**5.5600e-003**	**0.0000**	**18.2745**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	4.8000e-004	4.9800e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8896	0.8896	5.0000e-005	0.0000	0.8905
Total	**3.2000e-004**	**4.8000e-004**	**4.9800e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.8896**	**0.8896**	**5.0000e-005**	**0.0000**	**0.8905**

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
Total	**0.0242**	**0.2588**	**0.1970**	**2.0000e-004**	**0.0903**	**0.0138**	**0.1041**	**0.0497**	**0.0127**	**0.0623**	**0.0000**	**18.1577**	**18.1577**	**5.5600e-003**	**0.0000**	**18.2745**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	4.8000e-004	4.9800e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8896	0.8896	5.0000e-005	0.0000	0.8905
Total	**3.2000e-004**	**4.8000e-004**	**4.9800e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.8896**	**0.8896**	**5.0000e-005**	**0.0000**	**0.8905**

3.4 Paving - 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	0.0322	0.3433	0.2899	4.5000e-004		0.0188	0.0188		0.0173	0.0173	0.0000	40.7375	40.7375	0.0127	0.0000	41.0038
Paving	1.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0333**	**0.3433**	**0.2899**	**4.5000e-004**		**0.0188**	**0.0188**		**0.0173**	**0.0173**	**0.0000**	**40.7375**	**40.7375**	**0.0127**	**0.0000**	**41.0038**

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	9.7000e-004	1.4500e-003	0.0150	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.8546	2.8546	1.4000e-004	0.0000	2.8575

Total	**9.7000e-004**	**1.4500e-003**	**0.0150**	**4.0000e-005**	**3.2900e-003**	**3.0000e-005**	**3.3200e-003**	**8.7000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**2.8546**	**2.8546**	**1.4000e-004**	**0.0000**	**2.8575**

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	0.0322	0.3433	0.2899	4.5000e-004		0.0188	0.0188		0.0173	0.0173	0.0000	40.7374	40.7374	0.0127	0.0000	41.0038
Paving	1.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0333**	**0.3433**	**0.2899**	**4.5000e-004**		**0.0188**	**0.0188**		**0.0173**	**0.0173**	**0.0000**	**40.7374**	**40.7374**	**0.0127**	**0.0000**	**41.0038**

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	9.7000e-004	1.4500e-003	0.0150	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.8546	2.8546	1.4000e-004	0.0000	2.8575
Total	**9.7000e-004**	**1.4500e-003**	**0.0150**	**4.0000e-005**	**3.2900e-003**	**3.0000e-005**	**3.3200e-003**	**8.7000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**2.8546**	**2.8546**	**1.4000e-004**	**0.0000**	**2.8575**

3.5 Architectural Coating - 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					
Archit. Coating	0.0116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0185	3.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	2.5533	2.5533	2.4000e-004	0.0000	2.5584
Total	**0.0146**	**0.0201**	**0.0185**	**3.0000e-005**		**1.5100e-003**	**1.5100e-003**		**1.5100e-003**	**1.5100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.4000e-004**	**0.0000**	**2.5584**

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Archit. Coating	0.0116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0185	3.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	2.5533	2.5533	2.4000e-004	0.0000	2.5584
Total	**0.0146**	**0.0201**	**0.0185**	**3.0000e-005**		**1.5100e-003**	**1.5100e-003**		**1.5100e-003**	**1.5100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.4000e-004**	**0.0000**	**2.5584**

Mitigated Construction Off-Site

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

3.6 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					0.4081	0.0000	0.4081	0.2197	0.0000	0.2197	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2883	3.2446	2.3057	3.3600e-003		0.1520	0.1520		0.1398	0.1398	0.0000	307.1708	307.1708	0.0956	0.0000	309.1789
Total	**0.2883**	**3.2446**	**2.3057**	**3.3600e-003**	**0.4081**	**0.1520**	**0.5600**	**0.2197**	**0.1398**	**0.3595**	**0.0000**	**307.1708**	**307.1708**	**0.0956**	**0.0000**	**309.1789**

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	0.0312	0.4689	0.3936	1.4000e-003	0.0380	7.5900e-003	0.0456	0.0103	6.9800e-003	0.0173	0.0000	124.3965	124.3965	9.1000e-004	0.0000	124.4157
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5200e-003	5.2700e-003	0.0546	1.5000e-004	0.0120	1.0000e-004	0.0121	3.1800e-003	9.0000e-005	3.2600e-003	0.0000	10.3716	10.3716	5.2000e-004	0.0000	10.3824
Total	**0.0347**	**0.4742**	**0.4482**	**1.5500e-003**	**0.0499**	**7.6900e-003**	**0.0576**	**0.0134**	**7.0700e-003**	**0.0205**	**0.0000**	**134.7680**	**134.7680**	**1.4300e-003**	**0.0000**	**134.7981**

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					0.4081	0.0000	0.4081	0.2197	0.0000	0.2197	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2883	3.2446	2.3057	3.3600e-003		0.1520	0.1520		0.1398	0.1398	0.0000	307.1704	307.1704	0.0956	0.0000	309.1786
Total	**0.2883**	**3.2446**	**2.3057**	**3.3600e-003**	**0.4081**	**0.1520**	**0.5600**	**0.2197**	**0.1398**	**0.3595**	**0.0000**	**307.1704**	**307.1704**	**0.0956**	**0.0000**	**309.1786**

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	0.0312	0.4689	0.3936	1.4000e-003	0.0380	7.5900e-003	0.0456	0.0103	6.9800e-003	0.0173	0.0000	124.3965	124.3965	9.1000e-004	0.0000	124.4157
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5200e-003	5.2700e-003	0.0546	1.5000e-004	0.0120	1.0000e-004	0.0121	3.1800e-003	9.0000e-005	3.2600e-003	0.0000	10.3716	10.3716	5.2000e-004	0.0000	10.3824
Total	**0.0347**	**0.4742**	**0.4482**	**1.5500e-003**	**0.0499**	**7.6900e-003**	**0.0576**	**0.0134**	**7.0700e-003**	**0.0205**	**0.0000**	**134.7680**	**134.7680**	**1.4300e-003**	**0.0000**	**134.7981**

3.6 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4081	0.0000	0.4081	0.2197	0.0000	0.2197	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0563	0.6233	0.4633	7.1000e-004		0.0288	0.0288		0.0265	0.0265	0.0000	63.7570	63.7570	0.0202	0.0000	64.1806
Total	**0.0563**	**0.6233**	**0.4633**	**7.1000e-004**	**0.4081**	**0.0288**	**0.4369**	**0.2197**	**0.0265**	**0.2462**	**0.0000**	**63.7570**	**63.7570**	**0.0202**	**0.0000**	**64.1806**

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	6.4000e-003	0.0925	0.0816	3.0000e-004	0.0316	1.6000e-003	0.0332	7.9600e-003	1.4700e-003	9.4300e-003	0.0000	25.7396	25.7396	1.9000e-004	0.0000	25.7436
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	1.0200e-003	0.0106	3.0000e-005	2.5200e-003	2.0000e-005	2.5400e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.1052	2.1052	1.0000e-004	0.0000	2.1074

Total	**7.0800e-003**	**0.0935**	**0.0922**	**3.3000e-004**	**0.0341**	**1.6200e-003**	**0.0358**	**8.6300e-003**	**1.4900e-003**	**0.0101**	**0.0000**	**27.8448**	**27.8448**	**2.9000e-004**	**0.0000**	**27.8510**

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					
Fugitive Dust					0.4081	0.0000	0.4081	0.2197	0.0000	0.2197	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0563	0.6233	0.4633	7.1000e-004		0.0288	0.0288		0.0265	0.0265	0.0000	63.7570	63.7570	0.0202	0.0000	64.1806
Total	**0.0563**	**0.6233**	**0.4633**	**7.1000e-004**	**0.4081**	**0.0288**	**0.4369**	**0.2197**	**0.0265**	**0.2462**	**0.0000**	**63.7570**	**63.7570**	**0.0202**	**0.0000**	**64.1806**

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	6.4000e-003	0.0925	0.0816	3.0000e-004	0.0316	1.6000e-003	0.0332	7.9600e-003	1.4700e-003	9.4300e-003	0.0000	25.7396	25.7396	1.9000e-004	0.0000	25.7436
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	1.0200e-003	0.0106	3.0000e-005	2.5200e-003	2.0000e-005	2.5400e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.1052	2.1052	1.0000e-004	0.0000	2.1074
Total	**7.0800e-003**	**0.0935**	**0.0922**	**3.3000e-004**	**0.0341**	**1.6200e-003**	**0.0358**	**8.6300e-003**	**1.4900e-003**	**0.0101**	**0.0000**	**27.8448**	**27.8448**	**2.9000e-004**	**0.0000**	**27.8510**

3.7 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	0.0556	0.6309	0.3731	7.2000e-004		0.0317	0.0317		0.0291	0.0291	0.0000	65.9246	65.9246	0.0205	0.0000	66.3556
Total	**0.0556**	**0.6309**	**0.3731**	**7.2000e-004**		**0.0317**	**0.0317**		**0.0291**	**0.0291**	**0.0000**	**65.9246**	**65.9246**	**0.0205**	**0.0000**	**66.3556**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.7000e-004	6.6300e-003	9.3000e-003	2.0000e-005	5.4000e-004	1.1000e-004	6.5000e-004	1.5000e-004	1.0000e-004	2.5000e-004	0.0000	1.6777	1.6777	1.0000e-005	0.0000	1.6779
Worker	7.1000e-004	1.0600e-003	0.0110	3.0000e-005	2.4100e-003	2.0000e-005	2.4300e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.0933	2.0933	1.0000e-004	0.0000	2.0955
Total	**1.3800e-003**	**7.6900e-003**	**0.0203**	**5.0000e-005**	**2.9500e-003**	**1.3000e-004**	**3.0800e-003**	**7.9000e-004**	**1.2000e-004**	**9.1000e-004**	**0.0000**	**3.7710**	**3.7710**	**1.1000e-004**	**0.0000**	**3.7735**

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	0.0556	0.6309	0.3731	7.2000e-004		0.0317	0.0317		0.0291	0.0291	0.0000	65.9245	65.9245	0.0205	0.0000	66.3555
Total	**0.0556**	**0.6309**	**0.3731**	**7.2000e-004**		**0.0317**	**0.0317**		**0.0291**	**0.0291**	**0.0000**	**65.9245**	**65.9245**	**0.0205**	**0.0000**	**66.3555**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.7000e-004	6.6300e-003	9.3000e-003	2.0000e-005	5.4000e-004	1.1000e-004	6.5000e-004	1.5000e-004	1.0000e-004	2.5000e-004	0.0000	1.6777	1.6777	1.0000e-005	0.0000	1.6779
Worker	7.1000e-004	1.0600e-003	0.0110	3.0000e-005	2.4100e-003	2.0000e-005	2.4300e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.0933	2.0933	1.0000e-004	0.0000	2.0955
Total	**1.3800e-003**	**7.6900e-003**	**0.0203**	**5.0000e-005**	**2.9500e-003**	**1.3000e-004**	**3.0800e-003**	**7.9000e-004**	**1.2000e-004**	**9.1000e-004**	**0.0000**	**3.7710**	**3.7710**	**1.1000e-004**	**0.0000**	**3.7735**

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	4.7700e-003	0.0172	0.0629	1.3000e-004	8.8300e-003	2.6000e-004	9.0900e-003	2.3600e-003	2.4000e-004	2.6000e-003	0.0000	10.7250	10.7250	4.9000e-004	0.0000	10.7352
Unmitigated	4.7700e-003	0.0172	0.0629	1.3000e-004	8.8300e-003	2.6000e-004	9.0900e-003	2.3600e-003	2.4000e-004	2.6000e-003	0.0000	10.7250	10.7250	4.9000e-004	0.0000	10.7352

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	6.97	1.32	0.68	23,312	23,312
Total	6.97	1.32	0.68	23,312	23,312

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	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515683	0.060583	0.179994	0.140474	0.041721	0.006653	0.015053	0.028382	0.001919	0.002521	0.004323	0.000600	0.002094

5.0 Energy Detail

4.4 Fleet Mix

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	3.4483	3.4483	1.6000e-004	3.0000e-005	3.4618
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3.4483	3.4483	1.6000e-004	3.0000e-005	3.4618
NaturalGas Mitigated	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0038	1.0038	2.0000e-005	2.0000e-005	1.0099

NaturalGas Unmitigated	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0038	1.0038	2.0000e-005	2.0000e-005	1.0099

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	18810	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0038	1.0038	2.0000e-005	2.0000e-005	1.0099
Total		**1.0000e-004**	**9.2000e-004**	**7.7000e-004**	**1.0000e-005**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**1.0038**	**1.0038**	**2.0000e-005**	**2.0000e-005**	**1.0099**

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	18810	1.0000e-004	9.2000e-004	7.7000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0038	1.0038	2.0000e-005	2.0000e-005	1.0099
Total		**1.0000e-004**	**9.2000e-004**	**7.7000e-004**	**1.0000e-005**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**1.0038**	**1.0038**	**2.0000e-005**	**2.0000e-005**	**1.0099**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	12050	3.4483	1.6000e-004	3.0000e-005	3.4618
Total		**3.4483**	**1.6000e-004**	**3.0000e-005**	**3.4618**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	12050	3.4483	1.6000e-004	3.0000e-005	3.4618
Total		**3.4483**	**1.6000e-004**	**3.0000e-005**	**3.4618**

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	0.3822	1.0000e-005	1.3600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6200e-003	2.6200e-003	1.0000e-005	0.0000	2.7600e-003

Unmitigated	0.3822	1.0000e-005	1.3600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6200e-003	2.6200e-003	1.0000e-005	0.0000	2.7600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.1600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3809					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.3600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6200e-003	2.6200e-003	1.0000e-005	0.0000	2.7600e-003
Total	**0.3822**	**1.0000e-005**	**1.3600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.6200e-003**	**2.6200e-003**	**1.0000e-005**	**0.0000**	**2.7600e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.1600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3809					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.3600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6200e-003	2.6200e-003	1.0000e-005	0.0000	2.7600e-003
Total	**0.3822**	**1.0000e-005**	**1.3600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.6200e-003**	**2.6200e-003**	**1.0000e-005**	**0.0000**	**2.7600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.9350	7.5700e-003	1.9000e-004	1.1517
Unmitigated	0.9350	7.5700e-003	1.9000e-004	1.1518

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.23125 / 0	0.9350	7.5700e-003	1.9000e-004	1.1518
Total		**0.9350**	**7.5700e-003**	**1.9000e-004**	**1.1518**

Mitigated

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

General Light Industry	0.23125 / 0	0.9350	7.5700e-003	1.9000e-004	1.1517
Total		**0.9350**	**7.5700e-003**	**1.9000e-004**	**1.1517**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.2517	0.0149	0.0000	0.5641
Unmitigated	0.2517	0.0149	0.0000	0.5641

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1.24	0.2517	0.0149	0.0000	0.5641
Total		**0.2517**	**0.0149**	**0.0000**	**0.5641**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1.24	0.2517	0.0149	0.0000	0.5641
Total		**0.2517**	**0.0149**	**0.0000**	**0.5641**

9.0 Operational Offroad

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

10.0 Vegetation

Wetlands - Pumpkin Patch Operations Only

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.20	1000sqft	0.12	5,200.00	0
Unrefrigerated Warehouse-No Rail	9.75	1000sqft	0.22	9,750.00	0
Parking Lot	47.00	Space	0.42	18,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Energy Use - All electricity will be generated on-site

Operational Off-Road Equipment - Forklift and crane will be needed to off-load flatbed trucks with piping and other supplies.

Water And Wastewater - Operations will require 10,000 gallons per day, or 5,000 gallons per day per each site (Pumpkin Patch and LCWA).

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	4.29	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	2.23	0.00
tblEnergyUse	NT24E	4.62	0.00

tblEnergyUse	NT24E	1.34	0.00
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	5.62	0.00
tblEnergyUse	T24E	0.79	0.00
tblEnergyUse	T24NG	10.54	0.00
tblEnergyUse	T24NG	0.88	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	100.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	100.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.29	0.29
tblOperationalOffRoadEquipment	OperLoadFactor	0.20	0.20
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblWater	IndoorWaterUseRate	2,254,687.50	0.00
tblWater	OutdoorWaterUseRate	566,454.65	1,825,000.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.2607	0.7619	0.5581	8.5000e-004	0.0118	0.0499	0.0617	3.3400e-003	0.0461	0.0495	0.0000	76.4079	76.4079	0.0187	0.0000	76.8009
Total	**0.2607**	**0.7619**	**0.5581**	**8.5000e-004**	**0.0118**	**0.0499**	**0.0617**	**3.3400e-003**	**0.0461**	**0.0495**	**0.0000**	**76.4079**	**76.4079**	**0.0187**	**0.0000**	**76.8009**

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					
2017	0.2607	0.7619	0.5581	8.5000e-004	0.0118	0.0499	0.0617	3.3400e-003	0.0461	0.0495	0.0000	76.4078	76.4078	0.0187	0.0000	76.8008
Total	**0.2607**	**0.7619**	**0.5581**	**8.5000e-004**	**0.0118**	**0.0499**	**0.0617**	**3.3400e-003**	**0.0461**	**0.0495**	**0.0000**	**76.4078**	**76.4078**	**0.0187**	**0.0000**	**76.8008**

	ROG	**NOx**	**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	tons/yr										MT/yr					
Area	0.1400	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5400e-003	1.5400e-003	0.0000	0.0000	1.6300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0411	0.1355	0.5012	1.3800e-003	0.0940	1.9600e-003	0.0960	0.0252	1.8100e-003	0.0270	0.0000	103.1715	103.1715	3.8600e-003	0.0000	103.2526
Offroad	0.0183	0.2053	0.0917	1.8000e-004		0.0103	0.0103		9.5000e-003	9.5000e-003	0.0000	16.3036	16.3036	5.0800e-003	0.0000	16.4102
Waste						0.0000	0.0000		0.0000	0.0000	2.8419	0.0000	2.8419	0.1680	0.0000	6.3688

Water						0.0000	0.0000		0.0000	0.0000	0.2932	9.2460	9.5393	0.0305	8.0000e-004	10.4283
Total	**0.1995**	**0.3408**	**0.5937**	**1.5600e-003**	**0.0940**	**0.0123**	**0.1063**	**0.0252**	**0.0113**	**0.0365**	**3.1351**	**128.7227**	**131.8578**	**0.2074**	**8.0000e-004**	**136.4616**

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	0.1400	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5400e-003	1.5400e-003	0.0000	0.0000	1.6300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0411	0.1355	0.5012	1.3800e-003	0.0940	1.9600e-003	0.0960	0.0252	1.8100e-003	0.0270	0.0000	103.1715	103.1715	3.8600e-003	0.0000	103.2526
Offroad	0.0183	0.2053	0.0917	1.8000e-004		0.0103	0.0103		9.5000e-003	9.5000e-003	0.0000	16.3036	16.3036	5.0800e-003	0.0000	16.4102
Waste						0.0000	0.0000		0.0000	0.0000	2.8419	0.0000	2.8419	0.1680	0.0000	6.3688
Water						0.0000	0.0000		0.0000	0.0000	0.2932	9.2460	9.5393	0.0305	8.0000e-004	10.4278
Total	**0.1995**	**0.3408**	**0.5937**	**1.5600e-003**	**0.0940**	**0.0123**	**0.1063**	**0.0252**	**0.0113**	**0.0365**	**3.1351**	**128.7227**	**131.8578**	**0.2074**	**8.0000e-004**	**136.4611**

	ROG	**NOx**	**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	**9.19**	**60.23**	**15.45**	**11.54**	**0.00**	**84.05**	**9.72**	**0.00**	**84.00**	**26.06**	**0.00**	**12.67**	**12.36**	**2.45**	**0.00**	**12.03**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/13/2017	5	10	
2	Site Preparation	Site Preparation	1/14/2017	1/16/2017	5	1	

3	Grading	Grading	1/17/2017	1/18/2017	5	2	
4	Building Construction	Building Construction	1/19/2017	6/7/2017	5	100	
5	Paving	Paving	6/8/2017	6/14/2017	5	5	
6	Architectural Coating	Architectural Coating	6/15/2017	6/21/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 23,271; Non-Residential Outdoor: 7,757 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	14.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	6.0200e-003	0.0524	0.0429	6.0000e-005		3.6300e-003	3.6300e-003		3.4600e-003	3.4600e-003	0.0000	5.3697	5.3697	1.0600e-003	0.0000	5.3919
Total	**6.0200e-003**	**0.0524**	**0.0429**	**6.0000e-005**		**3.6300e-003**	**3.6300e-003**		**3.4600e-003**	**3.4600e-003**	**0.0000**	**5.3697**	**5.3697**	**1.0600e-003**	**0.0000**	**5.3919**

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	1.8000e-004	2.7000e-004	2.7700e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4942	0.4942	3.0000e-005	0.0000	0.4947
Total	**1.8000e-004**	**2.7000e-004**	**2.7700e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4942**	**0.4942**	**3.0000e-005**	**0.0000**	**0.4947**

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	6.0200e-003	0.0524	0.0429	6.0000e-005		3.6300e-003	3.6300e-003		3.4600e-003	3.4600e-003	0.0000	5.3697	5.3697	1.0600e-003	0.0000	5.3919
Total	**6.0200e-003**	**0.0524**	**0.0429**	**6.0000e-005**		**3.6300e-003**	**3.6300e-003**		**3.4600e-003**	**3.4600e-003**	**0.0000**	**5.3697**	**5.3697**	**1.0600e-003**	**0.0000**	**5.3919**

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	1.8000e-004	2.7000e-004	2.7700e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4942	0.4942	3.0000e-005	0.0000	0.4947
Total	**1.8000e-004**	**2.7000e-004**	**2.7700e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4942**	**0.4942**	**3.0000e-005**	**0.0000**	**0.4947**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3000e-004	6.3400e-003	3.6200e-003	0.0000		3.9000e-004	3.9000e-004		3.5000e-004	3.5000e-004	0.0000	0.4336	0.4336	1.3000e-004	0.0000	0.4364
Total	**6.3000e-004**	**6.3400e-003**	**3.6200e-003**	**0.0000**	**2.7000e-004**	**3.9000e-004**	**6.6000e-004**	**3.0000e-005**	**3.5000e-004**	**3.8000e-004**	**0.0000**	**0.4336**	**0.4336**	**1.3000e-004**	**0.0000**	**0.4364**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total	**1.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

Mitigated Construction On-Site

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

Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3000e-004	6.3400e-003	3.6200e-003	0.0000		3.9000e-004	3.9000e-004		3.5000e-004	3.5000e-004	0.0000	0.4336	0.4336	1.3000e-004	0.0000	0.4364
Total	**6.3000e-004**	**6.3400e-003**	**3.6200e-003**	**0.0000**	**2.7000e-004**	**3.9000e-004**	**6.6000e-004**	**3.0000e-005**	**3.5000e-004**	**3.8000e-004**	**0.0000**	**0.4336**	**0.4336**	**1.3000e-004**	**0.0000**	**0.4364**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total	**1.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

3.4 Grading - 2017

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					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e-003	0.0105	8.5800e-003	1.0000e-005		7.3000e-004	7.3000e-004		6.9000e-004	6.9000e-004	0.0000	1.0739	1.0739	2.1000e-004	0.0000	1.0784
Total	**1.2000e-003**	**0.0105**	**8.5800e-003**	**1.0000e-005**	**7.5000e-004**	**7.3000e-004**	**1.4800e-003**	**4.1000e-004**	**6.9000e-004**	**1.1000e-003**	**0.0000**	**1.0739**	**1.0739**	**2.1000e-004**	**0.0000**	**1.0784**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	1.0000e-005	0.0000	0.0990
Total	**4.0000e-005**	**5.0000e-005**	**5.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0988**	**0.0988**	**1.0000e-005**	**0.0000**	**0.0990**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e-003	0.0105	8.5800e-003	1.0000e-005		7.3000e-004	7.3000e-004		6.9000e-004	6.9000e-004	0.0000	1.0739	1.0739	2.1000e-004	0.0000	1.0784
Total	**1.2000e-003**	**0.0105**	**8.5800e-003**	**1.0000e-005**	**7.5000e-004**	**7.3000e-004**	**1.4800e-003**	**4.1000e-004**	**6.9000e-004**	**1.1000e-003**	**0.0000**	**1.0739**	**1.0739**	**2.1000e-004**	**0.0000**	**1.0784**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	1.0000e-005	0.0000	0.0990
Total	**4.0000e-005**	**5.0000e-005**	**5.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0988**	**0.0988**	**1.0000e-005**	**0.0000**	**0.0990**

3.5 Building Construction - 2017

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	0.0637	0.6337	0.4020	5.7000e-004		0.0428	0.0428		0.0394	0.0394	0.0000	52.5954	52.5954	0.0161	0.0000	52.9339
Total	**0.0637**	**0.6337**	**0.4020**	**5.7000e-004**		**0.0428**	**0.0428**		**0.0394**	**0.0394**	**0.0000**	**52.5954**	**52.5954**	**0.0161**	**0.0000**	**52.9339**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4300e-003	0.0246	0.0331	7.0000e-005	1.8500e-003	3.8000e-004	2.2300e-003	5.3000e-004	3.5000e-004	8.8000e-004	0.0000	5.8171	5.8171	4.0000e-005	0.0000	5.8179
Worker	2.5200e-003	3.7300e-003	0.0387	9.0000e-005	7.6800e-003	6.0000e-005	7.7400e-003	2.0400e-003	6.0000e-005	2.1000e-003	0.0000	6.9189	6.9189	3.6000e-004	0.0000	6.9264
Total	**4.9500e-003**	**0.0284**	**0.0718**	**1.6000e-004**	**9.5300e-003**	**4.4000e-004**	**9.9700e-003**	**2.5700e-003**	**4.1000e-004**	**2.9800e-003**	**0.0000**	**12.7359**	**12.7359**	**4.0000e-004**	**0.0000**	**12.7443**

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	0.0637	0.6337	0.4020	5.7000e-004		0.0428	0.0428		0.0394	0.0394	0.0000	52.5954	52.5954	0.0161	0.0000	52.9338
Total	**0.0637**	**0.6337**	**0.4020**	**5.7000e-004**		**0.0428**	**0.0428**		**0.0394**	**0.0394**	**0.0000**	**52.5954**	**52.5954**	**0.0161**	**0.0000**	**52.9338**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4300e-003	0.0246	0.0331	7.0000e-005	1.8500e-003	3.8000e-004	2.2300e-003	5.3000e-004	3.5000e-004	8.8000e-004	0.0000	5.8171	5.8171	4.0000e-005	0.0000	5.8179
Worker	2.5200e-003	3.7300e-003	0.0387	9.0000e-005	7.6800e-003	6.0000e-005	7.7400e-003	2.0400e-003	6.0000e-005	2.1000e-003	0.0000	6.9189	6.9189	3.6000e-004	0.0000	6.9264
Total	**4.9500e-003**	**0.0284**	**0.0718**	**1.6000e-004**	**9.5300e-003**	**4.4000e-004**	**9.9700e-003**	**2.5700e-003**	**4.1000e-004**	**2.9800e-003**	**0.0000**	**12.7359**	**12.7359**	**4.0000e-004**	**0.0000**	**12.7443**

3.6 Paving - 2017

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	2.6000e-003	0.0246	0.0181	3.0000e-005		1.5000e-003	1.5000e-003		1.3900e-003	1.3900e-003	0.0000	2.4243	2.4243	6.7000e-004	0.0000	2.4384
Paving	5.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.1500e-003**	**0.0246**	**0.0181**	**3.0000e-005**		**1.5000e-003**	**1.5000e-003**		**1.3900e-003**	**1.3900e-003**	**0.0000**	**2.4243**	**2.4243**	**6.7000e-004**	**0.0000**	**2.4384**

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	1.6000e-004	2.4000e-004	2.4900e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4448	0.4448	2.0000e-005	0.0000	0.4453
Total	**1.6000e-004**	**2.4000e-004**	**2.4900e-003**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4448**	**0.4448**	**2.0000e-005**	**0.0000**	**0.4453**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.6000e-003	0.0246	0.0181	3.0000e-005		1.5000e-003	1.5000e-003		1.3900e-003	1.3900e-003	0.0000	2.4243	2.4243	6.7000e-004	0.0000	2.4384
Paving	5.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.1500e-003**	**0.0246**	**0.0181**	**3.0000e-005**		**1.5000e-003**	**1.5000e-003**		**1.3900e-003**	**1.3900e-003**	**0.0000**	**2.4243**	**2.4243**	**6.7000e-004**	**0.0000**	**2.4384**

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	1.6000e-004	2.4000e-004	2.4900e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4448	0.4448	2.0000e-005	0.0000	0.4453
Total	**1.6000e-004**	**2.4000e-004**	**2.4900e-003**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4448**	**0.4448**	**2.0000e-005**	**0.0000**	**0.4453**

3.7 Architectural Coating - 2017

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	0.1798					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total	**0.1806**	**5.4600e-003**	**4.6700e-003**	**1.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**0.6383**	**0.6383**	**7.0000e-005**	**0.0000**	**0.6397**

Unmitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	4.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0741	0.0741	0.0000	0.0000	0.0742
Total	**3.0000e-005**	**4.0000e-005**	**4.2000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0741**	**0.0741**	**0.0000**	**0.0000**	**0.0742**

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	0.1798					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total	**0.1806**	**5.4600e-003**	**4.6700e-003**	**1.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**0.6383**	**0.6383**	**7.0000e-005**	**0.0000**	**0.6397**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	4.2000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0741	0.0741	0.0000	0.0000	0.0742

Total	**3.0000e-005**	**4.0000e-005**	**4.2000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0741**	**0.0741**	**0.0000**	**0.0000**	**0.0742**

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	0.0411	0.1355	0.5012	1.3800e-003	0.0940	1.9600e-003	0.0960	0.0252	1.8100e-003	0.0270	0.0000	103.1715	103.1715	3.8600e-003	0.0000	103.2526
Unmitigated	0.0411	0.1355	0.5012	1.3800e-003	0.0940	1.9600e-003	0.0960	0.0252	1.8100e-003	0.0270	0.0000	103.1715	103.1715	3.8600e-003	0.0000	103.2526

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	57.25	12.32	5.10	139,756	139,756
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	25.25	25.25	25.25	108,225	108,225
Total	82.50	37.58	30.35	247,981	247,981

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH

0.511172	0.060004	0.180590	0.138995	0.042398	0.006681	0.016070	0.032568	0.001938	0.002493	0.004370	0.000586	0.002135

5.0 Energy Detail

4.4 Fleet Mix

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	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
Unrefrigerated Warehouse-No Rail	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	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
Unrefrigerated Warehouse-No Rail	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.1400	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5400e-003	1.5400e-003	0.0000	0.0000	1.6300e-003
Unmitigated	0.1400	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5400e-003	1.5400e-003	0.0000	0.0000	1.6300e-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	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5400e-003	1.5400e-003	0.0000	0.0000	1.6300e-003
Total	**0.1400**	**1.0000e-005**	**8.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.5400e-003**	**1.5400e-003**	**0.0000**	**0.0000**	**1.6300e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5400e-003	1.5400e-003	0.0000	0.0000	1.6300e-003
Total	**0.1400**	**1.0000e-005**	**8.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.5400e-003**	**1.5400e-003**	**0.0000**	**0.0000**	**1.6300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.5393	0.0305	8.0000e-004	10.4278

Unmitigated	9.5393	0.0305	8.0000e-004	10.4283

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.924215 / 1.825	9.5393	0.0305	8.0000e-004	10.4283
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.5393**	**0.0305**	**8.0000e-004**	**10.4283**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.924215 / 1.825	9.5393	0.0305	8.0000e-004	10.4278
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.5393**	**0.0305**	**8.0000e-004**	**10.4278**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.8419	0.1680	0.0000	6.3688
Unmitigated	2.8419	0.1680	0.0000	6.3688

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	4.84	0.9825	0.0581	0.0000	2.2018
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	9.16	1.8594	0.1099	0.0000	4.1670
Total		**2.8419**	**0.1680**	**0.0000**	**6.3688**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e

Land Use	tons	MT/yr			
General Office Building	4.84	0.9825	0.0581	0.0000	2.2018
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	9.16	1.8594	0.1099	0.0000	4.1670
Total		**2.8419**	**0.1680**	**0.0000**	**6.3688**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Cranes	1	4.00	100	226	0.29	Diesel
Forklifts	1	4.00	100	89	0.20	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Forklifts	4.4800e-003	0.0396	0.0304	4.0000e-005		3.1600e-003	3.1600e-003		2.9000e-003	2.9000e-003	0.0000	3.5053	3.5053	1.0900e-003	0.0000	3.5282
Cranes	0.0139	0.1657	0.0613	1.4000e-004		7.1700e-003	7.1700e-003		6.6000e-003	6.6000e-003	0.0000	12.7983	12.7983	3.9800e-003	0.0000	12.8820
Total	**0.0184**	**0.2053**	**0.0917**	**1.8000e-004**		**0.0103**	**0.0103**		**9.5000e-003**	**9.5000e-003**	**0.0000**	**16.3036**	**16.3036**	**5.0700e-003**	**0.0000**	**16.4102**

10.0 Vegetation

Wetlands - Visitor Center - Operations Only

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	3.35	1000sqft	0.08	3,350.00	0
Parking Lot	45.00	Space	0.41	18,000.00	0
City Park	73.00	Acre	73.00	3,179,880.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - CalEEMod land use selections are poor for this type of use.
Government office building used for visitor center.

Consumer Products - No "consumer products" used in the wetlands preserve.

Energy Use - All electricity will be generated on-site

Water And Wastewater - Wetlands (City Park) water usage eliminated.

Operational Off-Road Equipment - Forklift and crane will be needed to off-load flatbed trucks with piping and other supplies.

Area Coating - Estimate of visitor center area.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	1591885	36000

tblAreaCoating	Area_Nonresidential_Interior	4775655	36000
tblProjectCharacteristics	OperationalYear	2014	2018

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	0.7332	6.9058	7.1384	0.0124	1.2287	0.3101	1.5388	0.5014	0.2867	0.7881	0.0000	1,042.7185	1,042.7185	0.1811	0.0000	1,046.5214
2019	1.3189	8.2697	17.2857	0.0418	2.3460	0.2608	2.6068	0.6314	0.2434	0.8749	0.0000	3,191.6768	3,191.6768	0.1614	0.0000	3,195.0665
2020	1.2336	7.3881	16.5361	0.0420	2.3550	0.2325	2.5876	0.6339	0.2170	0.8508	0.0000	3,104.9360	3,104.9360	0.1567	0.0000	3,108.2266
2021	1.1575	6.4586	15.8100	0.0419	2.3461	0.2047	2.5507	0.6314	0.1910	0.8224	0.0000	3,068.6349	3,068.6349	0.1522	0.0000	3,071.8312
2022	1.0931	5.8337	15.1418	0.0417	2.3371	0.1838	2.5209	0.6290	0.1714	0.8004	0.0000	3,030.7829	3,030.7829	0.1484	0.0000	3,033.8983
2023	37.0609	0.9401	2.3767	6.3800e-003	0.3416	0.0386	0.3802	0.0915	0.0359	0.1274	0.0000	460.8874	460.8874	0.0422	0.0000	461.7728
Total	**42.5973**	**35.7960**	**74.2887**	**0.1861**	**10.9544**	**1.2304**	**12.1849**	**3.1187**	**1.1453**	**4.2640**	**0.0000**	**13,899.6365**	**13,899.6365**	**0.8419**	**0.0000**	**13,917.3168**

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	0.7332	6.9058	7.1384	0.0124	1.2287	0.3101	1.5388	0.5014	0.2867	0.7881	0.0000	1,042.7179	1,042.7179	0.1811	0.0000	1,046.5208

2019	1.3189	8.2697	17.2857	0.0418	2.3460	0.2608	2.6068	0.6314	0.2434	0.8749	0.0000	3,191.6765	3,191.6765	0.1614	0.0000	3,195.0662
2020	1.2336	7.3881	16.5361	0.0420	2.3550	0.2325	2.5876	0.6339	0.2170	0.8508	0.0000	3,104.9357	3,104.9357	0.1567	0.0000	3,108.2263
2021	1.1575	6.4586	15.8100	0.0419	2.3461	0.2047	2.5507	0.6314	0.1910	0.8224	0.0000	3,068.6345	3,068.6345	0.1522	0.0000	3,071.8308
2022	1.0931	5.8337	15.1418	0.0417	2.3371	0.1838	2.5209	0.6290	0.1714	0.8004	0.0000	3,030.7826	3,030.7826	0.1484	0.0000	3,033.8979
2023	37.0609	0.9401	2.3767	6.3800e-003	0.3416	0.0386	0.3802	0.0915	0.0359	0.1274	0.0000	460.8873	460.8873	0.0422	0.0000	461.7727
Total	**42.5973**	**35.7960**	**74.2887**	**0.1861**	**10.9544**	**1.2304**	**12.1849**	**3.1187**	**1.1453**	**4.2640**	**0.0000**	**13,899.6343**	**13,899.6343**	**0.8419**	**0.0000**	**13,917.3146**

	ROG	NOx	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	tons/yr										MT/yr					
Area	0.0419	1.0000e-005	1.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0100e-003	3.0100e-003	1.0000e-005	0.0000	3.1900e-003
Energy	2.0000e-004	1.7900e-003	1.5100e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	20.4161	20.4161	8.9000e-004	2.1000e-004	20.5003
Mobile	0.1511	0.4155	1.6137	4.0500e-003	0.2738	5.8400e-003	0.2796	0.0733	5.3800e-003	0.0787	0.0000	303.4355	303.4355	0.0116	0.0000	303.6789
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	1.9081	0.0000	1.9081	0.1128	0.0000	4.2762
Water						0.0000	0.0000		0.0000	0.0000	0.2111	280.3075	280.5186	0.0346	3.1800e-003	282.2297
Total	**0.1932**	**0.4173**	**1.6168**	**4.0600e-003**	**0.2738**	**5.9900e-003**	**0.2798**	**0.0733**	**5.5300e-003**	**0.0788**	**2.1193**	**604.1621**	**606.2813**	**0.1598**	**3.3900e-003**	**610.6883**

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	0.0419	1.0000e-005	1.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0100e-003	3.0100e-003	1.0000e-005	0.0000	3.1900e-003
Energy	2.0000e-004	1.7900e-003	1.5100e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	20.4161	20.4161	8.9000e-004	2.1000e-004	20.5003
Mobile	0.1511	0.4155	1.6137	4.0500e-003	0.2738	5.8400e-003	0.2796	0.0733	5.3800e-003	0.0787	0.0000	303.4355	303.4355	0.0116	0.0000	303.6789
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	1.9081	0.0000	1.9081	0.1128	0.0000	4.2762
Water						0.0000	0.0000		0.0000	0.0000	0.2111	280.3075	280.5186	0.0346	3.1800e-003	282.2294
Total	**0.1932**	**0.4173**	**1.6168**	**4.0600e-003**	**0.2738**	**5.9900e-003**	**0.2798**	**0.0733**	**5.5300e-003**	**0.0788**	**2.1193**	**604.1621**	**606.2813**	**0.1598**	**3.3900e-003**	**610.6880**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2018	4/6/2018	5	70	
2	Site Preparation	Site Preparation	4/7/2018	6/1/2018	5	40	
3	Grading	Grading	6/2/2018	11/2/2018	5	110	
4	Building Construction	Building Construction	11/3/2018	2/3/2023	5	1110	
5	Paving	Paving	2/4/2023	5/19/2023	5	75	

6	Architectural Coating	Architectural Coating	5/20/2023	9/1/2023	5	75	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,775,655; Non-Residential Outdoor: 1,591,885 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,344.00	525.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	269.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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	0.1246	1.2891	1.1104	1.4000e-003		0.0633	0.0633		0.0590	0.0590	0.0000	126.4765	126.4765	0.0350	0.0000	127.2109
Total	**0.1246**	**1.2891**	**1.1104**	**1.4000e-003**		**0.0633**	**0.0633**		**0.0590**	**0.0590**	**0.0000**	**126.4765**	**126.4765**	**0.0350**	**0.0000**	**127.2109**

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	1.7000e-003	2.5400e-003	0.0263	7.0000e-005	5.7600e-003	5.0000e-005	5.8100e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	4.9955	4.9955	2.5000e-004	0.0000	5.0007
Total	**1.7000e-003**	**2.5400e-003**	**0.0263**	**7.0000e-005**	**5.7600e-003**	**5.0000e-005**	**5.8100e-003**	**1.5300e-003**	**4.0000e-005**	**1.5700e-003**	**0.0000**	**4.9955**	**4.9955**	**2.5000e-004**	**0.0000**	**5.0007**

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	0.1246	1.2891	1.1104	1.4000e-003		0.0633	0.0633		0.0590	0.0590	0.0000	126.4764	126.4764	0.0350	0.0000	127.2108
Total	**0.1246**	**1.2891**	**1.1104**	**1.4000e-003**		**0.0633**	**0.0633**		**0.0590**	**0.0590**	**0.0000**	**126.4764**	**126.4764**	**0.0350**	**0.0000**	**127.2108**

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	1.7000e-003	2.5400e-003	0.0263	7.0000e-005	5.7600e-003	5.0000e-005	5.8100e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	4.9955	4.9955	2.5000e-004	0.0000	5.0007
Total	**1.7000e-003**	**2.5400e-003**	**0.0263**	**7.0000e-005**	**5.7600e-003**	**5.0000e-005**	**5.8100e-003**	**1.5300e-003**	**4.0000e-005**	**1.5700e-003**	**0.0000**	**4.9955**	**4.9955**	**2.5000e-004**	**0.0000**	**5.0007**

3.3 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					0.3613	0.0000	0.3613	0.1986	0.0000	0.1986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0858	0.9122	0.7247	7.8000e-004		0.0473	0.0473		0.0435	0.0435	0.0000	71.4820	71.4820	0.0223	0.0000	71.9494
Total	**0.0858**	**0.9122**	**0.7247**	**7.8000e-004**	**0.3613**	**0.0473**	**0.4086**	**0.1986**	**0.0435**	**0.2421**	**0.0000**	**71.4820**	**71.4820**	**0.0223**	**0.0000**	**71.9494**

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	1.1600e-003	1.7400e-003	0.0180	5.0000e-005	3.9500e-003	3.0000e-005	3.9800e-003	1.0500e-003	3.0000e-005	1.0800e-003	0.0000	3.4255	3.4255	1.7000e-004	0.0000	3.4291
Total	**1.1600e-003**	**1.7400e-003**	**0.0180**	**5.0000e-005**	**3.9500e-003**	**3.0000e-005**	**3.9800e-003**	**1.0500e-003**	**3.0000e-005**	**1.0800e-003**	**0.0000**	**3.4255**	**3.4255**	**1.7000e-004**	**0.0000**	**3.4291**

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					0.3613	0.0000	0.3613	0.1986	0.0000	0.1986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0858	0.9122	0.7247	7.8000e-004		0.0473	0.0473		0.0435	0.0435	0.0000	71.4820	71.4820	0.0223	0.0000	71.9493
Total	**0.0858**	**0.9122**	**0.7247**	**7.8000e-004**	**0.3613**	**0.0473**	**0.4086**	**0.1986**	**0.0435**	**0.2421**	**0.0000**	**71.4820**	**71.4820**	**0.0223**	**0.0000**	**71.9493**

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	1.1600e-003	1.7400e-003	0.0180	5.0000e-005	3.9500e-003	3.0000e-005	3.9800e-003	1.0500e-003	3.0000e-005	1.0800e-003	0.0000	3.4255	3.4255	1.7000e-004	0.0000	3.4291
Total	**1.1600e-003**	**1.7400e-003**	**0.0180**	**5.0000e-005**	**3.9500e-003**	**3.0000e-005**	**3.9800e-003**	**1.0500e-003**	**3.0000e-005**	**1.0800e-003**	**0.0000**	**3.4255**	**3.4255**	**1.7000e-004**	**0.0000**	**3.4291**

3.4 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					0.4770	0.0000	0.4770	0.1978	0.0000	0.1978	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2909	3.2744	2.3269	3.3900e-003		0.1533	0.1533		0.1411	0.1411	0.0000	309.9889	309.9889	0.0965	0.0000	312.0154

Total	**0.2909**	**3.2744**	**2.3269**	**3.3900e-003**	**0.4770**	**0.1533**	**0.6304**	**0.1978**	**0.1411**	**0.3389**	**0.0000**	**309.9889**	**309.9889**	**0.0965**	**0.0000**	**312.0154**

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	3.5600e-003	5.3200e-003	0.0551	1.5000e-004	0.0121	1.0000e-004	0.0122	3.2100e-003	9.0000e-005	3.2900e-003	0.0000	10.4667	10.4667	5.2000e-004	0.0000	10.4777
Total	**3.5600e-003**	**5.3200e-003**	**0.0551**	**1.5000e-004**	**0.0121**	**1.0000e-004**	**0.0122**	**3.2100e-003**	**9.0000e-005**	**3.2900e-003**	**0.0000**	**10.4667**	**10.4667**	**5.2000e-004**	**0.0000**	**10.4777**

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					0.4770	0.0000	0.4770	0.1978	0.0000	0.1978	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2909	3.2744	2.3269	3.3900e-003		0.1533	0.1533		0.1411	0.1411	0.0000	309.9885	309.9885	0.0965	0.0000	312.0151
Total	**0.2909**	**3.2744**	**2.3269**	**3.3900e-003**	**0.4770**	**0.1533**	**0.6304**	**0.1978**	**0.1411**	**0.3389**	**0.0000**	**309.9885**	**309.9885**	**0.0965**	**0.0000**	**312.0151**

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	3.5600e-003	5.3200e-003	0.0551	1.5000e-004	0.0121	1.0000e-004	0.0122	3.2100e-003	9.0000e-005	3.2900e-003	0.0000	10.4667	10.4667	5.2000e-004	0.0000	10.4777
Total	**3.5600e-003**	**5.3200e-003**	**0.0551**	**1.5000e-004**	**0.0121**	**1.0000e-004**	**0.0122**	**3.2100e-003**	**9.0000e-005**	**3.2900e-003**	**0.0000**	**10.4667**	**10.4667**	**5.2000e-004**	**0.0000**	**10.4777**

3.5 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	0.0547	0.4769	0.3594	5.5000e-004		0.0306	0.0306		0.0288	0.0288	0.0000	48.5378	48.5378	0.0119	0.0000	48.7872
Total	**0.0547**	**0.4769**	**0.3594**	**5.5000e-004**		**0.0306**	**0.0306**		**0.0288**	**0.0288**	**0.0000**	**48.5378**	**48.5378**	**0.0119**	**0.0000**	**48.7872**

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	0.0816	0.8106	1.1371	2.3300e-003	0.0662	0.0129	0.0792	0.0189	0.0119	0.0308	0.0000	205.1833	205.1833	1.4800e-003	0.0000	205.2144
Worker	0.0891	0.1332	1.3805	3.7100e-003	0.3023	2.4100e-003	0.3047	0.0803	2.2300e-003	0.0825	0.0000	262.1624	262.1624	0.0131	0.0000	262.4367
Total	**0.1707**	**0.9438**	**2.5176**	**6.0400e-003**	**0.3685**	**0.0153**	**0.3839**	**0.0992**	**0.0141**	**0.1133**	**0.0000**	**467.3457**	**467.3457**	**0.0145**	**0.0000**	**467.6511**

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	0.0547	0.4769	0.3594	5.5000e-004		0.0306	0.0306		0.0288	0.0288	0.0000	48.5377	48.5377	0.0119	0.0000	48.7872
Total	**0.0547**	**0.4769**	**0.3594**	**5.5000e-004**		**0.0306**	**0.0306**		**0.0288**	**0.0288**	**0.0000**	**48.5377**	**48.5377**	**0.0119**	**0.0000**	**48.7872**

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	0.0816	0.8106	1.1371	2.3300e-003	0.0662	0.0129	0.0792	0.0189	0.0119	0.0308	0.0000	205.1833	205.1833	1.4800e-003	0.0000	205.2144
Worker	0.0891	0.1332	1.3805	3.7100e-003	0.3023	2.4100e-003	0.3047	0.0803	2.2300e-003	0.0825	0.0000	262.1624	262.1624	0.0131	0.0000	262.4367
Total	**0.1707**	**0.9438**	**2.5176**	**6.0400e-003**	**0.3685**	**0.0153**	**0.3839**	**0.0992**	**0.0141**	**0.1133**	**0.0000**	**467.3457**	**467.3457**	**0.0145**	**0.0000**	**467.6511**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3069	2.7359	2.2342	3.5000e-003		0.1677	0.1677		0.1577	0.1577	0.0000	305.5302	305.5302	0.0743	0.0000	307.0913
Total	**0.3069**	**2.7359**	**2.2342**	**3.5000e-003**		**0.1677**	**0.1677**		**0.1577**	**0.1577**	**0.0000**	**305.5302**	**305.5302**	**0.0743**	**0.0000**	**307.0913**

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	0.4913	4.7561	6.9929	0.0148	0.4217	0.0780	0.4998	0.1204	0.0718	0.1922	0.0000	1,280.7717	1,280.7717	9.2400e-003	0.0000	1,280.9656
Worker	0.5207	0.7776	8.0586	0.0236	1.9243	0.0151	1.9394	0.5110	0.0140	0.5250	0.0000	1,605.3749	1,605.3749	0.0778	0.0000	1,607.0096
Total	**1.0120**	**5.5337**	**15.0515**	**0.0383**	**2.3460**	**0.0931**	**2.4391**	**0.6314**	**0.0857**	**0.7172**	**0.0000**	**2,886.1466**	**2,886.1466**	**0.0871**	**0.0000**	**2,887.9752**

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	0.3069	2.7359	2.2342	3.5000e-003		0.1677	0.1677		0.1577	0.1577	0.0000	305.5299	305.5299	0.0743	0.0000	307.0909
Total	**0.3069**	**2.7359**	**2.2342**	**3.5000e-003**		**0.1677**	**0.1677**		**0.1577**	**0.1577**	**0.0000**	**305.5299**	**305.5299**	**0.0743**	**0.0000**	**307.0909**

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	0.4913	4.7561	6.9929	0.0148	0.4217	0.0780	0.4998	0.1204	0.0718	0.1922	0.0000	1,280.7717	1,280.7717	9.2400e-003	0.0000	1,280.9656
Worker	0.5207	0.7776	8.0586	0.0236	1.9243	0.0151	1.9394	0.5110	0.0140	0.5250	0.0000	1,605.3749	1,605.3749	0.0778	0.0000	1,607.0096
Total	**1.0120**	**5.5337**	**15.0515**	**0.0383**	**2.3460**	**0.0931**	**2.4391**	**0.6314**	**0.0857**	**0.7172**	**0.0000**	**2,886.1466**	**2,886.1466**	**0.0871**	**0.0000**	**2,887.9752**

3.5 Building Construction - 2020

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	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1514	302.1514	0.0736	0.0000	303.6973

Total	**0.2766**	**2.5000**	**2.2019**	**3.5100e-003**		**0.1458**	**0.1458**		**0.1371**	**0.1371**	**0.0000**	**302.1514**	**302.1514**	**0.0736**	**0.0000**	**303.6973**

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	0.4676	4.1647	6.8070	0.0148	0.4234	0.0717	0.4951	0.1209	0.0660	0.1868	0.0000	1,256.7201	1,256.7201	9.0800e-003	0.0000	1,256.9107
Worker	0.4894	0.7234	7.5272	0.0237	1.9317	0.0150	1.9467	0.5130	0.0139	0.5269	0.0000	1,546.0646	1,546.0646	0.0740	0.0000	1,547.6187
Total	**0.9570**	**4.8881**	**14.3342**	**0.0385**	**2.3550**	**0.0867**	**2.4418**	**0.6339**	**0.0799**	**0.7138**	**0.0000**	**2,802.7847**	**2,802.7847**	**0.0831**	**0.0000**	**2,804.5294**

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	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1510	302.1510	0.0736	0.0000	303.6969
Total	**0.2766**	**2.5000**	**2.2019**	**3.5100e-003**		**0.1458**	**0.1458**		**0.1371**	**0.1371**	**0.0000**	**302.1510**	**302.1510**	**0.0736**	**0.0000**	**303.6969**

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	0.4676	4.1647	6.8070	0.0148	0.4234	0.0717	0.4951	0.1209	0.0660	0.1868	0.0000	1,256.7201	1,256.7201	9.0800e-003	0.0000	1,256.9107
Worker	0.4894	0.7234	7.5272	0.0237	1.9317	0.0150	1.9467	0.5130	0.0139	0.5269	0.0000	1,546.0646	1,546.0646	0.0740	0.0000	1,547.6187
Total	**0.9570**	**4.8881**	**14.3342**	**0.0385**	**2.3550**	**0.0867**	**2.4418**	**0.6339**	**0.0799**	**0.7138**	**0.0000**	**2,802.7847**	**2,802.7847**	**0.0831**	**0.0000**	**2,804.5294**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0339**	**301.0339**	**0.0725**	**0.0000**	**302.5568**

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	0.4493	3.5220	6.6091	0.0147	0.4218	0.0651	0.4869	0.1204	0.0599	0.1803	0.0000	1,251.3643	1,251.3643	9.1100e-003	0.0000	1,251.5557
Worker	0.4612	0.6737	7.0428	0.0236	1.9243	0.0150	1.9393	0.5110	0.0139	0.5250	0.0000	1,516.2368	1,516.2368	0.0706	0.0000	1,517.7187
Total	**0.9105**	**4.1957**	**13.6519**	**0.0384**	**2.3461**	**0.0801**	**2.4261**	**0.6314**	**0.0738**	**0.7052**	**0.0000**	**2,767.6010**	**2,767.6010**	**0.0797**	**0.0000**	**2,769.2743**

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	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0335	301.0335	0.0725	0.0000	302.5565
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0335**	**301.0335**	**0.0725**	**0.0000**	**302.5565**

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	0.4493	3.5220	6.6091	0.0147	0.4218	0.0651	0.4869	0.1204	0.0599	0.1803	0.0000	1,251.3643	1,251.3643	9.1100e-003	0.0000	1,251.5557
Worker	0.4612	0.6737	7.0428	0.0236	1.9243	0.0150	1.9393	0.5110	0.0139	0.5250	0.0000	1,516.2368	1,516.2368	0.0706	0.0000	1,517.7187
Total	**0.9105**	**4.1957**	**13.6519**	**0.0384**	**2.3461**	**0.0801**	**2.4261**	**0.6314**	**0.0738**	**0.7052**	**0.0000**	**2,767.6010**	**2,767.6010**	**0.0797**	**0.0000**	**2,769.2743**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2209	2.0197	2.1226	3.4900e-003		0.1047	0.1047		0.0986	0.0986	0.0000	299.9946	299.9946	0.0718	0.0000	301.5017
Total	**0.2209**	**2.0197**	**2.1226**	**3.4900e-003**		**0.1047**	**0.1047**		**0.0986**	**0.0986**	**0.0000**	**299.9946**	**299.9946**	**0.0718**	**0.0000**	**301.5017**

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	0.4374	3.1845	6.4230	0.0147	0.4202	0.0641	0.4843	0.1199	0.0590	0.1789	0.0000	1,245.4538	1,245.4538	9.2800e-003	0.0000	1,245.6487
Worker	0.4348	0.6294	6.5962	0.0235	1.9169	0.0149	1.9318	0.5091	0.0138	0.5229	0.0000	1,485.3345	1,485.3345	0.0673	0.0000	1,486.7480
Total	**0.8722**	**3.8139**	**13.0192**	**0.0382**	**2.3371**	**0.0790**	**2.4161**	**0.6290**	**0.0728**	**0.7019**	**0.0000**	**2,730.7883**	**2,730.7883**	**0.0766**	**0.0000**	**2,732.3966**

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	0.2209	2.0197	2.1226	3.4900e-003		0.1047	0.1047		0.0986	0.0986	0.0000	299.9943	299.9943	0.0718	0.0000	301.5013
Total	**0.2209**	**2.0197**	**2.1226**	**3.4900e-003**		**0.1047**	**0.1047**		**0.0986**	**0.0986**	**0.0000**	**299.9943**	**299.9943**	**0.0718**	**0.0000**	**301.5013**

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	0.4374	3.1845	6.4230	0.0147	0.4202	0.0641	0.4843	0.1199	0.0590	0.1789	0.0000	1,245.4538	1,245.4538	9.2800e-003	0.0000	1,245.6487
Worker	0.4348	0.6294	6.5962	0.0235	1.9169	0.0149	1.9318	0.5091	0.0138	0.5229	0.0000	1,485.3345	1,485.3345	0.0673	0.0000	1,486.7480
Total	**0.8722**	**3.8139**	**13.0192**	**0.0382**	**2.3371**	**0.0790**	**2.4161**	**0.6290**	**0.0728**	**0.7019**	**0.0000**	**2,730.7883**	**2,730.7883**	**0.0766**	**0.0000**	**2,732.3966**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0196	0.1789	0.2026	3.4000e-004		8.7100e-003	8.7100e-003		8.2000e-003	8.2000e-003	0.0000	28.8556	28.8556	6.8500e-003	0.0000	28.9995

Total	**0.0196**	**0.1789**	**0.2026**	**3.4000e-004**		**8.7100e-003**	**8.7100e-003**		**8.2000e-003**	**8.2000e-003**	**0.0000**	**28.8556**	**28.8556**	**6.8500e-003**	**0.0000**	**28.9995**

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	0.0390	0.2443	0.5943	1.4000e-003	0.0404	6.0900e-003	0.0465	0.0115	5.6000e-003	0.0171	0.0000	119.1916	119.1916	8.0000e-004	0.0000	119.2085
Worker	0.0396	0.0570	0.5974	2.2600e-003	0.1843	1.4300e-003	0.1858	0.0490	1.3300e-003	0.0503	0.0000	140.6198	140.6198	6.2200e-003	0.0000	140.7504
Total	**0.0786**	**0.3013**	**1.1918**	**3.6600e-003**	**0.2247**	**7.5200e-003**	**0.2322**	**0.0605**	**6.9300e-003**	**0.0674**	**0.0000**	**259.8114**	**259.8114**	**7.0200e-003**	**0.0000**	**259.9588**

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	0.0196	0.1789	0.2026	3.4000e-004		8.7100e-003	8.7100e-003		8.2000e-003	8.2000e-003	0.0000	28.8555	28.8555	6.8500e-003	0.0000	28.9995
Total	**0.0196**	**0.1789**	**0.2026**	**3.4000e-004**		**8.7100e-003**	**8.7100e-003**		**8.2000e-003**	**8.2000e-003**	**0.0000**	**28.8555**	**28.8555**	**6.8500e-003**	**0.0000**	**28.9995**

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	0.0390	0.2443	0.5943	1.4000e-003	0.0404	6.0900e-003	0.0465	0.0115	5.6000e-003	0.0171	0.0000	119.1916	119.1916	8.0000e-004	0.0000	119.2085
Worker	0.0396	0.0570	0.5974	2.2600e-003	0.1843	1.4300e-003	0.1858	0.0490	1.3300e-003	0.0503	0.0000	140.6198	140.6198	6.2200e-003	0.0000	140.7504
Total	**0.0786**	**0.3013**	**1.1918**	**3.6600e-003**	**0.2247**	**7.5200e-003**	**0.2322**	**0.0605**	**6.9300e-003**	**0.0674**	**0.0000**	**259.8114**	**259.8114**	**7.0200e-003**	**0.0000**	**259.9588**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0380	0.3749	0.5357	8.4000e-004		0.0188	0.0188		0.0173	0.0173	0.0000	73.5029	73.5029	0.0238	0.0000	74.0021
Paving	5.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0385**	**0.3749**	**0.5357**	**8.4000e-004**		**0.0188**	**0.0188**		**0.0173**	**0.0173**	**0.0000**	**73.5029**	**73.5029**	**0.0238**	**0.0000**	**74.0021**

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	1.3300e-003	1.9100e-003	0.0200	8.0000e-005	6.1700e-003	5.0000e-005	6.2200e-003	1.6400e-003	4.0000e-005	1.6800e-003	0.0000	4.7083	4.7083	2.1000e-004	0.0000	4.7126
Total	**1.3300e-003**	**1.9100e-003**	**0.0200**	**8.0000e-005**	**6.1700e-003**	**5.0000e-005**	**6.2200e-003**	**1.6400e-003**	**4.0000e-005**	**1.6800e-003**	**0.0000**	**4.7083**	**4.7083**	**2.1000e-004**	**0.0000**	**4.7126**

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	0.0380	0.3749	0.5357	8.4000e-004		0.0188	0.0188		0.0173	0.0173	0.0000	73.5028	73.5028	0.0238	0.0000	74.0020
Paving	5.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0385**	**0.3749**	**0.5357**	**8.4000e-004**		**0.0188**	**0.0188**		**0.0173**	**0.0173**	**0.0000**	**73.5028**	**73.5028**	**0.0238**	**0.0000**	**74.0020**

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	1.3300e-003	1.9100e-003	0.0200	8.0000e-005	6.1700e-003	5.0000e-005	6.2200e-003	1.6400e-003	4.0000e-005	1.6800e-003	0.0000	4.7083	4.7083	2.1000e-004	0.0000	4.7126
Total	**1.3300e-003**	**1.9100e-003**	**0.0200**	**8.0000e-005**	**6.1700e-003**	**5.0000e-005**	**6.2200e-003**	**1.6400e-003**	**4.0000e-005**	**1.6800e-003**	**0.0000**	**4.7083**	**4.7083**	**2.1000e-004**	**0.0000**	**4.7126**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	36.8919					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1900e-003	0.0489	0.0679	1.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	9.5747	9.5747	5.7000e-004	0.0000	9.5867
Total	**36.8991**	**0.0489**	**0.0679**	**1.1000e-004**		**2.6600e-003**	**2.6600e-003**		**2.6600e-003**	**2.6600e-003**	**0.0000**	**9.5747**	**9.5747**	**5.7000e-004**	**0.0000**	**9.5867**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0238	0.0342	0.3587	1.3600e-003	0.1107	8.6000e-004	0.1115	0.0294	8.0000e-004	0.0302	0.0000	84.4347	84.4347	3.7300e-003	0.0000	84.5131
Total	**0.0238**	**0.0342**	**0.3587**	**1.3600e-003**	**0.1107**	**8.6000e-004**	**0.1115**	**0.0294**	**8.0000e-004**	**0.0302**	**0.0000**	**84.4347**	**84.4347**	**3.7300e-003**	**0.0000**	**84.5131**

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	36.8919					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1900e-003	0.0489	0.0679	1.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	9.5747	9.5747	5.7000e-004	0.0000	9.5867
Total	**36.8991**	**0.0489**	**0.0679**	**1.1000e-004**		**2.6600e-003**	**2.6600e-003**		**2.6600e-003**	**2.6600e-003**	**0.0000**	**9.5747**	**9.5747**	**5.7000e-004**	**0.0000**	**9.5867**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0238	0.0342	0.3587	1.3600e-003	0.1107	8.6000e-004	0.1115	0.0294	8.0000e-004	0.0302	0.0000	84.4347	84.4347	3.7300e-003	0.0000	84.5131
Total	**0.0238**	**0.0342**	**0.3587**	**1.3600e-003**	**0.1107**	**8.6000e-004**	**0.1115**	**0.0294**	**8.0000e-004**	**0.0302**	**0.0000**	**84.4347**	**84.4347**	**3.7300e-003**	**0.0000**	**84.5131**

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	0.1511	0.4155	1.6137	4.0500e-003	0.2738	5.8400e-003	0.2796	0.0733	5.3800e-003	0.0787	0.0000	303.4355	303.4355	0.0116	0.0000	303.6789
Unmitigated	0.1511	0.4155	1.6137	4.0500e-003	0.2738	5.8400e-003	0.2796	0.0733	5.3800e-003	0.0787	0.0000	303.4355	303.4355	0.0116	0.0000	303.6789

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	116.07	116.07	116.07	333,996	333,996
Government Office Building	230.92	0.00	0.00	388,394	388,394
Parking Lot	0.00	0.00	0.00		
Total	346.99	116.07	116.07	722,390	722,390

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Government Office Building	16.60	8.40	6.90	33.00	62.00	5.00	50	34	16
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511172	0.060004	0.180590	0.138995	0.042398	0.006681	0.016070	0.032568	0.001938	0.002493	0.004370	0.000586	0.002135

5.0 Energy Detail

4.4 Fleet Mix

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	18.4622	18.4622	8.5000e-004	1.8000e-004	18.5345
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	18.4622	18.4622	8.5000e-004	1.8000e-004	18.5345
NaturalGas Mitigated	2.0000e-004	1.7900e-003	1.5100e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9539	1.9539	4.0000e-005	4.0000e-005	1.9658
NaturalGas Unmitigated	2.0000e-004	1.7900e-003	1.5100e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9539	1.9539	4.0000e-005	4.0000e-005	1.9658

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	36615.5	2.0000e-004	1.7900e-003	1.5100e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9539	1.9539	4.0000e-005	4.0000e-005	1.9658
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.0000e-004**	**1.7900e-003**	**1.5100e-003**	**1.0000e-005**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**	**0.0000**	**1.9539**	**1.9539**	**4.0000e-005**	**4.0000e-005**	**1.9658**

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Government Office Building	36615.5	2.0000e-004	1.7900e-003	1.5100e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9539	1.9539	4.0000e-005	4.0000e-005	1.9658
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.0000e-004**	**1.7900e-003**	**1.5100e-003**	**1.0000e-005**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**	**0.0000**	**1.9539**	**1.9539**	**4.0000e-005**	**4.0000e-005**	**1.9658**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	48675.5	13.9293	6.4000e-004	1.3000e-004	13.9838
Parking Lot	15840	4.5329	2.1000e-004	4.0000e-005	4.5506
Total		**18.4622**	**8.5000e-004**	**1.7000e-004**	**18.5345**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	48675.5	13.9293	6.4000e-004	1.3000e-004	13.9838
Parking Lot	15840	4.5329	2.1000e-004	4.0000e-005	4.5506
Total		**18.4622**	**8.5000e-004**	**1.7000e-004**	**18.5345**

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	0.0419	1.0000e-005	1.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0100e-003	3.0100e-003	1.0000e-005	0.0000	3.1900e-003
Unmitigated	0.0419	1.0000e-005	1.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0100e-003	3.0100e-003	1.0000e-005	0.0000	3.1900e-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	0.0417					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-004	1.0000e-005	1.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0100e-003	3.0100e-003	1.0000e-005	0.0000	3.1900e-003
Total	**0.0419**	**1.0000e-005**	**1.5700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.0100e-003**	**3.0100e-003**	**1.0000e-005**	**0.0000**	**3.1900e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0417					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-004	1.0000e-005	1.5700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0100e-003	3.0100e-003	1.0000e-005	0.0000	3.1900e-003
Total	**0.0419**	**1.0000e-005**	**1.5700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.0100e-003**	**3.0100e-003**	**1.0000e-005**	**0.0000**	**3.1900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	280.5186	0.0346	3.1800e-003	282.2294
Unmitigated	280.5186	0.0346	3.1800e-003	282.2297

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 86.9781	276.5308	0.0127	2.6300e-003	277.6130
Government Office Building	0.66551 / 0.407893	3.9878	0.0219	5.5000e-004	4.6167

Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**280.5186**	**0.0346**	**3.1800e-003**	**282.2297**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 86.9781	276.5308	0.0127	2.6300e-003	277.6130
Government Office Building	0.66551 / 0.407893	3.9878	0.0219	5.5000e-004	4.6163
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**280.5186**	**0.0346**	**3.1800e-003**	**282.2294**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.9081	0.1128	0.0000	4.2762
Unmitigated	1.9081	0.1128	0.0000	4.2762

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	6.28	1.2748	0.0753	0.0000	2.8569
Government Office Building	3.12	0.6333	0.0374	0.0000	1.4193
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**1.9081**	**0.1128**	**0.0000**	**4.2762**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	6.28	1.2748	0.0753	0.0000	2.8569
Government Office Building	3.12	0.6333	0.0374	0.0000	1.4193
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**1.9081**	**0.1128**	**0.0000**	**4.2762**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Cranes	0	8.00	260	226	0.29	Diesel

Forklifts	0	8.00	260	89	0.20	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Cranes	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Forklifts	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

10.0 Vegetation

Wetlands - LCWA Site - Operations Only

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.00	1000sqft	0.12	5,200.00	0
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	0.02	1,000.00	0
Parking Lot	0.00	Space	0.42	18,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Some storage will occur on-site, so a minimal amount of warehouse is included even though there is no building.

Energy Use - All electricity will be generated on-site

Operational Off-Road Equipment - Forklift and crane will be needed to off-load flatbed trucks with piping and other supplies.

Water And Wastewater - Operations will require 10,000 gallons per day, or 5,000 gallons per day per each site (Pumpkin Patch and LCWA).

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	4.29	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	2.23	0.00
tblEnergyUse	NT24E	4.62	0.00

tblEnergyUse	NT24E	1.34	0.00
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	5.62	0.00
tblEnergyUse	T24E	0.79	0.00
tblEnergyUse	T24NG	10.54	0.00
tblEnergyUse	T24NG	0.88	0.00
tblLandUse	LandUseSquareFeet	0.00	5,200.00
tblLandUse	LandUseSquareFeet	0.00	18,800.00
tblLandUse	LotAcreage	0.00	0.12
tblLandUse	LotAcreage	0.00	0.42
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	100.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	100.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.29	0.29
tblOperationalOffRoadEquipment	OperLoadFactor	0.20	0.20
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblWater	OutdoorWaterUseRate	0.00	1,825,000.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

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

2017	0.1578	0.7526	0.5358	8.0000e-004	8.9700e-003	0.0498	0.0587	2.5800e-003	0.0460	0.0486	0.0000	72.4673	72.4673	0.0186	0.0000	72.8579
Total	**0.1578**	**0.7526**	**0.5358**	**8.0000e-004**	**8.9700e-003**	**0.0498**	**0.0587**	**2.5800e-003**	**0.0460**	**0.0486**	**0.0000**	**72.4673**	**72.4673**	**0.0186**	**0.0000**	**72.8579**

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					
2017	0.1578	0.7526	0.5358	8.0000e-004	8.9700e-003	0.0498	0.0587	2.5800e-003	0.0460	0.0486	0.0000	72.4672	72.4672	0.0186	0.0000	72.8578
Total	**0.1578**	**0.7526**	**0.5358**	**8.0000e-004**	**8.9700e-003**	**0.0498**	**0.0587**	**2.5800e-003**	**0.0460**	**0.0486**	**0.0000**	**72.4672**	**72.4672**	**0.0186**	**0.0000**	**72.8578**

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

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	0.0982	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mobile	1.6600e-003	5.9400e-003	0.0215	6.0000e-005	4.2100e-003	9.0000e-005	4.2900e-003	1.1300e-003	8.0000e-005	1.2100e-003	0.0000	4.6009	4.6009	1.7000e-004	0.0000	4.6045
Offroad	0.0183	0.2053	0.0917	1.8000e-004		0.0103	0.0103		9.5000e-003	9.5000e-003	0.0000	16.3036	16.3036	5.0800e-003	0.0000	16.4102
Waste						0.0000	0.0000		0.0000	0.0000	0.1908	0.0000	0.1908	0.0113	0.0000	0.4276
Water						0.0000	0.0000		0.0000	0.0000	0.0734	6.6639	6.7373	7.8400e-003	2.4000e-004	6.9768
Total	**0.1182**	**0.2112**	**0.1132**	**2.4000e-004**	**4.2100e-003**	**0.0104**	**0.0146**	**1.1300e-003**	**9.5800e-003**	**0.0107**	**0.2642**	**27.5685**	**27.8327**	**0.0244**	**2.4000e-004**	**28.4191**

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	0.0982	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.6600e-003	5.9400e-003	0.0215	6.0000e-005	4.2100e-003	9.0000e-005	4.2900e-003	1.1300e-003	8.0000e-005	1.2100e-003	0.0000	4.6009	4.6009	1.7000e-004	0.0000	4.6045
Offroad	0.0183	0.2053	0.0917	1.8000e-004		0.0103	0.0103		9.5000e-003	9.5000e-003	0.0000	16.3036	16.3036	5.0800e-003	0.0000	16.4102
Waste						0.0000	0.0000		0.0000	0.0000	0.1908	0.0000	0.1908	0.0113	0.0000	0.4276
Water						0.0000	0.0000		0.0000	0.0000	0.0734	6.6639	6.7373	7.8400e-003	2.4000e-004	6.9767
Total	**0.1182**	**0.2112**	**0.1132**	**2.4000e-004**	**4.2100e-003**	**0.0104**	**0.0146**	**1.1300e-003**	**9.5800e-003**	**0.0107**	**0.2642**	**27.5685**	**27.8327**	**0.0244**	**2.4000e-004**	**28.4190**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**15.52**	**97.19**	**80.99**	**75.00**	**0.00**	**99.14**	**70.66**	**0.00**	**99.16**	**88.70**	**0.00**	**59.14**	**58.58**	**20.85**	**0.00**	**57.74**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/13/2017	5	10	
2	Site Preparation	Site Preparation	1/14/2017	1/16/2017	5	1	
3	Grading	Grading	1/17/2017	1/18/2017	5	2	
4	Building Construction	Building Construction	1/19/2017	6/7/2017	5	100	
5	Paving	Paving	6/8/2017	6/14/2017	5	5	
6	Architectural Coating	Architectural Coating	6/15/2017	6/21/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,146; Non-Residential Outdoor: 3,382 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	6.0200e-003	0.0524	0.0429	6.0000e-005		3.6300e-003	3.6300e-003		3.4600e-003	3.4600e-003	0.0000	5.3697	5.3697	1.0600e-003	0.0000	5.3919
Total	**6.0200e-003**	**0.0524**	**0.0429**	**6.0000e-005**		**3.6300e-003**	**3.6300e-003**		**3.4600e-003**	**3.4600e-003**	**0.0000**	**5.3697**	**5.3697**	**1.0600e-003**	**0.0000**	**5.3919**

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	1.8000e-004	2.7000e-004	2.7700e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4942	0.4942	3.0000e-005	0.0000	0.4947
Total	**1.8000e-004**	**2.7000e-004**	**2.7700e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4942**	**0.4942**	**3.0000e-005**	**0.0000**	**0.4947**

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	6.0200e-003	0.0524	0.0429	6.0000e-005		3.6300e-003	3.6300e-003		3.4600e-003	3.4600e-003	0.0000	5.3697	5.3697	1.0600e-003	0.0000	5.3919
Total	**6.0200e-003**	**0.0524**	**0.0429**	**6.0000e-005**		**3.6300e-003**	**3.6300e-003**		**3.4600e-003**	**3.4600e-003**	**0.0000**	**5.3697**	**5.3697**	**1.0600e-003**	**0.0000**	**5.3919**

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	1.8000e-004	2.7000e-004	2.7700e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4942	0.4942	3.0000e-005	0.0000	0.4947
Total	**1.8000e-004**	**2.7000e-004**	**2.7700e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4942**	**0.4942**	**3.0000e-005**	**0.0000**	**0.4947**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3000e-004	6.3400e-003	3.6200e-003	0.0000		3.9000e-004	3.9000e-004		3.5000e-004	3.5000e-004	0.0000	0.4336	0.4336	1.3000e-004	0.0000	0.4364
Total	**6.3000e-004**	**6.3400e-003**	**3.6200e-003**	**0.0000**	**2.7000e-004**	**3.9000e-004**	**6.6000e-004**	**3.0000e-005**	**3.5000e-004**	**3.8000e-004**	**0.0000**	**0.4336**	**0.4336**	**1.3000e-004**	**0.0000**	**0.4364**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total	**1.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3000e-004	6.3400e-003	3.6200e-003	0.0000		3.9000e-004	3.9000e-004		3.5000e-004	3.5000e-004	0.0000	0.4336	0.4336	1.3000e-004	0.0000	0.4364
Total	**6.3000e-004**	**6.3400e-003**	**3.6200e-003**	**0.0000**	**2.7000e-004**	**3.9000e-004**	**6.6000e-004**	**3.0000e-005**	**3.5000e-004**	**3.8000e-004**	**0.0000**	**0.4336**	**0.4336**	**1.3000e-004**	**0.0000**	**0.4364**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.4000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total	**1.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

3.4 Grading - 2017

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					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	1.2000e-003	0.0105	8.5800e-003	1.0000e-005		7.3000e-004	7.3000e-004		6.9000e-004	6.9000e-004	0.0000	1.0739	1.0739	2.1000e-004	0.0000	1.0784
Total	**1.2000e-003**	**0.0105**	**8.5800e-003**	**1.0000e-005**	**7.5000e-004**	**7.3000e-004**	**1.4800e-003**	**4.1000e-004**	**6.9000e-004**	**1.1000e-003**	**0.0000**	**1.0739**	**1.0739**	**2.1000e-004**	**0.0000**	**1.0784**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	1.0000e-005	0.0000	0.0990
Total	**4.0000e-005**	**5.0000e-005**	**5.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0988**	**0.0988**	**1.0000e-005**	**0.0000**	**0.0990**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e-003	0.0105	8.5800e-003	1.0000e-005		7.3000e-004	7.3000e-004		6.9000e-004	6.9000e-004	0.0000	1.0739	1.0739	2.1000e-004	0.0000	1.0784
Total	**1.2000e-003**	**0.0105**	**8.5800e-003**	**1.0000e-005**	**7.5000e-004**	**7.3000e-004**	**1.4800e-003**	**4.1000e-004**	**6.9000e-004**	**1.1000e-003**	**0.0000**	**1.0739**	**1.0739**	**2.1000e-004**	**0.0000**	**1.0784**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	1.0000e-005	0.0000	0.0990
Total	**4.0000e-005**	**5.0000e-005**	**5.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0988**	**0.0988**	**1.0000e-005**	**0.0000**	**0.0990**

3.5 Building Construction - 2017

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	0.0637	0.6337	0.4020	5.7000e-004		0.0428	0.0428		0.0394	0.0394	0.0000	52.5954	52.5954	0.0161	0.0000	52.9339
Total	**0.0637**	**0.6337**	**0.4020**	**5.7000e-004**		**0.0428**	**0.0428**		**0.0394**	**0.0394**	**0.0000**	**52.5954**	**52.5954**	**0.0161**	**0.0000**	**52.9339**

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	1.6200e-003	0.0164	0.0221	4.0000e-005	1.2300e-003	2.5000e-004	1.4900e-003	3.5000e-004	2.3000e-004	5.9000e-004	0.0000	3.8780	3.8780	3.0000e-005	0.0000	3.8786
Worker	1.8000e-003	2.6600e-003	0.0277	7.0000e-005	5.4900e-003	4.0000e-005	5.5300e-003	1.4600e-003	4.0000e-005	1.5000e-003	0.0000	4.9421	4.9421	2.6000e-004	0.0000	4.9474
Total	**3.4200e-003**	**0.0191**	**0.0497**	**1.1000e-004**	**6.7200e-003**	**2.9000e-004**	**7.0200e-003**	**1.8100e-003**	**2.7000e-004**	**2.0900e-003**	**0.0000**	**8.8201**	**8.8201**	**2.9000e-004**	**0.0000**	**8.8260**

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	0.0637	0.6337	0.4020	5.7000e-004		0.0428	0.0428		0.0394	0.0394	0.0000	52.5954	52.5954	0.0161	0.0000	52.9338
Total	**0.0637**	**0.6337**	**0.4020**	**5.7000e-004**		**0.0428**	**0.0428**		**0.0394**	**0.0394**	**0.0000**	**52.5954**	**52.5954**	**0.0161**	**0.0000**	**52.9338**

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	1.6200e-003	0.0164	0.0221	4.0000e-005	1.2300e-003	2.5000e-004	1.4900e-003	3.5000e-004	2.3000e-004	5.9000e-004	0.0000	3.8780	3.8780	3.0000e-005	0.0000	3.8786
Worker	1.8000e-003	2.6600e-003	0.0277	7.0000e-005	5.4900e-003	4.0000e-005	5.5300e-003	1.4600e-003	4.0000e-005	1.5000e-003	0.0000	4.9421	4.9421	2.6000e-004	0.0000	4.9474
Total	**3.4200e-003**	**0.0191**	**0.0497**	**1.1000e-004**	**6.7200e-003**	**2.9000e-004**	**7.0200e-003**	**1.8100e-003**	**2.7000e-004**	**2.0900e-003**	**0.0000**	**8.8201**	**8.8201**	**2.9000e-004**	**0.0000**	**8.8260**

3.6 Paving - 2017

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	2.6000e-003	0.0246	0.0181	3.0000e-005		1.5000e-003	1.5000e-003		1.3900e-003	1.3900e-003	0.0000	2.4243	2.4243	6.7000e-004	0.0000	2.4384
Paving	5.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.1500e-003**	**0.0246**	**0.0181**	**3.0000e-005**		**1.5000e-003**	**1.5000e-003**		**1.3900e-003**	**1.3900e-003**	**0.0000**	**2.4243**	**2.4243**	**6.7000e-004**	**0.0000**	**2.4384**

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	1.6000e-004	2.4000e-004	2.4900e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4448	0.4448	2.0000e-005	0.0000	0.4453
Total	**1.6000e-004**	**2.4000e-004**	**2.4900e-003**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4448**	**0.4448**	**2.0000e-005**	**0.0000**	**0.4453**

Mitigated Construction On-Site

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

Off-Road	2.6000e-003	0.0246	0.0181	3.0000e-005		1.5000e-003	1.5000e-003		1.3900e-003	1.3900e-003	0.0000	2.4243	2.4243	6.7000e-004	0.0000	2.4384
Paving	5.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.1500e-003**	**0.0246**	**0.0181**	**3.0000e-005**		**1.5000e-003**	**1.5000e-003**		**1.3900e-003**	**1.3900e-003**	**0.0000**	**2.4243**	**2.4243**	**6.7000e-004**	**0.0000**	**2.4384**

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	1.6000e-004	2.4000e-004	2.4900e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4448	0.4448	2.0000e-005	0.0000	0.4453
Total	**1.6000e-004**	**2.4000e-004**	**2.4900e-003**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4448**	**0.4448**	**2.0000e-005**	**0.0000**	**0.4453**

3.7 Architectural Coating - 2017

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	0.0784					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total	**0.0792**	**5.4600e-003**	**4.6700e-003**	**1.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**0.6383**	**0.6383**	**7.0000e-005**	**0.0000**	**0.6397**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	3.0000e-005	2.8000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0494	0.0494	0.0000	0.0000	0.0495
Total	**2.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**5.0000e-005**	**0.0000**	**6.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0494**	**0.0494**	**0.0000**	**0.0000**	**0.0495**

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	0.0784					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total	**0.0792**	**5.4600e-003**	**4.6700e-003**	**1.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**0.6383**	**0.6383**	**7.0000e-005**	**0.0000**	**0.6397**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	3.0000e-005	2.8000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0494	0.0494	0.0000	0.0000	0.0495
Total	**2.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**5.0000e-005**	**0.0000**	**6.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0494**	**0.0494**	**0.0000**	**0.0000**	**0.0495**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6600e-003	5.9400e-003	0.0215	6.0000e-005	4.2100e-003	9.0000e-005	4.2900e-003	1.1300e-003	8.0000e-005	1.2100e-003	0.0000	4.6009	4.6009	1.7000e-004	0.0000	4.6045
Unmitigated	1.6600e-003	5.9400e-003	0.0215	6.0000e-005	4.2100e-003	9.0000e-005	4.2900e-003	1.1300e-003	8.0000e-005	1.2100e-003	0.0000	4.6009	4.6009	1.7000e-004	0.0000	4.6045

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	2.59	2.59	2.59	11,100	11,100
Total	2.59	2.59	2.59	11,100	11,100

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511172	0.060004	0.180590	0.138995	0.042398	0.006681	0.016070	0.032568	0.001938	0.002493	0.004370	0.000586	0.002135

5.0 Energy Detail

4.4 Fleet Mix

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

General Office Building	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
Unrefrigerated Warehouse-No Rail	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	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
Unrefrigerated Warehouse-No Rail	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000

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

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0982	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Unmitigated	0.0982	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	7.8400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0903					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	**0.0982**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**3.0000e-005**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	7.8400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0903					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	**0.0982**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**3.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e

Category	MT/yr			
Mitigated	6.7373	7.8400e-003	2.4000e-004	6.9767
Unmitigated	6.7373	7.8400e-003	2.4000e-004	6.9768

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.23125 / 1.825	6.7373	7.8400e-003	2.4000e-004	6.9768
Total		**6.7373**	**7.8400e-003**	**2.4000e-004**	**6.9768**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.23125 / 1.825	6.7373	7.8400e-003	2.4000e-004	6.9767

Total		**6.7373**	**7.8400e-003**	**2.4000e-004**	**6.9767**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1908	0.0113	0.0000	0.4276
Unmitigated	0.1908	0.0113	0.0000	0.4276

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.94	0.1908	0.0113	0.0000	0.4276
Total		**0.1908**	**0.0113**	**0.0000**	**0.4276**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.94	0.1908	0.0113	0.0000	0.4276
Total		**0.1908**	**0.0113**	**0.0000**	**0.4276**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Cranes	1	4.00	100	226	0.29	Diesel
Forklifts	1	4.00	100	89	0.20	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Forklifts	4.4800e-003	0.0396	0.0304	4.0000e-005		3.1600e-003	3.1600e-003		2.9000e-003	2.9000e-003	0.0000	3.5053	3.5053	1.0900e-003	0.0000	3.5282
Cranes	0.0139	0.1657	0.0613	1.4000e-004		7.1700e-003	7.1700e-003		6.6000e-003	6.6000e-003	0.0000	12.7983	12.7983	3.9800e-003	0.0000	12.8820
Total	**0.0184**	**0.2053**	**0.0917**	**1.8000e-004**		**0.0103**	**0.0103**		**9.5000e-003**	**9.5000e-003**	**0.0000**	**16.3036**	**16.3036**	**5.0700e-003**	**0.0000**	**16.4102**

10.0 Vegetation

BOMP - Existing Emissions - Drilling Only

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	53.00	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 53 Wells

Construction Phase - Two rigs operating for the full year.

Off-road Equipment - Two rigs based on InterAct info.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	0.00	365.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	PhaseEndDate	12/7/2016	12/31/2017
tblConstructionPhase	PhaseStartDate	12/8/2016	1/1/2017
tblOffRoadEquipment	HorsePower	221.00	425.00

tblOffRoadEquipment	HorsePower	221.00	525.00
tblOffRoadEquipment	LoadFactor	0.50	0.73
tblOffRoadEquipment	LoadFactor	0.50	0.73
tblOffRoadEquipment	OffRoadEquipmentType	Concrete/Industrial Saws	Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	5.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2017	0.4961	6.1117	3.3577	0.0123	0.1474	0.2313	0.3787	0.0782	0.2173	0.2955	0.0000	1,134.7880	1,134.7880	0.3236	0.0000	1,142.8783
Maximum	**0.4961**	**6.1117**	**3.3577**	**0.0123**	**0.1474**	**0.2313**	**0.3787**	**0.0782**	**0.2173**	**0.2955**	**0.0000**	**1,134.7880**	**1,134.7880**	**0.3236**	**0.0000**	**1,142.8783**

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					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

2017	0.4961	6.1116	3.3577	0.0123	0.1474	0.2313	0.3787	0.0782	0.2173	0.2955	0.0000	1,134.7867	1,134.7867	0.3236	0.0000	1,142.8769
Maximum	**0.4961**	**6.1116**	**3.3577**	**0.0123**	**0.1474**	**0.2313**	**0.3787**	**0.0782**	**0.2173**	**0.2955**	**0.0000**	**1,134.7867**	**1,134.7867**	**0.3236**	**0.0000**	**1,142.8769**

	ROG	NOx	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	**12-8-2016**	**3-7-2017**	1.1949	1.1949
2	**3-8-2017**	**6-7-2017**	1.6655	1.6655
3	**6-8-2017**	**9-7-2017**	1.6654	1.6654
4	**9-8-2017**	**9-30-2017**	0.4163	0.4163
		Highest	1.6655	1.6655

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	7.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e-003	1.3200e-003	0.0000	0.0000	1.4100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.0000e-005**	**1.0000e-005**	**6.9000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.3200e-003**	**1.3200e-003**	**0.0000**	**0.0000**	**1.4100e-003**

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	7.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e-003	1.3200e-003	0.0000	0.0000	1.4100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.0000e-005**	**1.0000e-005**	**6.9000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.3200e-003**	**1.3200e-003**	**0.0000**	**0.0000**	**1.4100e-003**

	ROG	NOx	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	Architectural Coating	Architectural Coating	12/8/2016	12/7/2016	5	0	
2	Building Construction	Building Construction	12/8/2016	12/7/2016	5	0	
3	Demolition	Demolition	12/8/2016	12/7/2016	5	0	
4	Paving	Paving	12/8/2016	12/7/2016	5	0	
5	Site Preparation	Site Preparation	12/8/2016	12/7/2016	5	0	
6	Grading	Grading	1/1/2017	12/31/2017	7	365	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Bore/Drill Rigs	1	8.00	425	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Bore/Drill Rigs	1	8.00	525	0.73
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40

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
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Building Construction	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2016

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

3.3 Building Construction - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

3.4 Demolition - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

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

3.5 Paving - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.6 Site Preparation - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

3.7 Grading - 2017

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					0.1374	0.0000	0.1374	0.0755	0.0000	0.0755	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4906	6.1071	3.3091	0.0122		0.2313	0.2313		0.2172	0.2172	0.0000	1,124.9068	1,124.9068	0.3232	0.0000	1,132.9877
Total	**0.4906**	**6.1071**	**3.3091**	**0.0122**	**0.1374**	**0.2313**	**0.3686**	**0.0755**	**0.2172**	**0.2928**	**0.0000**	**1,124.9068**	**1,124.9068**	**0.3232**	**0.0000**	**1,132.9877**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4600e-003	4.5500e-003	0.0486	1.1000e-004	0.0100	8.0000e-005	0.0101	2.6600e-003	8.0000e-005	2.7400e-003	0.0000	9.8812	9.8812	3.7000e-004	0.0000	9.8906
Total	**5.4600e-003**	**4.5500e-003**	**0.0486**	**1.1000e-004**	**0.0100**	**8.0000e-005**	**0.0101**	**2.6600e-003**	**8.0000e-005**	**2.7400e-003**	**0.0000**	**9.8812**	**9.8812**	**3.7000e-004**	**0.0000**	**9.8906**

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					0.1374	0.0000	0.1374	0.0755	0.0000	0.0755	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4906	6.1071	3.3091	0.0122		0.2313	0.2313		0.2172	0.2172	0.0000	1,124.9054	1,124.9054	0.3232	0.0000	1,132.9864
Total	**0.4906**	**6.1071**	**3.3091**	**0.0122**	**0.1374**	**0.2313**	**0.3686**	**0.0755**	**0.2172**	**0.2928**	**0.0000**	**1,124.9054**	**1,124.9054**	**0.3232**	**0.0000**	**1,132.9864**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4600e-003	4.5500e-003	0.0486	1.1000e-004	0.0100	8.0000e-005	0.0101	2.6600e-003	8.0000e-005	2.7400e-003	0.0000	9.8812	9.8812	3.7000e-004	0.0000	9.8906
Total	**5.4600e-003**	**4.5500e-003**	**0.0486**	**1.1000e-004**	**0.0100**	**8.0000e-005**	**0.0101**	**2.6600e-003**	**8.0000e-005**	**2.7400e-003**	**0.0000**	**9.8812**	**9.8812**	**3.7000e-004**	**0.0000**	**9.8906**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
User Defined Industrial	16.60	8.40	6.90	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
User Defined Industrial	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
User Defined Industrial	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	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					
User Defined Industrial	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	7.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e-003	1.3200e-003	0.0000	0.0000	1.4100e-003
Unmitigated	7.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e-003	1.3200e-003	0.0000	0.0000	1.4100e-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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e-003	1.3200e-003	0.0000	0.0000	1.4100e-003
Total	**7.0000e-005**	**1.0000e-005**	**6.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.3200e-003**	**1.3200e-003**	**0.0000**	**0.0000**	**1.4100e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e-003	1.3200e-003	0.0000	0.0000	1.4100e-003
Total	**7.0000e-005**	**1.0000e-005**	**6.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.3200e-003**	**1.3200e-003**	**0.0000**	**0.0000**	**1.4100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

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

User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

BOMP - Oil Truck Only

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	100.00	1000sqft	2.30	100,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Vehicle Trips - Adjusting defaults to give 40 truck trips per day with a one-way trip length of 16 miles.

Fleet Mix - All HDD trucks

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	250.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	250.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	100.00
tblFleetMix	HHD	0.03	1.00
tblFleetMix	LDA	0.54	0.00

tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblVehicleTrips	CC_TL	8.40	32.00
tblVehicleTrips	CC_TTP	28.00	100.00
tblVehicleTrips	CNW_TL	6.90	32.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	16.60	32.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.32	0.40
tblVehicleTrips	SU_TR	0.68	0.40
tblVehicleTrips	WD_TR	6.97	0.40

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					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

Quarter	**Start Date**	**End Date**	**Maximum Unmitigated ROG + NOX (tons/quarter)**	**Maximum Mitigated ROG + NOX (tons/quarter)**
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4078	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4800e-003	2.4800e-003	1.0000e-005	0.0000	2.6500e-003
Energy	9.7900e-003	0.0890	0.0748	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003	0.0000	457.2695	457.2695	0.0167	4.8500e-003	459.1346
Mobile	0.0923	3.2418	0.6205	8.6900e-003	0.2000	0.0135	0.2135	0.0549	0.0129	0.0678	0.0000	849.7843	849.7843	0.0541	0.0000	851.1366
Waste						0.0000	0.0000		0.0000	0.0000	25.1709	0.0000	25.1709	1.4876	0.0000	62.3598
Water						0.0000	0.0000		0.0000	0.0000	7.3365	95.9403	103.2768	0.7575	0.0186	127.7604
Total	**0.5099**	**3.3309**	**0.6965**	**9.2200e-003**	**0.2000**	**0.0203**	**0.2203**	**0.0549**	**0.0197**	**0.0746**	**32.5074**	**1,402.9965**	**1,435.5039**	**2.3159**	**0.0235**	**1,500.3941**

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	0.4078	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4800e-003	2.4800e-003	1.0000e-005	0.0000	2.6500e-003
Energy	9.7900e-003	0.0890	0.0748	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003	0.0000	457.2695	457.2695	0.0167	4.8500e-003	459.1346
Mobile	0.0923	3.2418	0.6205	8.6900e-003	0.2000	0.0135	0.2135	0.0549	0.0129	0.0678	0.0000	849.7843	849.7843	0.0541	0.0000	851.1366
Waste						0.0000	0.0000		0.0000	0.0000	25.1709	0.0000	25.1709	1.4876	0.0000	62.3598
Water						0.0000	0.0000		0.0000	0.0000	7.3365	95.9403	103.2768	0.7575	0.0186	127.7604
Total	**0.5099**	**3.3309**	**0.6965**	**9.2200e-003**	**0.2000**	**0.0203**	**0.2203**	**0.0549**	**0.0197**	**0.0746**	**32.5074**	**1,402.9965**	**1,435.5039**	**2.3159**	**0.0235**	**1,500.3941**

	ROG	NOx	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	Architectural Coating	Architectural Coating	12/15/2016	12/14/2016	5	10	
2	Building Construction	Building Construction	12/15/2016	12/14/2016	5	220	
3	Demolition	Demolition	12/15/2016	12/14/2016	5	20	
4	Grading	Grading	12/15/2016	12/14/2016	5	6	
5	Paving	Paving	12/15/2016	12/14/2016	5	10	
6	Site Preparation	Site Preparation	12/15/2016	12/14/2016	5	3	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40

Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	42.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2016

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

3.3 Building Construction - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

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

3.4 Demolition - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.5 Grading - 2016

Unmitigated Construction On-Site

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

Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.6 Paving - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

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

3.7 Site Preparation - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0923	3.2418	0.6205	8.6900e-003	0.2000	0.0135	0.2135	0.0549	0.0129	0.0678	0.0000	849.7843	849.7843	0.0541	0.0000	851.1366
Unmitigated	0.0923	3.2418	0.6205	8.6900e-003	0.2000	0.0135	0.2135	0.0549	0.0129	0.0678	0.0000	849.7843	849.7843	0.0541	0.0000	851.1366

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	40.00	40.00	40.00	465,920	465,920
Total	40.00	40.00	40.00	465,920	465,920

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	32.00	32.00	32.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

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	360.3608	360.3608	0.0149	3.0800e-003	361.6500
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	360.3608	360.3608	0.0149	3.0800e-003	361.6500
NaturalGas Mitigated	9.7900e-003	0.0890	0.0748	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003	0.0000	96.9087	96.9087	1.8600e-003	1.7800e-003	97.4846
NaturalGas Unmitigated	9.7900e-003	0.0890	0.0748	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003	0.0000	96.9087	96.9087	1.8600e-003	1.7800e-003	97.4846

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.816e+006	9.7900e-003	0.0890	0.0748	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003	0.0000	96.9087	96.9087	1.8600e-003	1.7800e-003	97.4846
Total		**9.7900e-003**	**0.0890**	**0.0748**	**5.3000e-004**		**6.7700e-003**	**6.7700e-003**		**6.7700e-003**	**6.7700e-003**	**0.0000**	**96.9087**	**96.9087**	**1.8600e-003**	**1.7800e-003**	**97.4846**

Mitigated

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

Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.816e+006	9.7900e-003	0.0890	0.0748	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003	0.0000	96.9087	96.9087	1.8600e-003	1.7800e-003	97.4846
Total		**9.7900e-003**	**0.0890**	**0.0748**	**5.3000e-004**		**6.7700e-003**	**6.7700e-003**		**6.7700e-003**	**6.7700e-003**	**0.0000**	**96.9087**	**96.9087**	**1.8600e-003**	**1.7800e-003**	**97.4846**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.131e+006	360.3608	0.0149	3.0800e-003	361.6500
Total		**360.3608**	**0.0149**	**3.0800e-003**	**361.6500**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.131e+006	360.3608	0.0149	3.0800e-003	361.6500
Total		**360.3608**	**0.0149**	**3.0800e-003**	**361.6500**

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	0.4078	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4800e-003	2.4800e-003	1.0000e-005	0.0000	2.6500e-003
Unmitigated	0.4078	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4800e-003	2.4800e-003	1.0000e-005	0.0000	2.6500e-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	0.0464					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3614					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4800e-003	2.4800e-003	1.0000e-005	0.0000	2.6500e-003
Total	**0.4078**	**1.0000e-005**	**1.2900e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.4800e-003**	**2.4800e-003**	**1.0000e-005**	**0.0000**	**2.6500e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0464					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3614					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4800e-003	2.4800e-003	1.0000e-005	0.0000	2.6500e-003
Total	**0.4078**	**1.0000e-005**	**1.2900e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.4800e-003**	**2.4800e-003**	**1.0000e-005**	**0.0000**	**2.6500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	103.2768	0.7575	0.0186	127.7604
Unmitigated	103.2768	0.7575	0.0186	127.7604

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	23.125 / 0	103.2768	0.7575	0.0186	127.7604
Total		**103.2768**	**0.7575**	**0.0186**	**127.7604**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	23.125 / 0	103.2768	0.7575	0.0186	127.7604
Total		**103.2768**	**0.7575**	**0.0186**	**127.7604**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			

Mitigated	25.1709	1.4876	0.0000	62.3598
Unmitigated	25.1709	1.4876	0.0000	62.3598

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	124	25.1709	1.4876	0.0000	62.3598
Total		**25.1709**	**1.4876**	**0.0000**	**62.3598**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	124	25.1709	1.4876	0.0000	62.3598
Total		**25.1709**	**1.4876**	**0.0000**	**62.3598**

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

BOMP - Operational Emissions - Drilling Only

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	53.00	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 53 Wells

Construction Phase - Two rigs operating for the full year.

Off-road Equipment - One workover rig at each site, 500 hp, 12 hours per day

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	0.00	365.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblOffRoadEquipment	HorsePower	221.00	500.00
tblOffRoadEquipment	HorsePower	221.00	500.00
tblOffRoadEquipment	LoadFactor	0.50	0.73

tblOffRoadEquipment	LoadFactor	0.50	0.73
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0401	0.5819	0.2663	1.1100e-003	6.6000e-004	0.0180	0.0186	1.7000e-004	0.0165	0.0167	0.0000	104.6854	104.6854	0.0314	0.0000	105.4705
2017	0.5513	7.7998	3.7297	0.0159	9.3500e-003	0.2382	0.2475	2.4800e-003	0.2191	0.2216	0.0000	1,471.3305	1,471.3305	0.4483	0.0000	1,482.5388
Maximum	**0.5513**	**7.7998**	**3.7297**	**0.0159**	**9.3500e-003**	**0.2382**	**0.2475**	**2.4800e-003**	**0.2191**	**0.2216**	**0.0000**	**1,471.3305**	**1,471.3305**	**0.4483**	**0.0000**	**1,482.5388**

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					
2016	0.0401	0.5819	0.2663	1.1100e-003	6.6000e-004	0.0180	0.0186	1.7000e-004	0.0165	0.0167	0.0000	104.6852	104.6852	0.0314	0.0000	105.4703
2017	0.5513	7.7998	3.7297	0.0159	9.3500e-003	0.2382	0.2475	2.4800e-003	0.2191	0.2216	0.0000	1,471.3288	1,471.3288	0.4483	0.0000	1,482.5371
Maximum	**0.5513**	**7.7998**	**3.7297**	**0.0159**	**9.3500e-003**	**0.2382**	**0.2475**	**2.4800e-003**	**0.2191**	**0.2216**	**0.0000**	**1,471.3288**	**1,471.3288**	**0.4483**	**0.0000**	**1,482.5371**

	ROG	NOx	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	**12-8-2016**	**3-7-2017**	2.2384	2.2384
2	**3-8-2017**	**6-7-2017**	2.2530	2.2530
3	**6-8-2017**	**9-7-2017**	2.2530	2.2530
4	**9-8-2017**	**9-30-2017**	0.5632	0.5632
		Highest	2.2530	2.2530

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	7.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e-003	1.3200e-003	0.0000	0.0000	1.4100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.0000e-005**	**1.0000e-005**	**6.9000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.3200e-003**	**1.3200e-003**	**0.0000**	**0.0000**	**1.4100e-003**

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	7.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e-003	1.3200e-003	0.0000	0.0000	1.4100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.0000e-005**	**1.0000e-005**	**6.9000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.3200e-003**	**1.3200e-003**	**0.0000**	**0.0000**	**1.4100e-003**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/8/2016	12/7/2016	5	0	
2	Site Preparation	Site Preparation	12/8/2016	12/7/2016	5	0	
3	Grading	Grading	12/8/2016	12/7/2017	7	365	
4	Building Construction	Building Construction	12/8/2017	12/7/2017	5	0	
5	Paving	Paving	12/8/2017	12/7/2017	5	0	
6	Architectural Coating	Architectural Coating	12/8/2017	12/7/2017	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Bore/Drill Rigs	1	12.00	500	0.73
Grading	Bore/Drill Rigs	1	12.00	500	0.73
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Rubber Tired Dozers	0	1.00	247	0.40

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
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Grading	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

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

Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

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

Mitigated Construction Off-Site

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

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0397	0.5816	0.2627	1.1000e-003		0.0180	0.0180		0.0165	0.0165	0.0000	104.0185	104.0185	0.0314	0.0000	104.8029
Total	**0.0397**	**0.5816**	**0.2627**	**1.1000e-003**	**0.0000**	**0.0180**	**0.0180**	**0.0000**	**0.0165**	**0.0165**	**0.0000**	**104.0185**	**104.0185**	**0.0314**	**0.0000**	**104.8029**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.4000e-004	3.6400e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.6000e-004	1.7000e-004	1.0000e-005	1.8000e-004	0.0000	0.6669	0.6669	3.0000e-005	0.0000	0.6676
Total	**4.1000e-004**	**3.4000e-004**	**3.6400e-003**	**1.0000e-005**	**6.6000e-004**	**1.0000e-005**	**6.6000e-004**	**1.7000e-004**	**1.0000e-005**	**1.8000e-004**	**0.0000**	**0.6669**	**0.6669**	**3.0000e-005**	**0.0000**	**0.6676**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0397	0.5816	0.2627	1.1000e-003		0.0180	0.0180		0.0165	0.0165	0.0000	104.0183	104.0183	0.0314	0.0000	104.8027
Total	**0.0397**	**0.5816**	**0.2627**	**1.1000e-003**	**0.0000**	**0.0180**	**0.0180**	**0.0000**	**0.0165**	**0.0165**	**0.0000**	**104.0183**	**104.0183**	**0.0314**	**0.0000**	**104.8027**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.4000e-004	3.6400e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.6000e-004	1.7000e-004	1.0000e-005	1.8000e-004	0.0000	0.6669	0.6669	3.0000e-005	0.0000	0.6676
Total	**4.1000e-004**	**3.4000e-004**	**3.6400e-003**	**1.0000e-005**	**6.6000e-004**	**1.0000e-005**	**6.6000e-004**	**1.7000e-004**	**1.0000e-005**	**1.8000e-004**	**0.0000**	**0.6669**	**0.6669**	**3.0000e-005**	**0.0000**	**0.6676**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5462	7.7956	3.6843	0.0158		0.2381	0.2381		0.2191	0.2191	0.0000	1,462.0990	1,462.0990	0.4480	0.0000	1,473.2986
Total	**0.5462**	**7.7956**	**3.6843**	**0.0158**	**0.0000**	**0.2381**	**0.2381**	**0.0000**	**0.2191**	**0.2191**	**0.0000**	**1,462.0990**	**1,462.0990**	**0.4480**	**0.0000**	**1,473.2986**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-003	4.2600e-003	0.0454	1.0000e-004	9.3500e-003	8.0000e-005	9.4300e-003	2.4800e-003	7.0000e-005	2.5600e-003	0.0000	9.2315	9.2315	3.5000e-004	0.0000	9.2402

Total	**5.1000e-003**	**4.2600e-003**	**0.0454**	**1.0000e-004**	**9.3500e-003**	**8.0000e-005**	**9.4300e-003**	**2.4800e-003**	**7.0000e-005**	**2.5600e-003**	**0.0000**	**9.2315**	**9.2315**	**3.5000e-004**	**0.0000**	**9.2402**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5462	7.7956	3.6843	0.0158		0.2381	0.2381		0.2191	0.2191	0.0000	1,462.0973	1,462.0973	0.4480	0.0000	1,473.2969
Total	**0.5462**	**7.7956**	**3.6843**	**0.0158**	**0.0000**	**0.2381**	**0.2381**	**0.0000**	**0.2191**	**0.2191**	**0.0000**	**1,462.0973**	**1,462.0973**	**0.4480**	**0.0000**	**1,473.2969**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-003	4.2600e-003	0.0454	1.0000e-004	9.3500e-003	8.0000e-005	9.4300e-003	2.4800e-003	7.0000e-005	2.5600e-003	0.0000	9.2315	9.2315	3.5000e-004	0.0000	9.2402
Total	**5.1000e-003**	**4.2600e-003**	**0.0454**	**1.0000e-004**	**9.3500e-003**	**8.0000e-005**	**9.4300e-003**	**2.4800e-003**	**7.0000e-005**	**2.5600e-003**	**0.0000**	**9.2315**	**9.2315**	**3.5000e-004**	**0.0000**	**9.2402**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

3.6 Paving - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

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

3.7 Architectural Coating - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
User Defined Industrial	16.60	8.40	6.90	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
User Defined Industrial	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
User Defined Industrial	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	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					
User Defined Industrial	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000

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

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	7.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e-003	1.3200e-003	0.0000	0.0000	1.4100e-003
Unmitigated	7.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e-003	1.3200e-003	0.0000	0.0000	1.4100e-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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e-003	1.3200e-003	0.0000	0.0000	1.4100e-003

Total	**7.0000e-005**	**1.0000e-005**	**6.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.3200e-003**	**1.3200e-003**	**0.0000**	**0.0000**	**1.4100e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3200e-003	1.3200e-003	0.0000	0.0000	1.4100e-003
Total	**7.0000e-005**	**1.0000e-005**	**6.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.3200e-003**	**1.3200e-003**	**0.0000**	**0.0000**	**1.4100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000

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

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

Wetlands - Operation - Employee Travel Only Existing

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.20	1000sqft	0.12	5,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Off-road Equipment -

Vehicle Trips - Based on 15 workers per day and a trip to and from site each day.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	100.00	0.00
tblAreaCoating	Area_EF_Parking	100	0
tblProjectCharacteristics	OperationalYear	2018	2017
tblVehicleTrips	WD_TR	11.03	5.77

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					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

Quarter	**Start Date**	**End Date**	**Maximum Unmitigated ROG + NOX (tons/quarter)**	**Maximum Mitigated ROG + NOX (tons/quarter)**

		Highest	

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0212	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Energy	2.9000e-004	2.6700e-003	2.2400e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	24.9716	24.9716	9.7000e-004	2.4000e-004	25.0678
Mobile	0.0108	0.0533	0.1462	3.9000e-004	0.0294	5.4000e-004	0.0300	7.8900e-003	5.1000e-004	8.3900e-003	0.0000	36.2418	36.2418	2.1700e-003	0.0000	36.2961
Waste						0.0000	0.0000		0.0000	0.0000	0.9825	0.0000	0.9825	0.0581	0.0000	2.4340
Water						0.0000	0.0000		0.0000	0.0000	0.2932	5.8395	6.1328	0.0304	7.6000e-004	7.1184
Total	**0.0323**	**0.0560**	**0.1485**	**4.1000e-004**	**0.0294**	**7.4000e-004**	**0.0302**	**7.8900e-003**	**7.1000e-004**	**8.5900e-003**	**1.2757**	**67.0530**	**68.3287**	**0.0916**	**1.0000e-003**	**70.9165**

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	0.0212	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Energy	2.9000e-004	2.6700e-003	2.2400e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	24.9716	24.9716	9.7000e-004	2.4000e-004	25.0678
Mobile	0.0108	0.0533	0.1462	3.9000e-004	0.0294	5.4000e-004	0.0300	7.8900e-003	5.1000e-004	8.3900e-003	0.0000	36.2418	36.2418	2.1700e-003	0.0000	36.2961
Waste						0.0000	0.0000		0.0000	0.0000	0.9825	0.0000	0.9825	0.0581	0.0000	2.4340

Water						0.0000	0.0000		0.0000	0.0000	0.2932	5.8395	6.1328	0.0304	7.6000e-004	7.1184
Total	**0.0323**	**0.0560**	**0.1485**	**4.1000e-004**	**0.0294**	**7.4000e-004**	**0.0302**	**7.8900e-003**	**7.1000e-004**	**8.5900e-003**	**1.2757**	**67.0530**	**68.3287**	**0.0916**	**1.0000e-003**	**70.9165**

	ROG	NOx	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	Architectural Coating	Architectural Coating	1/17/2017	1/16/2017	5	5	
2	Building Construction	Building Construction	1/17/2017	1/16/2017	5	100	
3	Demolition	Demolition	1/17/2017	1/16/2017	5	10	
4	Grading	Grading	1/17/2017	1/16/2017	5	2	
5	Paving	Paving	1/17/2017	1/16/2017	5	5	
6	Site Preparation	Site Preparation	1/17/2017	1/16/2017	5	1	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,800; Non-Residential Outdoor: 2,600; Striped Parking Area: 0 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29

Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

Mitigated Construction Off-Site

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

3.3 Building Construction - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

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

3.4 Demolition - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.5 Grading - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

3.6 Paving - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

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

3.7 Site Preparation - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0108	0.0533	0.1462	3.9000e-004	0.0294	5.4000e-004	0.0300	7.8900e-003	5.1000e-004	8.3900e-003	0.0000	36.2418	36.2418	2.1700e-003	0.0000	36.2961
Unmitigated	0.0108	0.0533	0.1462	3.9000e-004	0.0294	5.4000e-004	0.0300	7.8900e-003	5.1000e-004	8.3900e-003	0.0000	36.2418	36.2418	2.1700e-003	0.0000	36.2961

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	30.00	12.79	5.46	77,440	77,440
Total	30.00	12.79	5.46	77,440	77,440

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.544524	0.045551	0.198447	0.129336	0.019135	0.005878	0.019261	0.027434	0.001914	0.002222	0.004531	0.000699	0.001069

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	22.0690	22.0690	9.1000e-004	1.9000e-004	22.1480
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	22.0690	22.0690	9.1000e-004	1.9000e-004	22.1480
NaturalGas Mitigated	2.9000e-004	2.6700e-003	2.2400e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.9026	2.9026	6.0000e-005	5.0000e-005	2.9198
NaturalGas Unmitigated	2.9000e-004	2.6700e-003	2.2400e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.9026	2.9026	6.0000e-005	5.0000e-005	2.9198

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	54392	2.9000e-004	2.6700e-003	2.2400e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.9026	2.9026	6.0000e-005	5.0000e-005	2.9198
Total		**2.9000e-004**	**2.6700e-003**	**2.2400e-003**	**2.0000e-005**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**2.9026**	**2.9026**	**6.0000e-005**	**5.0000e-005**	**2.9198**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	54392	2.9000e-004	2.6700e-003	2.2400e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.9026	2.9026	6.0000e-005	5.0000e-005	2.9198
Total		**2.9000e-004**	**2.6700e-003**	**2.2400e-003**	**2.0000e-005**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**2.9026**	**2.9026**	**6.0000e-005**	**5.0000e-005**	**2.9198**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	69264	22.0690	9.1000e-004	1.9000e-004	22.1480
Total		**22.0690**	**9.1000e-004**	**1.9000e-004**	**22.1480**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	69264	22.0690	9.1000e-004	1.9000e-004	22.1480

Total		**22.0690**	**9.1000e-004**	**1.9000e-004**	**22.1480**

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	0.0212	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Unmitigated	0.0212	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.4100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004

Total	**0.0212**	**0.0000**	**7.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.0000**	**1.4000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.4100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Total	**0.0212**	**0.0000**	**7.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.0000**	**1.4000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.1328	0.0304	7.6000e-004	7.1184
Unmitigated	6.1328	0.0304	7.6000e-004	7.1184

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.924215 / 0.566455	6.1328	0.0304	7.6000e-004	7.1184
Total		**6.1328**	**0.0304**	**7.6000e-004**	**7.1184**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.924215 / 0.566455	6.1328	0.0304	7.6000e-004	7.1184
Total		**6.1328**	**0.0304**	**7.6000e-004**	**7.1184**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.9825	0.0581	0.0000	2.4340
Unmitigated	0.9825	0.0581	0.0000	2.4340

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	4.84	0.9825	0.0581	0.0000	2.4340
Total		**0.9825**	**0.0581**	**0.0000**	**2.4340**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	4.84	0.9825	0.0581	0.0000	2.4340

Total		**0.9825**	**0.0581**	**0.0000**	**2.4340**

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

Wetlands - Operation - Employee Travel Only Future

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.20	1000sqft	0.12	5,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Off-road Equipment -

Vehicle Trips - Based on 25 workers per day and a trip to and from site each day.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	100.00	0.00
tblAreaCoating	Area_EF_Parking	100	0
tblProjectCharacteristics	OperationalYear	2018	2019
tblVehicleTrips	WD_TR	11.03	9.62

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					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

Quarter	**Start Date**	**End Date**	**Maximum Unmitigated ROG + NOX (tons/quarter)**	**Maximum Mitigated ROG + NOX (tons/quarter)**

		Highest	

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0212	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Energy	2.9000e-004	2.6700e-003	2.2400e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	24.9716	24.9716	9.7000e-004	2.4000e-004	25.0678
Mobile	0.0140	0.0742	0.1886	6.0000e-004	0.0469	7.0000e-004	0.0476	0.0126	6.6000e-004	0.0132	0.0000	55.1426	55.1426	2.9700e-003	0.0000	55.2170
Waste						0.0000	0.0000		0.0000	0.0000	0.9825	0.0000	0.9825	0.0581	0.0000	2.4340
Water						0.0000	0.0000		0.0000	0.0000	0.2932	5.8395	6.1328	0.0304	7.6000e-004	7.1184
Total	**0.0355**	**0.0769**	**0.1909**	**6.2000e-004**	**0.0469**	**9.0000e-004**	**0.0478**	**0.0126**	**8.6000e-004**	**0.0134**	**1.2757**	**85.9539**	**87.2296**	**0.0924**	**1.0000e-003**	**89.8374**

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	0.0212	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Energy	2.9000e-004	2.6700e-003	2.2400e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	24.9716	24.9716	9.7000e-004	2.4000e-004	25.0678
Mobile	0.0140	0.0742	0.1886	6.0000e-004	0.0469	7.0000e-004	0.0476	0.0126	6.6000e-004	0.0132	0.0000	55.1426	55.1426	2.9700e-003	0.0000	55.2170
Waste						0.0000	0.0000		0.0000	0.0000	0.9825	0.0000	0.9825	0.0581	0.0000	2.4340

Water						0.0000	0.0000		0.0000	0.0000	0.2932	5.8395	6.1328	0.0304	7.6000e-004	7.1184
Total	**0.0355**	**0.0769**	**0.1909**	**6.2000e-004**	**0.0469**	**9.0000e-004**	**0.0478**	**0.0126**	**8.6000e-004**	**0.0134**	**1.2757**	**85.9539**	**87.2296**	**0.0924**	**1.0000e-003**	**89.8374**

	ROG	NOx	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	Architectural Coating	Architectural Coating	1/17/2017	1/16/2017	5	5	
2	Building Construction	Building Construction	1/17/2017	1/16/2017	5	100	
3	Demolition	Demolition	1/17/2017	1/16/2017	5	10	
4	Grading	Grading	1/17/2017	1/16/2017	5	2	
5	Paving	Paving	1/17/2017	1/16/2017	5	5	
6	Site Preparation	Site Preparation	1/17/2017	1/16/2017	5	1	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,800; Non-Residential Outdoor: 2,600; Striped Parking Area: 0 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29

Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

Mitigated Construction Off-Site

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

3.3 Building Construction - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

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

3.4 Demolition - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.5 Grading - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

3.6 Paving - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

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

3.7 Site Preparation - 2017

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0140	0.0742	0.1886	6.0000e-004	0.0469	7.0000e-004	0.0476	0.0126	6.6000e-004	0.0132	0.0000	55.1426	55.1426	2.9700e-003	0.0000	55.2170
Unmitigated	0.0140	0.0742	0.1886	6.0000e-004	0.0469	7.0000e-004	0.0476	0.0126	6.6000e-004	0.0132	0.0000	55.1426	55.1426	2.9700e-003	0.0000	55.2170

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	50.00	12.79	5.46	123,447	123,447
Total	50.00	12.79	5.46	123,447	123,447

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989

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	22.0690	22.0690	9.1000e-004	1.9000e-004	22.1480
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	22.0690	22.0690	9.1000e-004	1.9000e-004	22.1480
NaturalGas Mitigated	2.9000e-004	2.6700e-003	2.2400e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.9026	2.9026	6.0000e-005	5.0000e-005	2.9198
NaturalGas Unmitigated	2.9000e-004	2.6700e-003	2.2400e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.9026	2.9026	6.0000e-005	5.0000e-005	2.9198

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	54392	2.9000e-004	2.6700e-003	2.2400e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.9026	2.9026	6.0000e-005	5.0000e-005	2.9198
Total		**2.9000e-004**	**2.6700e-003**	**2.2400e-003**	**2.0000e-005**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**2.9026**	**2.9026**	**6.0000e-005**	**5.0000e-005**	**2.9198**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	54392	2.9000e-004	2.6700e-003	2.2400e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.9026	2.9026	6.0000e-005	5.0000e-005	2.9198
Total		**2.9000e-004**	**2.6700e-003**	**2.2400e-003**	**2.0000e-005**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**2.9026**	**2.9026**	**6.0000e-005**	**5.0000e-005**	**2.9198**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	69264	22.0690	9.1000e-004	1.9000e-004	22.1480
Total		**22.0690**	**9.1000e-004**	**1.9000e-004**	**22.1480**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	69264	22.0690	9.1000e-004	1.9000e-004	22.1480

Total		**22.0690**	**9.1000e-004**	**1.9000e-004**	**22.1480**

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	0.0212	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Unmitigated	0.0212	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.4100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004

Total	**0.0212**	**0.0000**	**7.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.0000**	**1.4000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.4100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Total	**0.0212**	**0.0000**	**7.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.0000**	**1.4000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.1328	0.0304	7.6000e-004	7.1184
Unmitigated	6.1328	0.0304	7.6000e-004	7.1184

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.924215 / 0.566455	6.1328	0.0304	7.6000e-004	7.1184
Total		**6.1328**	**0.0304**	**7.6000e-004**	**7.1184**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.924215 / 0.566455	6.1328	0.0304	7.6000e-004	7.1184
Total		**6.1328**	**0.0304**	**7.6000e-004**	**7.1184**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.9825	0.0581	0.0000	2.4340
Unmitigated	0.9825	0.0581	0.0000	2.4340

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	4.84	0.9825	0.0581	0.0000	2.4340
Total		**0.9825**	**0.0581**	**0.0000**	**2.4340**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	4.84	0.9825	0.0581	0.0000	2.4340

Total		**0.9825**	**0.0581**	**0.0000**	**2.4340**

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

BOMP - Electric Emissions for 53 Wells (Existing)				
Power (kW)	kWh/yr	kWhr/well/yr		
7,206	63,124,560	1,191,029		
from Lederhos Engineering "Synergy Lease Only Production Forecast"				
	CO2	CH4	N2O	CO2EQ
lb/MWh	702.44	0.029	0.006	
Lb/yr	44,341,216	1,831	379	
MT/yr	20,119	1	0	**20,187**
GWP	1	28	265	
Emission factors from CalEEMod v. 2016.3.1				

Turbine Calculations								
Data provided by Solar Turbines dated November 7, 2016								
Based on the use of 4 Mercury 50 turbines								
Output Power (kWe)	Load		4 Turbines					
4,477	100%		17,908					
NOx	lb/hr	lb/day	lb/day					
Lean-Premix	0.812	19.5	78.0	From 100% Load and has 60% reduction SCR				
CO								
Lean-Premix	0.989	23.7	94.9					
VOC								
Uncontrolled	0.565	13.6	54.2					
SO2								
Uncontrolled	0.153	3.7	14.7					
PM10 (condensible)								
Uncontrolled	0.520	12.5	25.0	Emission based on Solar Turbines claim of 0.004 lb/MMBtu				
PM2.5 (filterable)								
Uncontrolled	0.520	12.5	25.0	Emission based on Solar Turbines claim of 0.004 lb/MMBtu				
Greenhouse Gases								
CO2	lb/hr	lb/day	4 Turbines	MT/Yr				
100% Load	5,310	127,440	509,760	84,397				
CO2	4370	104,880	419,520	69,456	**67,581**			
Average Load (77.84%)				80% Load	**77.84% Load**			

SCE Emissions for Various Scenarios						
Emissions for Power in Excess of What Turbines Can Provide						
	Lb/MWh	Avg SCE Demand (MW)	lb/day	lb/year	MT/Yr	GWP
CO2	702.43634	0.36215	6,105	2,228,433	1,011	1
CH4	0.029	0.36215	0	92	0.04	28
N2O	0.00617	0.36215	0	20	0.01	265
CO2EQ					**1,014**	
Emissions for Power All Coming From SCE - CalEEMod Emission Rates						
	Lb/MWh	Avg SCE Demand (MW)	lb/day	lb/year	MT/Yr	GWP
CO2	702.43634	14.302	241,110	88,005,102	39,918	1
CH4	0.029	14.302	10	3,633	1.6	28
N2O	0.00617	14.302	2	773	0.4	265
CO2EQ					**40,058**	
Emissions for Non-Cogen Electric Consumption						
	Lb/MWh	Avg SCE Demand (MW)	lb/day	lb/year	MT/Yr	GWP
CO2	702.43634	1.715	28,912	10,552,982	4,787	1
CH4	0.029	1.715	1	436	0.2	28
N2O	0.00617	1.715	0	93	0.0	265
CO2EQ					**4,803**	
Emissions for Power All Coming From SCE - All Fossil Fuel						
	Lb/MWh	Avg SCE Demand (MW)	lb/day	lb/year	MT/Yr	GWP
CO2	945.3	14.302	324,472	118,432,402	53,720	1
CH4	0	14.302	0	0	0.0	28
N2O	0	14.302	0	0	0.0	265
CO2EQ					**53,720**	

Boilers for Heating Non-Cogen				
Gas Consumption (mscfd)	Gas Consumption (scf/day)			
480	480,000			
	EF (lb/106 scf)	Emissions (lb/day)	Emissions (MT/Yr)	GWP
VOC	5.5	2.6		
NOx	50	24.0		
CO	84	40.3		
SOx	0.6	0.3		
PM10	7.6	3.6		
PM2.5	5.7	2.7		
CO2	120,000	57,600	**9,536**	1
CH4	2.3	1.1	**0.18**	28
CO2EQ			**9,541**	
Assumptions:				
1. Small boiler with low NOx burners				
2. Emission factors from AP-42, Section 1.4				

Turbine Commissioning Emissions

Emissions Per Star-Up and Shut-Down for One Mercury 50 Turbine

Event	Emissions (lb/event)				
	NOx	CO	UHC	VOC	CO2
Start Up	1	5	3	0.5	363
Shut Down	1	4	2	0.5	322
Total	2	9	5	1.0	685

Scenario 1: Dynamic Testing includes 5 start ups and 5 shut downs per day per turbine

Operation Mode	Emissions (lb/day)				
	NOx	CO	UHC	VOC	CO2
Start Up/Shut Down Emissions - Uncontrolled	10.00	45.00	25.00	5.00	3,425.00
SCR Control Efficiency	0.50	0.40	0.00	0.00	0.00
Start Up/Shut Down Emissions - Controlled	5.00	27.00	25.00	5.00	3,425.00
Daily Operational Emissions - Controlled	7.15	13.05	12.43	2.49	117,700.00
Daily Emissions per Turbine - Uncontrolled Start-Ups	17.15	58.05	37.43	7.49	121,125.00
Daily Emissions per Turbine - Controlled Start-Ups	12.15	40.05	37.43	7.49	121,125.00
Total Daily Emissions for 4 Turbines - Uncontrolled	68.60	232.18	149.72	29.94	484,500.00
Total Daily Emissions for 4 Turbines - Controlled	48.60	160.18	149.72	29.94	484,500.00

- Daily Operation Emissions assume maximum of 22 hours of normal operation during commissioning

Scenario 2: Dynamic Testing includes 10 start ups and 10 shut downs per day per turbine

Operation Mode	Emissions (lb/day)				
	NOx	CO	UHC	VOC	CO2
Start Up/Shut Down Emissions - Uncontrolled	20.00	90.00	50.00	10.00	6,850.00
SCR Control Efficiency	0.50	0.40	0.00	0.00	0.00
Start Up/Shut Down Emissions - Controlled	10.00	54.00	50.00	10.00	6,850.00
Daily Operational Emissions - Controlled	6.50	11.86	11.30	2.26	107,000.00
Daily Emissions per Turbine - Uncontrolled Start-Ups	26.50	101.86	61.30	12.26	113,850.00
Daily Emissions per Turbine - Controlled Start-Ups	16.50	65.86	61.30	12.26	113,850.00
Total Daily Emissions for 4 Turbines - Uncontrolled	106.00	407.44	245.20	49.04	455,400.00
Total Daily Emissions for 4 Turbines - Controlled	66.00	263.44	245.20	49.04	455,400.00

- Daily Operation Emissions assume maximum of 20 hours of normal operation during commissioning

PM emissions based on Solar Turbine emission rates of 0,520 lb/hr and 20 hours per day

BOMP - Landfill Excavation - Construction Only

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	7.00	Acre	7.00	304,920.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction per email.

Off-road Equipment - No painting phase.

Off-road Equipment - No drilling or pumping.

Off-road Equipment - No drilling or pumping needed.

Off-road Equipment - Equipment per email.

Off-road Equipment - Equipment per emails.

Off-road Equipment - A grader wasn't included, but one must be needed for handling import.

Off-road Equipment - No paving phase.

Trips and VMT - Assume wet to Simi Valley Landfill and dry to Irwindale Landfill.
Import from 10 to 50 miles source (used 50)
Grading - Acreage of site.

Construction Off-road Equipment Mitigation - All Tier IV per mitigation requirements.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	20.00	0.00

tblConstructionPhase	NumDays	10.00	65.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblGrading	AcresOfGrading	10.00	7.00
tblGrading	AcresOfGrading	0.00	7.00
tblGrading	MaterialExported	0.00	63,000.00
tblGrading	MaterialImported	0.00	45,000.00
tblOffRoadEquipment	HorsePower	247.00	200.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripLength	20.00	168.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripNumber	7,875.00	2,370.00
tblTripsAndVMT	HaulingTripNumber	5,625.00	3,750.00

tblTripsAndVMT	WorkerTripNumber	0.00	3.00
tblTripsAndVMT	WorkerTripNumber	15.00	5.00
tblTripsAndVMT	WorkerTripNumber	26.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1884	4.3506	1.2675	0.0113	0.4633	0.0656	0.5289	0.1790	0.0609	0.2399			1,096.6460	0.0823	0.0000	1,098.7041
Maximum	**0.1884**	**4.3506**	**1.2675**	**0.0113**	**0.4633**	**0.0656**	**0.5289**	**0.1790**	**0.0609**	**0.2399**			**1,096.6460**	**0.0823**	**0.0000**	**1,098.7041**

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	0.1160	3.5140	1.2940	0.0113	0.3357	0.0181	0.3538	0.1123	0.0174	0.1297			1,096.6459	0.0823	0.0000	1,098.7040
Maximum	**0.1160**	**3.5140**	**1.2940**	**0.0113**	**0.3357**	**0.0181**	**0.3538**	**0.1123**	**0.0174**	**0.1297**			**1,096.6459**	**0.0823**	**0.0000**	**1,098.7040**

	ROG	NOx	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	**38.41**	**19.23**	**-2.09**	**0.00**	**27.55**	**72.43**	**33.11**	**37.25**	**71.52**	**45.95**	**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)
2	**4-1-2018**	**6-30-2018**	1.3066	1.1933
		Highest	1.3066	1.1933

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	2.8800e-003	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000			1.7000e-004	0.0000	0.0000	1.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.0171	0.0924	0.2200	7.0000e-004	0.0535	8.1000e-004	0.0543	0.0143	7.6000e-004	0.0151			64.1129	3.5300e-003	0.0000	64.2010
Waste						0.0000	0.0000		0.0000	0.0000			0.1218	7.2000e-003	0.0000	0.3017
Water						0.0000	0.0000		0.0000	0.0000			29.5239	1.2200e-003	2.5000e-004	29.6296
Total	**0.0200**	**0.0924**	**0.2201**	**7.0000e-004**	**0.0535**	**8.1000e-004**	**0.0543**	**0.0143**	**7.6000e-004**	**0.0151**			**93.7588**	**0.0120**	**2.5000e-004**	**94.1325**

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	2.8800e-003	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000			1.7000e-004	0.0000	0.0000	1.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.0171	0.0924	0.2200	7.0000e-004	0.0535	8.1000e-004	0.0543	0.0143	7.6000e-004	0.0151			64.1129	3.5300e-003	0.0000	64.2010
Waste						0.0000	0.0000		0.0000	0.0000			0.1218	7.2000e-003	0.0000	0.3017
Water						0.0000	0.0000		0.0000	0.0000			29.5239	1.2200e-003	2.5000e-004	29.6296
Total	**0.0200**	**0.0924**	**0.2201**	**7.0000e-004**	**0.0535**	**8.1000e-004**	**0.0543**	**0.0143**	**7.6000e-004**	**0.0151**			**93.7588**	**0.0120**	**2.5000e-004**	**94.1325**

	ROG	NOx	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	Drilling	Demolition	1/1/2018	1/19/2018	5	15	
2	Excavation	Site Preparation	1/20/2018	4/20/2018	5	65	
3	Dewatering	Site Preparation	4/21/2018	5/11/2018	7	21	
4	Final Grading & Import	Grading	5/12/2018	6/8/2018	5	20	
5	Paving	Paving	6/9/2018	6/8/2018	5	0	
6	Architectural Coating	Architectural Coating	6/9/2018	6/8/2018	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

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

Drilling	Bore/Drill Rigs	0	7.00	221	0.50
Drilling	Concrete/Industrial Saws	0	8.00	81	0.73
Drilling	Excavators	0	8.00	158	0.38
Drilling	Rubber Tired Dozers	0	8.00	247	0.40
Excavation	Excavators	1	8.00	158	0.38
Excavation	Pumps	0	24.00	84	0.74
Excavation	Rubber Tired Dozers	1	8.00	200	0.40
Dewatering	Graders	0	8.00	187	0.41
Dewatering	Pumps	0	24.00	84	0.74
Dewatering	Rubber Tired Dozers	0	8.00	247	0.40
Dewatering	Rubber Tired Dozers	0	8.00	247	0.40
Dewatering	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Dewatering	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Final Grading & Import	Excavators	0	8.00	158	0.38
Final Grading & Import	Forklifts	0	8.00	89	0.20
Final Grading & Import	Generator Sets	0	8.00	84	0.74
Final Grading & Import	Graders	1	8.00	187	0.41
Final Grading & Import	Graders	0	8.00	187	0.41
Final Grading & Import	Off-Highway Trucks	1	4.00	402	0.38
Final Grading & Import	Rubber Tired Dozers	0	8.00	247	0.40
Final Grading & Import	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Final Grading & Import	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48
Excavation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Drilling	0	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation	6	5.00	0.00	2,370.00	14.70	6.90	168.00	LD_Mix	HDT_Mix	HHDT
Dewatering	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Dewatering	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Final Grading & Import	2	5.00	0.00	3,750.00	14.70	6.90	50.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Drilling - 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	1.0000e-004	1.0500e-003	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005			0.2368	1.0000e-005	0.0000	0.2370
Total	**1.2000e-004**	**1.0000e-004**	**1.0500e-003**	**0.0000**	**2.5000e-004**	**0.0000**	**2.5000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**			**0.2368**	**1.0000e-005**	**0.0000**	**0.2370**

Mitigated Construction On-Site

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

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	1.0000e-004	1.0500e-003	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005			0.2368	1.0000e-005	0.0000	0.2370
Total	**1.2000e-004**	**1.0000e-004**	**1.0500e-003**	**0.0000**	**2.5000e-004**	**0.0000**	**2.5000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**			**0.2368**	**1.0000e-005**	**0.0000**	**0.2370**

3.3 Excavation - 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					0.2030	0.0000	0.2030	0.1085	0.0000	0.1085			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0747	0.7730	0.5254	8.0000e-004		0.0452	0.0452		0.0416	0.0416			72.7413	0.0227	0.0000	73.3074
Total	**0.0747**	**0.7730**	**0.5254**	**8.0000e-004**	**0.2030**	**0.0452**	**0.2482**	**0.1085**	**0.0416**	**0.1501**			**72.7413**	**0.0227**	**0.0000**	**73.3074**

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	0.0684	2.2628	0.4563	6.9200e-003	0.1710	0.0112	0.1821	0.0469	0.0107	0.0576			676.8992	0.0361	0.0000	677.8024
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	8.6000e-004	7.1000e-004	7.5800e-003	2.0000e-005	1.7800e-003	1.0000e-005	1.8000e-003	4.7000e-004	1.0000e-005	4.9000e-004			1.7103	6.0000e-005	0.0000	1.7118

Total	**0.0692**	**2.2635**	**0.4638**	**6.9400e-003**	**0.1728**	**0.0112**	**0.1839**	**0.0474**	**0.0107**	**0.0581**			**678.6095**	**0.0362**	**0.0000**	**679.5142**

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					0.0792	0.0000	0.0792	0.0423	0.0000	0.0423			0.0000	0.0000	0.0000	0.0000
Off-Road	9.7500e-003	0.0423	0.5327	8.0000e-004		1.3000e-003	1.3000e-003		1.3000e-003	1.3000e-003			72.7412	0.0227	0.0000	73.3073
Total	**9.7500e-003**	**0.0423**	**0.5327**	**8.0000e-004**	**0.0792**	**1.3000e-003**	**0.0805**	**0.0423**	**1.3000e-003**	**0.0436**			**72.7412**	**0.0227**	**0.0000**	**73.3073**

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	0.0684	2.2628	0.4563	6.9200e-003	0.1710	0.0112	0.1821	0.0469	0.0107	0.0576			676.8992	0.0361	0.0000	677.8024
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	8.6000e-004	7.1000e-004	7.5800e-003	2.0000e-005	1.7800e-003	1.0000e-005	1.8000e-003	4.7000e-004	1.0000e-005	4.9000e-004			1.7103	6.0000e-005	0.0000	1.7118
Total	**0.0692**	**2.2635**	**0.4638**	**6.9400e-003**	**0.1728**	**0.0112**	**0.1839**	**0.0474**	**0.0107**	**0.0581**			**678.6095**	**0.0362**	**0.0000**	**679.5142**

3.4 Dewatering - 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

Mitigated Construction On-Site

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

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

3.5 Final Grading & Import - 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					6.2600e-003	0.0000	6.2600e-003	7.9000e-004	0.0000	7.9000e-004			0.0000	0.0000	0.0000	0.0000
Off-Road	9.0600e-003	0.1129	0.0402	1.3000e-004		3.8400e-003	3.8400e-003		3.5300e-003	3.5300e-003			12.1086	3.7700e-003	0.0000	12.2028
Total	**9.0600e-003**	**0.1129**	**0.0402**	**1.3000e-004**	**6.2600e-003**	**3.8400e-003**	**0.0101**	**7.9000e-004**	**3.5300e-003**	**4.3200e-003**			**12.1086**	**3.7700e-003**	**0.0000**	**12.2028**

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	0.0351	1.2009	0.2347	3.4000e-003	0.0805	5.3700e-003	0.0859	0.0221	5.1300e-003	0.0272			332.4235	0.0197	0.0000	332.9160
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	2.2000e-004	2.3300e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004			0.5263	2.0000e-005	0.0000	0.5267
Total	**0.0353**	**1.2011**	**0.2371**	**3.4100e-003**	**0.0811**	**5.3700e-003**	**0.0865**	**0.0223**	**5.1300e-003**	**0.0274**			**332.9498**	**0.0197**	**0.0000**	**333.4427**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.4400e-003	0.0000	2.4400e-003	3.1000e-004	0.0000	3.1000e-004			0.0000	0.0000	0.0000	0.0000
Off-Road	1.6200e-003	7.0200e-003	0.0594	1.3000e-004		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004			12.1086	3.7700e-003	0.0000	12.2028
Total	**1.6200e-003**	**7.0200e-003**	**0.0594**	**1.3000e-004**	**2.4400e-003**	**2.2000e-004**	**2.6600e-003**	**3.1000e-004**	**2.2000e-004**	**5.3000e-004**			**12.1086**	**3.7700e-003**	**0.0000**	**12.2028**

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	0.0351	1.2009	0.2347	3.4000e-003	0.0805	5.3700e-003	0.0859	0.0221	5.1300e-003	0.0272			332.4235	0.0197	0.0000	332.9160
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	2.2000e-004	2.3300e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004			0.5263	2.0000e-005	0.0000	0.5267
Total	**0.0353**	**1.2011**	**0.2371**	**3.4100e-003**	**0.0811**	**5.3700e-003**	**0.0865**	**0.0223**	**5.1300e-003**	**0.0274**			**332.9498**	**0.0197**	**0.0000**	**333.4427**

3.6 Paving - 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.7 Architectural Coating - 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					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0171	0.0924	0.2200	7.0000e-004	0.0535	8.1000e-004	0.0543	0.0143	7.6000e-004	0.0151			64.1129	3.5300e-003	0.0000	64.2010

Unmitigated	0.0171	0.0924	0.2200	7.0000e-004	0.0535	8.1000e-004	0.0543	0.0143	7.6000e-004	0.0151			64.1129	3.5300e-003	0.0000	64.2010

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	13.23	159.25	117.18	140,827	140,827
Total	13.23	159.25	117.18	140,827	140,827

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	0.0000	0.0000	0.0000

Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	2.8800e-003	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000			1.7000e-004	0.0000	0.0000	1.9000e-004
Unmitigated	2.8800e-003	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000			1.7000e-004	0.0000	0.0000	1.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8700e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000			1.7000e-004	0.0000	0.0000	1.9000e-004
Total	**2.8800e-003**	**0.0000**	**9.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**1.7000e-004**	**0.0000**	**0.0000**	**1.9000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8700e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000

Landscaping	1.0000e-005	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000			1.7000e-004	0.0000	0.0000	1.9000e-004
Total	**2.8800e-003**	**0.0000**	**9.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**1.7000e-004**	**0.0000**	**0.0000**	**1.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	29.5239	1.2200e-003	2.5000e-004	29.6296
Unmitigated	29.5239	1.2200e-003	2.5000e-004	29.6296

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 8.34037	29.5239	1.2200e-003	2.5000e-004	29.6296
Total		**29.5239**	**1.2200e-003**	**2.5000e-004**	**29.6296**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 8.34037	29.5239	1.2200e-003	2.5000e-004	29.6296
Total		**29.5239**	**1.2200e-003**	**2.5000e-004**	**29.6296**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1218	7.2000e-003	0.0000	0.3017
Unmitigated	0.1218	7.2000e-003	0.0000	0.3017

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.6	0.1218	7.2000e-003	0.0000	0.3017
Total		**0.1218**	**7.2000e-003**	**0.0000**	**0.3017**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.6	0.1218	7.2000e-003	0.0000	0.3017
Total		**0.1218**	**7.2000e-003**	**0.0000**	**0.3017**

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

B4 Greenhouse Gas Mitigation White Paper

Los Cerritos Wetlands Oil Consolidation and Restoration Project

Greenhouse Gas Mitigation White Paper

May 30, 2017

I. Introduction

The Greenhouse Gas (GHG) Assessment for the Los Cerritos Wetlands Oil Consolidation and Restoration Project ("Project") Environmental Impact Report (EIR) has identified a significant GHG impact. With implementation of GHG-reducing measures, the Project is able to mitigate its GHG impact to a less than significant level. Specifically, GHG emissions will be mitigated through a combination of: (1) Project design features; (2) Operational characteristics; and (3) Retiring GHG allowances and offsets per the AB 32 Cap-and-Trade regulation.

This white paper summarizes the findings of the GHG Assessment prepared for the Project by Greve & Associates, describes the unique California GHG regulations that mitigate certain GHG emissions, and identifies the mitigation measures that the Project proposes to implement to reduce its GHG impacts to less than significant.

II. Project EIR GHG Significance Threshold

The South Coast Air Quality Management District (SCAQMD) has adopted GHG significance thresholds for Stationary Sources, Rules and Plans. The threshold utilizes a tiered approach, with a screening significance threshold of 10,000 MT CO_2EQ for industrial projects. Because this project most closely resembles the types of industrial projects used by SCAQMD under its industrial definition, the 10,000 MT CO_2EQ per year will be used as the significance threshold for this project's EIR. The SCAQMD methodology recommends that total construction emissions be amortized over a 30-year period or the project's expected lifetime if it is less than 30 years.

III. What are the calculated GHG emissions from the project?

As detailed in the sections below the Project GHG emissions exceed the 10,000 MT CO_2EQ per year significance threshold cited above, thus requiring identification and implementation of feasible mitigation measures to reduce, if possible, the impact to less than significant.

a. Construction

Per the Project's GHG Assessment there are nine phases of construction with Table 1, below, showing the GHG emissions by phases and then annualized over 30 years in accordance with the EIR GHG significance threshold methodology.

TABLE 1. GHG Emissions for Construction (Metric Tons Per Year)

	CO2	CH4	N2O	CO2EQ
1. Demolition/Site Prep	202.6	0.1	0.0	203.8
2. Well Cellars	771.6	0.1	0.0	774.7
3. Process Equipment	1027.7	0.2	0.0	1031.7
4. Tank Construction	58.2	0.0	0.0	58.5
5. Off-Site Construction	331.7	0.1	0.0	333.2
6. Office/Warehouse	100.5	0.0	0.0	101.0
7. Wetlands Restoration	646.8	0.2	0.0	650.0
8. Turbine Commission	206.6	0.0	0.0	206.6
Subtotal	3,345.7	0.7	0.0	3,359.6
9. Landfill Excavation	414.6	0.0	0.0	415.6
Total Construction Emissions (Metric Tons)	3,760.3	0.7	0.0	3,775.2
Averaged Over 30 Years (Metric Tons Per Year)	125.3	0.0	0.0	125.8

b. Operations

Per the Project's GHG Assessment there are five areas of operational emissions with Table 2, below, showing the GHG emissions broken down for those areas. Those five areas consist of the oil production operations at two sites, Pumpkin Patch Site and LCWA Site; the Visitors Center on the Synergy Oil Field Site; and the power generation from both the gas turbines that will be constructed on the LCWA Site and the electrical power usage from SCE.

TABLE 2. GHG Emissions for Operations (Metric Tons Per Year)

	CO2	CH4	N2O	CO2EQ
Pumpkin Patch	603	0.8	0.0	621
Visitor Center	606	0.2	0.0	611
LCWA Site	499	1.2	0.0	529
Turbines @ LCWA	67,581	0.0	0.0	67,581
SCE Power	1,011	0.0	0.0	1,014
Total Operational Emissions	70,300	2	0	70,356

IV. What are the project design features incorporated in the Project that reduce GHG emissions?

There are a number of specific project design features that serve to reduce the project's GHG emissions. Project design features are those measures or design characteristics of the proposed project that the project proponent has voluntarily offered to implement which will reduce or avoid potentially significant environmental impacts. Compared to the relatively simpler process of only using electricity from SCE, these features come with an added cost of multi-millions of dollars, all borne by the project proponent. Absent implementation of these features, there would be significant increases in the GHG emissions that would otherwise result from the Project.

a. Microgrid Design and Solar PV

The Project proposes to include as part of its overall design and energy production strategy a microgrid and installation of solar PV modules. The decision to utilize a microgrid and solar PV modules as part of the project's energy system is a design feature which helps to reduce the GHG emissions from the proposed project and is voluntarily being offered and implemented by the project proponent.

The project intends to construct and operate its own microgrid by designing the production facilities in such a manner that the microgrid can capture energy produced by the oil production operations (i.e., natural gas) and redistribute that energy elsewhere in the system. This project design feature (i.e., the microgrid) controls integration of multiple energy sources and uses to maximize efficiency, environmental benefits, cost savings and reliability. The energy source components will include an SCE grid connection, four 4.5 MW gas turbines with heat recovery steam generators for cogeneration and potential generation of 18 MW, and renewable solar photovoltaic with generation potential of 158 kW. The microgrid system will provide all of the energy needed

for the facilities including drilling rigs and supporting equipment, pumps, two electric vehicle charging stations, and other equipment.

GHG reductions are provided by the microgrid because it allows for the real-time integration of clean and renewable energy sources with energy efficiency controls on energy using equipment. The microgrid can match the cleanest energy sources with the cleanest, most efficient energy uses.

b. **Turbine Use**

The Project's oil production process will result in natural gas production. In many oil fields, the natural gas produced as a byproduct of oil production is shipped off-site and used elsewhere for energy production, and electricity is purchased from SCE to run the oil field equipment. Instead of adopting that option, the Project decided to use gas turbines on-site to generate power to run the oil field equipment. The gas turbines would be fueled by the natural gas that is produced on-site. Use of that natural gas as a source of power to run the Project turbines is highly efficient as compared to other power options for oil production operations. This translates into a significant reduction in GHG emissions. Without the Project's use of turbines, the natural gas may be burned in water heaters and space heaters in homes, sold to a power company to combust and generate power (less efficiently), or combusted by other sources. The point is that without ability to capture and re-use the natural gas generated by the Project, the natural gas would be combusted offsite and added to the GHG emissions generated.

The manner in which the gas turbines help reduce overall GHG impacts is best explained by providing a comparison of the project without turbines against the proposed project with turbines. If the project proponent had not decided to include the turbines for electrical generation and natural gas re-capture, the project would have had to purchase power from SCE. SCE's generation of power to run the equipment for the Project would generate between 40,058 and 53,720 MTCO2EQ/Yr of GHG emissions as shown in the Project's GHG Assessment. In addition to the GHG emissions that would be generated by SCE's power generation, the Project will produce natural gas as a byproduct of oil production. That natural gas will not be used on site, and will be shipped offsite to be used to generate power elsewhere in the region or state. For example, natural gas produced by the Project could be placed into the regional natural gas distribution system, and used as a source of energy for domestic use, such as being burned in homes for space heating. Using CalEEMod, the estimate is that 90,255 MTCO2EQ/Yr of GHG emissions could be generated by space heating. Therefore, the total of GHG emissions that might be generated if the turbines were not used is 143,975 MTCO2EQ/Yr. This is more than twice as high as the emissions generated by the Project for power generation. This analysis is summarized in Table 3.

TABLE 3. Potential GHG Emissions Generated Without Turbines (MTCO2EQ/Yr)

	GHG Emissions
SCE Emissions	53,720
Residential Space Heating	90,255
Total Emissions	143,975

Proposed Project Power Emissions, including SCE	68,595
Percent Lower with Project	52%

Per this illustration, use of the turbines for the Project can provide a large GHG emission savings when compared to the alternative of using only SCE electricity and selling all the natural gas for use elsewhere.

c. **Turbine Selection**

Another project design feature of the Project that reduces GHG emissions is the selection of turbines that will produce substantially lower GHG and other emissions as compared to standard turbines. As an example, the Project may use the Mercury 50 model turbine from Solar Turbines, or similar. This example is summarized in Table 4.

TABLE 4. CO2 Emissions per Year- Project Turbine Alternatives

Turbine Manufacturer/Model	CO2 Emissions per Year (Metric Tons CO2/kW/yr)
Solar Turbines / Mercury 50	4.74
Solar Turbines / Mars 100	5.58
Benefit, Project Use of Low Emission Turbines	15% Cleaner

The emission-reducing benefits of the cleaner turbine can be even higher for other pollutants like NOx. Being mindful of balancing turbine cost with the priority of low GHG and other emissions, the Project will use turbines that produce low emissions and help reduce EIR-identified emission impacts below levels of significance.

d. **Turbine Design – Cogeneration System**

Both the United States Environmental Protection Agency and California Air Resources Board promote the pollution-reducing efficiency of cogeneration systems and encourage their expanded use.

Most oil production facilities of the type proposed do not utilize cogeneration. The use of cogeneration represents the utilization of advanced technology and an additional capital expense, and the proposed project has included the use of cogeneration as a project design feature to minimize greenhouse gas emissions.

The primary focus of the cogeneration process will be to heat oil and water, and cool gas as part of the oil production/separation process. The water reclaimed from this process is injected back into the oil production formation, and the gas and oil is sold for use and further processing, respectively. As the oil/water mixture

enters the separation chamber it is heated and chemicals may be applied to enhance separation. Gas coming off of this process is cooled to remove water and heavy hydrocarbons. Without cogeneration, natural gas would be combusted in a boiler to heat the oil/water mixture. With cogeneration, waste heat from the turbine exhaust is used to heat the oil/water mixture rather than being exhausted to the atmosphere. Again, without cogeneration, refrigeration units powered by electricity would be utilized. With cogeneration, the steam from the turbines powers the refrigeration units.

Therefore, without cogeneration additional greenhouse gases would be generated by the combustion of natural gas for heating and by electric consumption for cooling. These additional emissions were calculated. SPEC Services (email dated December 20, 2016) estimated that 41,160 kwh per day would be needed for cooling and that 480 mscfd (thousand standard cubic feet per day) of natural gas would need to be combusted for heating. Emission factors in CalEEMod (version 2016.3.1) were used to calculate the GHG emissions from electrical consumption. Emission factors from the U.S. Environmental Protection Agency ("Compilation of Air Emission Factors, AP-42", https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emission-factors) were used to compute emissions from the combustion of natural gas for heating. The results are presented in the Table 5 below, provides the additional greenhouse gas emissions for heating and cooling and the total additional emissions without cogeneration.

TABLE 5. Emissions With and Without Cogeneration (metric tons per year)

	CO2EQ
Additional Heating Emissions	9,541
Additional Cooling Emissions	4,804
Additional Emissions Without Cogen	14,345
Power Emissions with Cogen and SCE	68,595
Power Emissions Without Cogen	82,941
Percent Increase Without Cogen	21%

The table's data indicates that 14,343 metric tons per year of equivalent carbon dioxide (MTCO2EQ/Yr) would be generated if cogeneration was not used. Without cogeneration, an additional 21% of GHG emissions would be generated. Therefore, the use of cogeneration as a design feature of the Project results in a significant GHG emission savings.

e. Synergy Oil Field Curtailed Operations

Finally, Project partner Synergy Oil has committed to curtail its operations if the Project is approved and upon issuance of building permits which will significantly reduce GHG emissions. Once the proposed Project receives the necessary building permits, Synergy has committed as a project design feature to reduce the baseline oil

production by 75%. In addition, any trucking of oil off-site will be eliminated since all produced oil would be processed at the Pumpkin Patch Site and pumped through new pipes to refineries. To further reduce emissions from current oil operations, the Project provides for a phase out of the 53 existing oil wells as follows: within the first 20 years after project implementation (essentially measured from the issuance of the certificate of occupancy of the new office building on the Pumpkin Patch site), 50% of the existing wells would be removed. At the end of 40 years, the remaining 50% of wells would be removed from the existing Synergy Oil Field and City sites.

The GHG reductions associated with this commitment are shown as "Curtailed Emissions" in Table 7 below.

V. What are the operational characteristics that provide GHG emissions reductions?

There are a number of operational characteristics that affect the calculation of GHG emissions in different ways. Like the project design features described above, all of the operational characteristics described below provide important GHG reductions. These characteristics show how the Project reduces GHG and other pollutants by improving energy generation and consumption.

a. California Energy Supply Loading Order – Displacement of Higher Polluting Energy

As described in this white paper the Project's installation of a microgrid and turbines provides a major reduction in GHG emissions compared to comparable oil production facilities and supporting energy systems. An additional benefit comes from the system-wide energy supply loading order used by California. That loading order provides California with the cleanest, low GHG energy supply possible from all sources, tiering the supply preference from energy efficiency to renewable wind/solar to cleaner (and later dirtier) natural gas and other fossil fuel power plants, in that order.

In short this loading order means the energy provided by the Project's relatively low GHG microgrid and turbines will offset dirtier energy from California's energy system that would otherwise be used by the Project. California Energy Commission staff describe this benefit in part in a December 2016 analysis of GHG emissions and mitigation for a proposed power plant, per the following two quotes-

> "Given that natural gas-fired generation is needed for reliable system operation, the development and operation of new facilities to replace aging plants … is not only necessary for system and local reliability, such development serves to reduce GHG emissions from the electricity sector."

> "Any assessment of the impact of a new power plant on system-wide GHG emissions must begin with the understanding that electricity generation and demand must be in balance at all times; the energy provided by any new generation resource simultaneously displaces exactly the same amount of energy from an existing resource or resources. The GHG emissions produced by [the new plant] are thus not incremental additions to system-wide emissions, but are offset by reductions in GHG emissions from those generation resources that are displaced."

b. GHG Benefits of Project-Sourced Oil Supply Compared to Other Oil Fields

About 35 percent of the oil used in California comes from California oil and gas reservoirs. There are a number of strategic and environmental benefits associated with oil and gas that is sourced and used in California. These benefits include energy security, reliability, local sustainability (e.g., local source/local use), and reduced transport-related environmental risk and GHG emissions.

Another way California-sourced oil/gas reduces GHG emissions is via California's AB 32 regulations which include control of oil and gas production facilities. As an example, in March 2017 CARB approved the most comprehensive regulation worldwide for oil and gas production-related methane.

As exhibited in the following Table 6, according to CARB the carbon intensity for crude oil production and transport is significantly lower in the Project-associated oil field compared to oil supplied to California refineries from other areas of the state, United States, and world.

TABLE 6. Carbon Intensity of Crude Oil Production and Transport – California Refineries

Region of Oil Production	Carbon Intensity Value (gCO2e/MJ)
Seal Beach (Project-related oil field)	5.08
Average, All Oil Refined in California	11.98
Benefit, Seal Beach compared to All Refined Oil	57% Cleaner

VI. What is Cap-and-Trade and why is the project captured by this California program?

a. California Global Warming Solutions Act (AB 32)

Because the Project GHG emissions trigger a requirement for compliance with AB 32 regulations it is important to understand the applicable regulations and their relation to GHG mitigation. It is also important to understand that GHGs are not like other pollutants with localized impacts. GHG by its very name is an impact that is global in nature, so the focus of GHG mitigation often extends well beyond the local level.

The California Global Warming Solutions Act (a.k.a. AB 32) directs the California Air Resources Board ("CARB") to do the following:

- On or before June 30, 2007, CARB shall publish a list of discrete early action measures for reducing GHG emissions that can be implemented by January 1, 2010;
- By January 1, 2008, establish the statewide GHG emissions cap for 2020, based on CARB's calculation of statewide GHG emissions in 1990 (an approximately 25 percent reduction in existing statewide GHG emissions);

- Also by January 1, 2008, adopt mandatory reporting rules for GHG emissions sources that "contribute the most to statewide emissions" (Health & Safety Code § 38530);
- By January 1, 2009, adopt a scoping plan that indicates how GHG emission reductions will be achieved from significant GHG sources through regulations, market mechanisms, and other strategies;
- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures;
- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that will achieve the statewide GHG emissions limit by 2020; and
- On January 1, 2012, CARB's GHG emissions regulations become operative.
- On January 1, 2020, achieve 1990 levels of GHG emissions.

b. GHG Emissions Tracking and Reporting

CARB Mandatory Reporting Regulations (December 2007). Under AB 32, CARB promulgated regulations (https://www.arb.ca.gov/cc/reporting/ghg-rep/regulation/mrr-regulation.htm) to govern mandatory greenhouse gas emissions reporting for certain sectors of the economy, most dealing with approximately 94 percent of the industrial and commercial stationary sources of emissions. Regulated entities include electricity generating facilities, electricity retail providers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and industrial sources that emit over 10,000 metric tons of CO2 from stationary source combustion.

Because of these regulations, the Project is required to provide detailed annual reports to CARB about its facility-wide GHG emissions.

c. California Air Resources Board Cap-and-Trade Regulation

The AB 32 Scoping Plan identifies a Cap-and-Trade program as one of the strategies California will employ to reduce the greenhouse gas (GHG) emissions that cause climate change. Under Cap-and-Trade, an overall limit on GHG emissions from capped sectors will be established, and facilities subject to the cap will be able to trade permits (allowances) to emit GHGs. The program started on January 1, 2012, with an enforceable compliance obligation beginning with the 2013 GHG emissions for GHG emissions from stationary sources. Projects comply with Cap-and-Trade by using three methods: obtain allowances by purchasing them; obtain freely allocated industry assistance allowances, and; offsets. The petroleum and natural gas sector is covered for stationary and related combustion, process vents and flare emissions when the total emissions from these sources exceed 25,000 MTCO2e per year. Suppliers of natural gas and transportation fuels that generate combustion emissions are also covered by Cap-and-Trade.

Cap-and-Trade is designed to reduce the emissions from a substantial percentage of GHG sources (about 80% of GHG emissions will come under the program) within California through a market trading system. The system would reduce GHG emissions by reducing the available GHG "allowances" over time up until the year 2020. The program beyond the year 2020 has not been designed yet, but the program is intended to extend beyond that timeframe. Facilities are required to obtain an "allowance", either through purchasing at auction or through freely allocated "industry assistance" allowances from CARB, for each MTCO2e of GHG they emit. CARB issues the "industry assistance" allocations for free for a number of industries. These are based, in part, on a pre-defined "benchmark" of GHG emissions per unit of production.

For the oil recovery production sector, allowances are provided as a function of the amount of crude oil produced, thereby establishing, in effect, a level of efficiency in regard to GHG emissions for that sector. Other sectors are also allocated allowances based on their own respective activities. If an operation within the sector operates less efficiently than the specified "benchmark", thereby receiving an insufficient number of "free" allowances to cover their emissions, they would be required to implement efficiency improvements or purchase additional allowances from the CARB auction. Some availability of "offsets" is also included in the program which can be obtained from specific, allowable offset programs, such as GHG reduction projects related to forestry, livestock, and ozone depleting chemicals. Offsets outside of these three options are not allowed at this time. The first group of sectors began trading in allowances in 2012. That group includes the oil and gas sector as well as most stationary sources. A second group began the program in 2015, which would include the transportation fuels sector. CARB auctioned about 23 million allowances in November 2012 to be used for the 2013 year.

VII. Is the project able to fully mitigate its GHG emissions?

Yes. In complying with the Cap-and-Trade regulation the Project more than mitigates its GHG emissions. All of the additional Project design features and operational characteristics described above provide an even higher level of assurance for full GHG mitigation.

a. EIR Net Change in GHG Emissions

Table 7 shows the net change in GHG emissions in the Project's GHG Assessment after adjusting for the Project's commitment to reduce oil production from the existing 53 oil wells. The table shows that with the reduction from the Project's commitment to reduce and eliminate the operations of the 53 existing wells, 53,590 metric tons of GHG emissions will remain relative to the Project EIR's significance threshold of 10,000 metric tons.

TABLE 7. Change in GHG Emissions (MTCO2EQ/Yr)

Activity	First 20 Years	Years 20 to 40	After 40 Years
Operational Emissions	70,356	70,356	70,356
Annualized Construction Emissions	126	126	
New Annualized Emissions	70,482	70,482	70,360
Curtailed Emissions	16,871*	19,558*	22,211*
Project Emissions	53,611	50,924	48,145

*Within two years after issuance of the certificate of occupancy for the new office building on Pumpkin Patch, the project will reduce baseline oil production by 75% from existing wells. This will result in a reduction of 16,871 MTCO2EQ/year. With the phase out of 50% of the existing 53 wells by year 20, the cumulative reduction is 19,558 MTCO2EQ year. After 40 years from issuance of the certificate of occupancy, GHG emissions from all 53 of the existing wells will be curtailed.

b. Regulatory Mitigation – AB 32 and Cap-and-Trade

As described above California's AB 32 GHG mitigation program includes a Cap-and-Trade regulation threshold of 25,000 metric tons of GHG. Because the Project exceeds that threshold, it must comply with CARB's Cap-and-Trade regulation. In addition, the Project may be subject to additional reporting requirements and GHG reduction and trading requirements as these regulations continue to evolve.

i. California Air Resources Board AB 32 Cap-and-Trade Allowances/Offsets

Because the Project will comply with AB 32 and CARB's Cap-and-Trade regulation it will be required to retire GHG allowances or offsets equal to the Project's GHG emissions. Retiring the GHG allowances or offsets means the Project has to acquire them through a number of means carefully controlled by CARB, including the purchase of allowances in CARB-controlled auctions with variable and increasing cost, according to projections and decreasing supply.

Regarding the amount of required allowances/offsets the Cap-and-Trade regulation uses measured facility-wide GHG emissions as annually reported to CARB. Per Table 2 above the annual measured operational/facility-wide GHG emissions are calculated to be 70,356 metric tons. (Note that this is worst case with turbines at 100%. In many years the turbines are projected to reduce output, so impact and mitigation will be lower.) For comparison, the annual GHG emissions calculated per EIR protocols shows GHG emissions of 53,611 metric tons, which accounts for both construction and operational emissions. This means the Cap-and-Trade regulation will require the Project to mitigate GHG emissions beyond the amount identified per EIR protocols and in the Project EIR.

TABLE 8. CARB Cap-and-Trade GHG Mitigation Compared to Project EIR GHG Emissions

GHG Emission/Mitigation Source	CO2 Emissions/Mitigation (Metric Tons CO2EQ/Year)
EIR Construction and Operations GHG Emissions	53,611
CARB Cap-and-Trade Mitigation	(70,356)
Excess GHG Mitigation with Cap-and-Trade	(16,745)

Thus, CARB's Cap-and-Trade regulation provides GHG mitigation beyond the GHG emissions amount identified in the Project EIR GHG Assessment.