Air Quality Assessment for the West Ontario Commerce Center

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TABLE OF CONTENTS

1.0 Existing Air Quality 1

1.1 Project Description 1

1.1 Existing Sensitive Receptors 1

1.2 Local, State, and Federal Air Quality Agencies 1

1.3 Criteria Pollutants, Health Effects, and Standards 4

1.4 Attainment Designations 4

1.5 Air Quality Management Plan (AQMP) 6

1.6 Climate 6

1.7 Monitored Air Quality 7

1.8 Existing Emissions 8

2.0 Potential Air Quality Impacts 10

2.1 Thresholds of Significance 10

2.1.1 Regional Air Quality 10

2.1.2 Localized Significance Thresholds 10

2.2 Construction Emissions 12

2.2.1 Regional Construction Impacts 12

2.2.2 Localized Construction Air Impacts 13

2.2.3 Diesel Particulate Matter Emissions During Construction 14

2.3 Operational Impacts 15

2.3.1 Regional Operational Impacts 15

2.3.2 Local Air Quality Impacts Due to Operation 17

2.3.3 Local Air Quality at Intersections 18

2.3.4 Potential for Odors 20

2.3.5 Compliance with Air Quality Planning 21

3.0 Mitigation Measures 23

3.1 Short-Term Impacts 23

3.2 Long-Term Impacts 23

4.0 Unavoidable Significant Impacts 24

4.1 Short-Term Impacts 24

4.2 Long-Term Impacts 24

LIST OF TABLES

Table 1 Designations of Criteria Pollutants for the SCAB....4
Table 2 Air Quality Levels Measured at the Ontario[1] Station....8
Table 3 SCAQMD Regional Pollutant Emission Thresholds of Significance....10
Table 4 Localized Significance Thresholds at the Nearest Receptors....11
Table 5 Peak Construction Emissions for Each Phase....13
Table 6 On-Site Emissions By Construction Activity....14
Table 7 Project Operational Emissions (pounds per day)....16
Table 8 Comparison of Project Emissions with SCAB Emissions....17
Table 9 On-Site Emissions by Operations (2023)....18
Table 10 Intersection Volumes (Vehicles Per Hour)....20

LIST OF EXHIBITS

Exhibit 1 Proposed Land Use Plan....2
Exhibit 2 Ambient Air Quality Standards....5

1.0 EXISTING AIR QUALITY

1.1 Project Description

The proposed West Ontario Commerce Center Specific Plan includes two (2) Planning Areas (PAs) totaling approximately 120 net acres and will allow a maximum development of 555,505 square feet of Business Park use and 2,350,005 square feet of Industrial use with a total development of 2,905,510 square feet (Exhibit 1). Approximately 100,000 square feet of the industrial use was assumed to be refrigerated warehousing. The proposed Business Park use will accommodate industrial-serving commercial and office uses, very light industrial uses, and allow multi-tenant buildings and single-tenant buildings. The proposed Industrial use will allow storage and warehousing use. The proposed Industrial use will also allow the development of e-commerce use, distribution, and a wide-range of manufacturing and assembly uses. Business Park uses are depicted as Future Development, on the northern portion of the site.

The project will be developed in two phases. The first phase of development includes the development of two industrial buildings (totaling up to 2,350,005 square feet) and surface parking for each building. The second phase of development includes the Business Park and commercial uses for the northern portion of the site along the south side of Eucalyptus Avenue with Business Park and commercial uses oriented towards Eucalyptus Avenue.

1.1 Existing Sensitive Receptors

Land uses that are considered sensitive receptors for air quality impacts include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. There are a few rural residences located to the west of the project along Merrill Avenue approximately 0.2 miles from the site. Single family homes are also located approximately 0.4 miles southeast of the project site. These homes lie in the southeast quadrant of Merrill Avenue and South Archibald Avenue.

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.

Exhibit 1 - Proposed Land Use Plan

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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.

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 2 presents the state and national ambient air quality standards.

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.

Exhibit 2 - 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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1.5 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 SCAQMD Governing Board adopted the 2016 AQMP on March 3, 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 2016 Air Quality Management Plan", March 2017). 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 58% of VOC emissions, 88% of NOx emissions, 35% of direct PM2.5 emissions, 44% of SOx emissions, and 95% of CO emissions. Area sources (e.g., architectural coatings, residential water heaters, and consumer products) account for approximately 37% of VOC emissions and 42% of direct $PM_{2.5}$ emissions. Point sources (e.g., chemical manufacturing, petroleum production, and electric utilities) account for approximately 50% of SOx emissions. Entrained road dust account for approximately 13% 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 Southwest San Bernardino Valley Source-Receptor Area (SRA) 33. The Ontario monitoring station is the representative facility for SRA 33. 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 Ontario station include ozone, carbon monoxide (CO), PM10, nitrogen dioxide, and sulfur dioxide. The air quality data monitored from 2014 to 2016 are presented in Table 2. 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 Ontario[1] Station

Pollutant	California Standard	National Standard	Year	Max. Level	Days State Standard Exceeded	Days National Standard Exceeded
Ozone	0.09 ppm	None	2016	0.127	20	1
1 Hour			2015	0.136	30	2
Average			2014	0.123	22	0
Ozone	0.070 ppm	0.08 ppm[4]	2016	0.092	29	26
8 Hour			2015	0.098	55	53
Average			2014	0.099	56	53
CO	9.0 ppm	9 ppm	2016	n/a	n/a	n/a
8 Hour			2015	n/a	n/a	n/a
Average			2014	n/a	n/a	n/a
Fine	None	35 μg/m^3	2016	41.6	n/a	2
Particulates			2015	52.7	n/a	10
$PM_{2.5}$			2014	n/a	n/a	n/a
(24 Hour)						
Fine	13 μg/m^3	12 μg/m^3	2016	n/a	n/a	n/a
Particulates			2015	14.5	Exceeded	Exceeded
$PM_{2.5}$			2014	n/a	n/a	n/a
(Annual)						
Respirable	50 μg/m^3	150 μg/m^3	2016	n/a	n/a	n/a
Particulates			2015	n/a	n/a	n/a
PM_{10}			2014	67.0	3	0
24 Hour Average						
Respirable	20 μg/m^3	35 μg/m^3	2016	n/a	n/a	n/a
Particulates			2015	n/a	n/a	n/a
PM_{10}			2014	n/a	n/a	n/a
AAM						

1. Data for Ozone from the Pomona station.
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 2/22/2017

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

1.8 Existing Emissions

A minimal amount of air emissions is currently generated on the site. Currently the site contains approximately 1,400 cows. These cows generate VOC and PM emissions.

According to the "Guidelines for Calculating Emissions from Dairy and Poultry Operations," (SCAQMD, December 2016), VOC emissions from milking cows is 12.8 pounds per cow per year and 3.56 pounds per cow per year for PM emissions. This results in 49.10 lbs. of VOC per day and 13.65 lbs. per day for PM emissions. (A calculation sheet is provided in the Appendix.)

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 3 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 is up to the individual lead agencies to determine if the SCAQMD thresholds are appropriate for their projects.

Table 3 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://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds).

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.

The project is located in Source Receptor Area (SRA) 33. The nearest existing sensitive land use is a single residence just south of the project about 100 feet from the edge of the project and about 200 feet from any significant construction activity. The second closest residents are west of the project site, and are about 1,300 feet from any significant construction area. Table 4 summarizes the LSTs for construction and operation. The thresholds listed in Table 4 are based on a 5-acre site. A project with daily emission rates below the thresholds during construction and operation is considered to have a less than significant effect on local air quality.

Table 4 Localized Significance Thresholds at the Nearest Receptors

	Localized Significance Threshold (lbs./day)			
Description	**NOx**	**CO**	**PM10**	**PM2.5**
Construction Activities (Closest)	352	4,424	70	18
Second Closet	677	22,563	259	127
Operation (Closest)	352	4,424	17	4
Second Closest	677	22,563	63	31

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 localized impact of construction emission impacts is also assessed.

2.2.1 Regional Construction Impacts

Emissions during the phases of construction were calculated using the latest version of the California Emissions Estimator Model (CalEEMod version 2016.3.1). 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 EMFAC2014 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. The appropriate number of acres, duration of each construction phase, and other key elements of the project were input into the CalEEMod to generate the estimate of emissions. It was also assumed that the overlap between construction phases would be minimal. No mitigation is assumed for this analysis. CalEEMod printouts for each phase are included in the Appendix.

The CalEEMod program was used to project the peak daily emissions from each phase of construction. For construction, the project will be developed in three phases; Phase 1A which includes Building 1, Phase 1B which includes Building 2, and Phase 2 which is the Business Park. The construction of Hellman Avenue from Merrill Avenue to Eucalyptus was assumed to occur in Phase 1A. General construction dates were provided by the project applicant's consultant (MIG/Hogle-Ireland, "West Ontario Commerce Center Specific Plan EIR Request for Information," dated April 14, 2017). Phase 1A construction would occur from January 2018 to December 2018, with Phase 1B occurring the following year. Phase 2 construction would occur from January 2020 through January 2023. Since there is no overlap between the three construction phases each were modeled separately.

The SCAQMD regional thresholds are presented in terms of pounds of emissions per day. Therefore, the highest daily construction emissions are of most concern. These emissions are presented below and represent a worst-case scenario. No mitigation is included in the emission projections. 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

	Pollutant Emissions (Pounds Per Day)					
Activity	**ROG**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Phase 1A	**873.6**	75.0	76.1	0.2	20.8	12.4
Phase 1B	**873.4**	69.5	69.7	0.2	20.7	12.2
Phase 2	**291.8**	63.4	64.5	0.2	15.1	5.4
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Phase Exceed Threshold?	***Yes***	*No*	*No*	*No*	*No*	*No*

As can be seen in Table 5 ROG emissions will exceed the SCAQMD thresholds. None of the other pollutants will exceed the regional thresholds. ROG emissions are projected to exceed the SCAQMD thresholds only during the painting phase of construction. The CalEEMod is extremely conservative when assessing painting emissions. For example, it assumes that nearly the entire building will be painted both inside and out. This is rarely the case for the warehouse and business offices. Only painting portions of the building and/or reducing the VOC (volatile organic compounds) in the paint can reduce emissions substantially. Without any limits or mitigation, the project could exceed the SCAQMD ROG thresholds and a significant impact would occur. Mitigation is proposed in Section 3.1 that reduces ROG emissions to an acceptable level.

2.2.2 Localized Construction Air Impacts

The on-site construction emissions were calculated utilizing CalEEMod. The emissions presented in Table 6 are those that would be emitted from construction activity for the project site. The total construction emissions are compared to the Localized Significance Thresholds (LSTs) described in Section 2.1.2. Worksheets showing the emission calculations are presented in the appendix.

Table 6 On-Site Emissions By Construction Activity

Activity	Daily Emissions (lbs./day) NOx	CO	PM10	PM2.5
Closest Residence				
Phase 1A	75.0	76.1	20.8	12.4
Phase 1B	69.5	69.7	20.7	12.2
Phase 2	63.4	64.5	15.1	5.4
LST Thresholds	352	4,424	70	18
Exceed Threshold?	*No*	*No*	*No*	*No*
Second Closest Residence				
Phase 1A	75.0	76.1	20.8	12.4
Phase 1B	69.5	69.7	20.7	12.2
Phase 2	63.4	64.5	15.1	5.4
LST Thresholds	677	22,563	259	127
Exceed Threshold?	*No*	*No*	*No*	*No*

None of the emissions exceed the LST thresholds. Therefore, nearby residences will not be adversely affected during construction. Local air quality impacts during construction will be less than significant.

2.2.3 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.

Impacts from toxic substances are related to cumulative exposure and are assessed over a 70-year period. Cancer risk is expressed as the maximum number of new cases of cancer projected to occur in a population of one million people due to exposure to the cancer-causing substance over a 70-year lifetime (California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Guide to Health Risk Assessment.) Grading for the project, when the peak diesel exhaust emissions would occur, is expected to take less than 4 months. Construction for Phases 1A and 1B, when construction is most intense, is expected to be completed in about 2 years. Construction of the Business Park could be spread out over 3 years. Because of the relatively short duration of construction compared to a 70-year lifespan, diesel emissions resulting from the construction of the project are not expected to result in a significant impact.

2.3 Operational Impacts

2.3.1 Regional Operational Impacts

Operational air pollutant emissions due to the project were calculated using the CalEEMod program. The program calculated operational emissions for the two phases of the proposed project. Emission sources include cars and trucks going to and from the site, natural gas for space heating, painting, and other miscellaneous sources. For the warehousing portion of the project, trucks will be a major component of the generated traffic. Stantec determined truck percentages and provided that data for use in this air quality analysis ("Table 5 Trip Generation Calcs," an Excel spreadsheet, dated February 2017). The Stantec traffic breakdown for the warehousing portion of the project (Phase 1) is as follows; passenger vehicles are 79.57%, large 2-axle trucks are 3.46%, 3-axle trucks are 4.64%, and 4-axle trucks are 12.33%. These truck percentages were converted to the categories used in CalEEMod, and a spreadsheet is included in the appendix showing the results.

CalEEMod was used to calculate the maximum daily emissions except for the emissions from the two phases of the project. Output files from the CalEEMod program are presented in the appendix.

Table 7 presents the results of the emission projections showing the maximum daily air pollutant emissions. Three time frames are presented. The first is 2020 which is when Phase 1 (warehousing) is anticipated to open. In 2023, Phase 2, the business park, is expected to open. Finally, the year 2040 is examined as a future horizon year.

Table 7 Project Operational Emissions (pounds per day)

	ROG	NOx	CO	SOx	PM10	PM2.5
Opening Year for Phase 1 (2020)						
Phase 1 Operations	62.6	253.0	207.5	1.1	73.9	21.1
Less Cow Emissions	49.1	0.0	0.0	0.0	13.7	13.7
Net Emissions	13.5	**253.0**	207.5	1.1	60.2	7.4
Opening Year for Phase 2 (2023)						
Phase 1 Operations	56.7	145.1	155.9	1.0	73.0	20.2
Phase 2 Operations	22.8	47.2	132.7	0.5	47.9	13.1
Total Operations	79.5	192.3	288.6	1.5	121.0	33.3
Less Cow Emissions	49.1	0.0	0.0	0.0	13.7	13.7
Net Emissions	30.4	**192.3**	288.6	1.5	107.3	19.6
Full Operation (2040)						
Phase 1 Operations	52.3	121.7	91.5	0.8	72.5	19.8
Phase 2 Operations	18.3	38.1	71.4	0.4	47.7	12.9
Total Operations	70.6	159.8	162.9	1.3	120.2	32.7
Less Cow Emissions	49.1	0.0	0.0	0.0	13.7	13.7
Net Emissions	21.5	**159.8**	162.9	1.3	106.5	19.0
SCQAMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Exceed Thresholds	*No*	***Yes***	*No*	*No*	*No*	*No*

The data in Table 7 show that the change in project emissions are above the SCAQMD thresholds for NOx. The other pollutants are below the SCAQMD thresholds and will not be an impact. NOx emissions are due almost exclusively to the motor vehicles, and most notably, the trucks associated with the project. Mitigation measures to reduce NOx emissions are discussed in Section 3.2.

Table 8 compares the project emissions (2023) due to the project to the projected basinwide emissions from the 2016 AQMP. This comparison shows that the project would result in a net increase in emissions that is insignificant in comparison to basinwide emissions.

Table 8 Comparison of Project Emissions with SCAB Emissions

	Pollutant Emissions (tons/day)					
	ROG	NOx	CO	SOx	PM10	PM2.5
Project Emissions (2023)	0.0152	0.0961	0.1443	0.0008	0.0536	0.0098
2031 South Coast Air Basin*	345	214	1,188	18	N/A	65
Project as Percentage of Basin	0.004%	0.045%	0.012%	0.004%	N/A	0.015%

*Table 3-4E Final Draft 2016 AQMP

2.3.2 Local Air Quality Impacts Due to Operation

The on-site operational emissions were calculated utilizing CalEEMod. An estimate of vehicle traffic travel length was made for the business park and warehousing areas. It was estimated that a one-way trip on-site from the public street to a parking space would typically not exceed 0.4 miles for the warehousing area and 0.2 miles for the business park. The emissions presented in Table 9 are those that would be emitted from activity within the project site. Since 2023 have the highest emissions, this year was analyzed. The total on-site operational emissions are compared to the Localized Significance Thresholds (LSTs) described in Section 2.1.2.

Table 9 On-Site Emissions by Operations (2023)

Activity	Daily Emissions (lbs./day) NOx	CO	PM10	PM2.5
Closest Residence				
Phase 1 Operations	85.5	37.3	2.6	0.9
Phase 2 Operations	23.7	26.9	1.0	0.3
Total Emissions	109.1	64.2	3.5	1.2
LST Thresholds	352	4,424	17	4
Exceed Threshold?	*No*	*No*	*No*	*No*
Second Closest Residence				
Phase 1 Operations	85.5	37.3	2.6	0.9
Phase 2 Operations	23.7	26.9	1.0	0.3
Total Emissions	109.1	64.2	3.5	1.2
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 Local Air Quality at Intersections

To assess local air quality impacts, the peak hour traffic volumes are related to the Ambient Air Quality Standards, which are the significance threshold for this type of impact. Because the area is in attainment of the CO state standards, exceedances of these standards, 20 ppm for 1-hour carbon monoxide (CO) concentration levels and 9 ppm for 8-hour CO concentration levels, would result in a significant local air quality impact. The air basin has reached attainment of the CO air quality standards and CO analysis is generally no longer required by the SCAQMD.

CO modeling was originally performed at four intersections considered to be the worst-case intersections in the South Coast Air Basin as part of the 2003 AQMP to demonstrate attainment of the federal CO standards. This CO modeling is included in the EPA approved 2005 SCAB CO Redesignation Request. The four intersections included, Wilshire at Veteran, Sunset at Highland, La Cienega at Century, and Long Beach at Imperial. The highest peak a.m. traffic volume was 8,062 (occurred at Wilshire and Veteran), while the highest peak p.m. volume was 8,674 (occurred at La Cienega and Century). Table 4-10 of Appendix V, Section 4 of the 2005 SCAB CO Redesignation Request shows that the modeled 1-hour average concentrations at these four intersections for 2002 conditions are below the 8-hour standard

of 9 ppm. The highest modeled 1-hour average concentration of 4.6 ppm took place at the Wilshire and Veteran intersection, and is well below the State standard of 20 ppm and the Federal standard of 35 ppm.

Traffic data prepared for the project (Stantec, June 2017) provides a.m./p.m. peak traffic volumes for the horizon year 2040. Only the total two-way link volumes are reported by Stantec. The link volumes are provided in Table 10. The data indicate that all of the intersections will be well below the intersection volumes used for the Redesignation Request. The highest link volume will be 8,172 vehicles per hour, which is below the highest peak p.m. volume of 8,674. Therefore, the impact on air pollution at intersections will be less than significant.

Roads with substantial diesel truck volumes have the potential to result in particulate hot spots. The FHWA has published guidance on performing a qualitative analysis of particulate hot spots and established a screening threshold for potential impacts. The FHWA guidance considers a road with an average daily diesel truck volume of 10,000 or less does not have the potential to result in a particulate hot-spot.

The only roadway in the project study area with an average daily diesel truck volume greater than 10,000 is SR-60. Current Caltrans data shows that there are approximately 18,000 daily diesel trucks on SR-60 through the project area. A fair amount of project generated traffic will utilize the freeway. The project will generate less than 1,900 heavy diesel truck trips per day. Even if there were particulate hotspots along SR-60 where the particulate ambient air quality standards are exceeded, the project would not considerably contribute to the emissions causing the exceedance. Therefore, the project will not result in a significant impact due to particulate hotspots.

Table 10 Intersection Volumes (Vehicles Per Hour)

Roadway	Extent	Baseline A.M.	Baseline P.M.	Project A.M.	Project P.M.	Base + Project A.M.	Base + Project P.M.
Walnut Ave	Euclid to Grove	992	1,167	2	2	994	1,169
Riverside Ave	Euclid to Grove	1,597	2,044	3	2	1,600	2,046
Riverside Ave	Turner to Haven	890	1,542	5	11	895	1,553
Chino Ave	Euclid to Grove	984	1,077	3	2	987	1,079
Schaefer Ave	Euclid to Grove	278	339	0	1	278	340
Grand Ave	Roswell to Ramona	2,307	3,819	145	299	2,452	4,118
Grand Ave	Mountain to Euclid	1,618	2,119	202	336	1,820	2,455
Edison Ave	Haven to Milliken	3,047	4,690	228	183	3,275	4,873
Edison Ave	Milliken to I-15	4,636	6,492	228	183	4,864	6,675
Eucalyptus Ave	Grove to Project Site	137	173	389	366	526	539
Merrill Ave	Grove to Project Site	1,272	1,367	272	291	1,544	1,658
Limonite Ave	Sumner to Hamner	6,379	7,954	221	218	6,600	8,172
Limonite Ave	I-15 Ramps	5,554	6,821	121	65	5,675	6,886
Euclid Ave	SR-60 Ramps	2,823	3,001	57	60	2,880	3,061
Euclid Ave	Riverside to Chino	2,721	3,080	94	79	2,815	3,159
Euclid Ave	Merrill to Pine	2,694	2,849	103	119	2,797	2,968
Grove Ave	SR-60 Ramps	2,191	2,202	89	94	2,280	2,296
Grove Ave	Riverside to Chino	618	745	249	116	867	861
Archibald Ave	SR-60 Ramps	3,171	3,497	203	93	3,374	3,590
Archibald Ave	Riverside to Chino	3,393	3,759	266	212	3,659	3,971
Archibald Ave	Edison to Eucalyptus	5,142	5,873	498	404	5,640	6,277
Archibald Ave	Limonite to Schleisman	5,866	6,881	92	86	5,958	6,967
Hamner Ave	Limonite to Schleisman	2,615	3,538	38	35	2,653	3,573

2.3.4 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.

Odor complaints would be expected to not be an issue with the proposed facilities. Trucks will operate on-site, but generally, the SCAQMD receives few complaints regarding truck operations. The project site is located at some distance from residential areas. This distance helps to disperse any odorous material that might 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.

2.3.5 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.

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.

3.0 MITIGATION MEASURES

3.1 Short-Term Impacts

During each of the construction phases, ROG emissions were projected to be above the regional significance threshold. CalEEMod may be overly aggressive in estimating painting emissions. It calculates that most of the buildings will be completely painted inside and out, which usually is not the case for new warehousing and office park buildings. A mitigation measure is provided below that bring the emissions to below the thresholds. It reduces the volatile organic content (VOC) of the paint and puts a limit on the area of the buildings that can be painted. Finally, it should be noted that each warehouse building is projected to be constructed over a 1 year period whereas the office park will be constructed over a 3 year period. The painting for the warehouses will be compressed into fewer days than for the office park, and that results in a higher building area that can be painted for the office park without exceeding the thresholds.

AQ-1: Use low VOC paints and restrict area to be painted. Only paints with a volatile organic content (VOC) of 50 grams per liter (g/l) or less will be used. Additionally, the area that can be painted combined inside and out will not exceed 150,000 square feet (sf) for Phase 1A, 150,000 sf for Phase 1B, and 700,000 sf for Phase 2. A Painting Plan shall be provided to the City indicating which areas will be painted and the total area to be painted for each phase. The paints to be used along with their VOC ratings also need to be included in the Painting Plan. This will bring the ROG emissions down to 66 pounds per day for each construction phase (CalEEMod sheets provided in Appendix). Therefore, with implementation of this mitigation measure the short-term emissions of ROG will be reduced to a level of less than significant.

3.2 Long-Term Impacts

Long-term regional impacts are projected for NOx emissions. NOx emissions are due primarily to the vehicular traffic, most notably truck traffic. The following mitigation measures are recommended. In general, the effectiveness of the measures cannot be quantified. They will reduce emissions to an extent, but the resultant emissions will still exceed the significance thresholds.

AQ-2: General NOx reduction measures.

- Encourage all fleet vehicles to conform to 2010 air quality standards or better. Users shall maintain compliance through normal course of business.
- Any spaces utilizing refrigerated storage, including restaurants and food or beverage stores, shall provide an electrical hookup for refrigeration units on delivery trucks. Trucks incapable of utilizing the electrical hookup for powering refrigeration shall be prohibited from accessing the site.
- Install catalytic converters on gasoline-powered equipment.

- Electrical powered equipment should be utilized in-lieu of gasoline-powered engines where technically feasible.
- Utilize electrical equipment for landscape maintenance.
- All forklifts shall be electric or natural gas powered.
- Prohibit idling of trucks for periods exceeding three minutes

4.0 UNAVOIDABLE SIGNIFICANT IMPACTS

4.1 Short-Term Impacts

With the mitigation measures identified above, all emissions will be below significance threshold levels. There will not be any short-term significant impacts.

4.2 Long-Term Impacts

The analysis indicates that the project will exceed the regional emissions for NOx due to the operation of the proposed project. Even with mitigation measures imposed on the project, the project will continue to exceed regional significance threshold levels.

APPENDIX

Air Pollutant Emissions from Dairy Operations				
Project:	**WOCC**			
Data and Assumptions				
Number of cows:	1,400			
Type of cows:	Milking cows			
Type of disposal:	None			
	VOC	PM	NH3	Units
Emission Factors	12.8	3.56	74.0	lbs/head/year
Emissions	17,920	4,984	103,600	lbs/year
Emissions	49.1	13.7	283.8	lbs/day
Emissions	8.13	--	--	MT/YR
GWP	25	0	0	
GHG Emissions	203.2	0	0	MTCO2EQ/YR

WOCC - Phase 1A 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
Unrefrigerated Warehouse-No Rail	1,187.20	1000sqft	27.25	1,187,200.00	0
Other Asphalt Surfaces	167.70	1000sqft	3.85	167,700.00	0
Parking Lot	1,026.00	1000sqft	23.55	1,026,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**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 - Includes construction of Hellman Avenue

Construction Phase - Construction phases scaled down to fit proposed 1 year construction schedule.

Grading - Approximate acreage for Phase 1A plus Hellman Ave.

Demolition -

Construction Off-road Equipment Mitigation - Potential mitigation measures; watering 3 times daily, Tier IV construction equipment.

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	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	75.00	13.00
tblConstructionPhase	NumDays	1,110.00	196.00
tblConstructionPhase	NumDays	70.00	12.00
tblConstructionPhase	NumDays	110.00	19.00
tblConstructionPhase	NumDays	75.00	13.00
tblConstructionPhase	NumDays	40.00	7.00
tblConstructionPhase	PhaseEndDate	12/23/2033	12/28/2018
tblConstructionPhase	PhaseEndDate	4/16/2032	11/22/2018
tblConstructionPhase	PhaseEndDate	10/5/2018	1/16/2018
tblConstructionPhase	PhaseEndDate	5/29/2020	2/21/2018
tblConstructionPhase	PhaseEndDate	2/18/2033	12/11/2018
tblConstructionPhase	PhaseEndDate	3/22/2019	1/25/2018

tblConstructionPhase	PhaseStartDate	2/19/2033	12/12/2018
tblConstructionPhase	PhaseStartDate	5/30/2020	2/22/2018
tblConstructionPhase	PhaseStartDate	3/23/2019	1/26/2018
tblConstructionPhase	PhaseStartDate	4/17/2032	11/23/2018
tblConstructionPhase	PhaseStartDate	10/6/2018	1/17/2018
tblGrading	AcresOfGrading	47.50	55.00
tblProjectCharacteristics	OperationalYear	2018	2020

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	873.5713	74.9629	76.0554	0.2407	18.2675	2.6355	20.8460	9.9840	2.4247	12.3563	0.0000	24,587.2283	24,587.2283	1.9518	0.0000	24,632.8778
Maximum	**873.5713**	**74.9629**	**76.0554**	**0.2407**	**18.2675**	**2.6355**	**20.8460**	**9.9840**	**2.4247**	**12.3563**	**0.0000**	**24,587.2283**	**24,587.2283**	**1.9518**	**0.0000**	**24,632.8778**

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	873.3023	54.4855	76.2973	0.2407	13.6738	0.5911	14.2649	3.9263	0.5690	4.2519	0.0000	24,587.2283	24,587.2283	1.9518	0.0000	24,632.8778
Maximum	**873.3023**	**54.4855**	**76.2973**	**0.2407**	**13.6738**	**0.5911**	**14.2649**	**3.9263**	**0.5690**	**4.2519**	**0.0000**	**24,587.2283**	**24,587.2283**	**1.9518**	**0.0000**	**24,632.8778**

	ROG	NOx	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	**0.03**	**27.32**	**-0.32**	**0.00**	**25.15**	**77.57**	**31.57**	**60.67**	**76.54**	**65.59**	**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	27.0585	2.2600e-003	0.2447	2.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004		0.5211	0.5211	1.4000e-003		0.5560
Energy	0.0719	0.6537	0.5491	3.9200e-003		0.0497	0.0497		0.0497	0.0497		784.4513	784.4513	0.0150	0.0144	789.1129
Mobile	4.2780	24.1880	61.4422	0.2185	18.1754	0.2256	18.4009	4.8634	0.2118	5.0752		22,209.5728	22,209.5728	1.1209		22,237.5946
Total	**31.4084**	**24.8440**	**62.2360**	**0.2224**	**18.1754**	**0.2761**	**18.4515**	**4.8634**	**0.2624**	**5.1258**		**22,994.5451**	**22,994.5451**	**1.1373**	**0.0144**	**23,027.2634**

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	27.0585	2.2600e-003	0.2447	2.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004		0.5211	0.5211	1.4000e-003		0.5560
Energy	0.0719	0.6537	0.5491	3.9200e-003		0.0497	0.0497		0.0497	0.0497		784.4513	784.4513	0.0150	0.0144	789.1129
Mobile	4.2780	24.1880	61.4422	0.2185	18.1754	0.2256	18.4009	4.8634	0.2118	5.0752		22,209.5728	22,209.5728	1.1209		22,237.5946
Total	**31.4084**	**24.8440**	**62.2360**	**0.2224**	**18.1754**	**0.2761**	**18.4515**	**4.8634**	**0.2624**	**5.1258**		**22,994.5451**	**22,994.5451**	**1.1373**	**0.0144**	**23,027.2634**

	ROG	NOx	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	1/16/2018	5	12	
2	Site Preparation	Site Preparation	1/17/2018	1/25/2018	5	7	
3	Grading	Grading	1/26/2018	2/21/2018	5	19	
4	Building Construction	Building Construction	2/22/2018	11/22/2018	5	196	
5	Paving	Paving	11/23/2018	12/11/2018	5	13	
6	Architectural Coating	Architectural Coating	12/12/2018	12/28/2018	5	13	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 55

Acres of Paving: 27.4

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,780,800; Non-Residential Outdoor: 593,600; Striped Parking Area: 71,622 (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
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	200.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,000.00	390.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	4.00	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
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

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					0.0713	0.0000	0.0713	0.0108	0.0000	0.0108			0.0000			0.0000
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**	**0.0713**	**1.9386**	**2.0099**	**0.0108**	**1.8048**	**1.8156**		**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	2.9800e-003	0.1041	0.0206	2.6000e-004	5.8200e-003	4.0000e-004	6.2300e-003	1.6000e-003	3.8000e-004	1.9800e-003		28.0472	28.0472	2.0400e-003		28.0983
Vendor	0.0000	0.0000	0.0000	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	**0.0909**	**0.1676**	**0.7018**	**1.9800e-003**	**0.1735**	**1.7400e-003**	**0.1752**	**0.0461**	**1.6100e-003**	**0.0477**		**199.1491**	**199.1491**	**7.8800e-003**		**199.3462**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0278	0.0000	0.0278	4.2100e-003	0.0000	4.2100e-003			0.0000			0.0000
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**	**0.0278**	**0.0616**	**0.0895**	**4.2100e-003**	**0.0616**	**0.0659**	**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	2.9800e-003	0.1041	0.0206	2.6000e-004	5.8200e-003	4.0000e-004	6.2300e-003	1.6000e-003	3.8000e-004	1.9800e-003		28.0472	28.0472	2.0400e-003		28.0983
Vendor	0.0000	0.0000	0.0000	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	**0.0909**	**0.1676**	**0.7018**	**1.9800e-003**	**0.1735**	**1.7400e-003**	**0.1752**	**0.0461**	**1.6100e-003**	**0.0477**		**199.1491**	**199.1491**	**7.8800e-003**		**199.3462**

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					9.0920	0.0000	9.0920	3.6417	0.0000	3.6417			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**	**9.0920**	**2.6337**	**11.7257**	**3.6417**	**2.4230**	**6.0647**		**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5459	0.0000	3.5459	1.4203	0.0000	1.4203			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**	**3.5459**	**0.1015**	**3.6474**	**1.4203**	**0.1015**	**1.5218**	**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

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	1.7320	47.3407	13.0655	0.0992	2.4961	0.3506	2.8467	0.7186	0.3354	1.0540		10,559.5012	10,559.5012	0.7946		10,579.3664
Worker	5.8585	4.2321	45.4094	0.1146	11.1776	0.0891	11.2667	2.9644	0.0821	3.0465		11,406.7920	11,406.7920	0.3893		11,416.5231
Total	**7.5905**	**51.5729**	**58.4749**	**0.2138**	**13.6738**	**0.4397**	**14.1135**	**3.6830**	**0.4175**	**4.1005**		**21,966.2932**	**21,966.2932**	**1.1839**		**21,995.8895**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7258	2.9127	17.8224	0.0269		0.1514	0.1514		0.1514	0.1514	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883

Total	**0.7258**	**2.9127**	**17.8224**	**0.0269**		**0.1514**	**0.1514**		**0.1514**	**0.1514**	**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	1.7320	47.3407	13.0655	0.0992	2.4961	0.3506	2.8467	0.7186	0.3354	1.0540		10,559.5012	10,559.5012	0.7946		10,579.3664
Worker	5.8585	4.2321	45.4094	0.1146	11.1776	0.0891	11.2667	2.9644	0.0821	3.0465		11,406.7920	11,406.7920	0.3893		11,416.5231
Total	**7.5905**	**51.5729**	**58.4749**	**0.2138**	**13.6738**	**0.4397**	**14.1135**	**3.6830**	**0.4175**	**4.1005**		**21,966.2932**	**21,966.2932**	**1.1839**		**21,995.8895**

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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797		2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	5.5222					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**7.1659**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**		**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Unmitigated Construction Off-Site

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

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	5.5222					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**5.8026**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Mitigated Construction Off-Site

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

3.7 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	872.1009					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		282.1171
Total	**872.3996**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.1717	0.8464	9.0819	0.0229	2.2355	0.0178	2.2534	0.5929	0.0164	0.6093		2,281.3584	2,281.3584	0.0779		2,283.3046
Total	**1.1717**	**0.8464**	**9.0819**	**0.0229**	**2.2355**	**0.0178**	**2.2534**	**0.5929**	**0.0164**	**0.6093**		**2,281.3584**	**2,281.3584**	**0.0779**		**2,283.3046**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	872.1009					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		282.1171

Total	**872.1306**	**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**		**282.1171**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.1717	0.8464	9.0819	0.0229	2.2355	0.0178	2.2534	0.5929	0.0164	0.6093		2,281.3584	2,281.3584	0.0779		2,283.3046
Total	**1.1717**	**0.8464**	**9.0819**	**0.0229**	**2.2355**	**0.0178**	**2.2534**	**0.5929**	**0.0164**	**0.6093**		**2,281.3584**	**2,281.3584**	**0.0779**		**2,283.3046**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.2780	24.1880	61.4422	0.2185	18.1754	0.2256	18.4009	4.8634	0.2118	5.0752		22,209.5728	22,209.5728	1.1209		22,237.5946
Unmitigated	4.2780	24.1880	61.4422	0.2185	18.1754	0.2256	18.4009	4.8634	0.2118	5.0752		22,209.5728	22,209.5728	1.1209		22,237.5946

4.2 Trip Summary Information

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

Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,994.50	1,994.50	1994.50	8,547,845	8,547,845
Total	1,994.50	1,994.50	1,994.50	8,547,845	8,547,845

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
Other 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
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	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
Other Asphalt Surfaces	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
Parking Lot	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	0.0719	0.6537	0.5491	3.9200e-003		0.0497	0.0497		0.0497	0.0497		784.4513	784.4513	0.0150	0.0144	789.1129
NaturalGas Unmitigated	0.0719	0.6537	0.5491	3.9200e-003		0.0497	0.0497		0.0497	0.0497		784.4513	784.4513	0.0150	0.0144	789.1129

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					
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
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	6667.84	0.0719	0.6537	0.5491	3.9200e-003		0.0497	0.0497		0.0497	0.0497		784.4513	784.4513	0.0150	0.0144	789.1129
Total		**0.0719**	**0.6537**	**0.5491**	**3.9200e-003**		**0.0497**	**0.0497**		**0.0497**	**0.0497**		**784.4513**	**784.4513**	**0.0150**	**0.0144**	**789.1129**

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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	6.66784	0.0719	0.6537	0.5491	3.9200e-003		0.0497	0.0497		0.0497	0.0497		784.4513	784.4513	0.0150	0.0144	789.1129
Total		**0.0719**	**0.6537**	**0.5491**	**3.9200e-003**		**0.0497**	**0.0497**		**0.0497**	**0.0497**		**784.4513**	**784.4513**	**0.0150**	**0.0144**	**789.1129**

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	27.0585	2.2600e-003	0.2447	2.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004		0.5211	0.5211	1.4000e-003		0.5560
Unmitigated	27.0585	2.2600e-003	0.2447	2.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004		0.5211	0.5211	1.4000e-003		0.5560

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	3.1061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	23.9294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0230	2.2600e-003	0.2447	2.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004		0.5211	0.5211	1.4000e-003		0.5560
Total	**27.0585**	**2.2600e-003**	**0.2447**	**2.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.8000e-004**	**8.8000e-004**		**0.5211**	**0.5211**	**1.4000e-003**		**0.5560**

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	3.1061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	23.9294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0230	2.2600e-003	0.2447	2.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004		0.5211	0.5211	1.4000e-003		0.5560
Total	**27.0585**	**2.2600e-003**	**0.2447**	**2.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.8000e-004**	**8.8000e-004**		**0.5211**	**0.5211**	**1.4000e-003**		**0.5560**

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

WOCC - Phase 1B 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
Unrefrigerated Warehouse-No Rail	1,162.80	1000sqft	26.69	1,162,800.00	0
Other Asphalt Surfaces	0.00	1000sqft	3.85	167,700.00	0
Parking Lot	937.40	1000sqft	21.52	937,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**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 - Based on project info

Land Use -

Construction Phase - Construction phases scaled down to fit proposed 1 year construction schedule.

Grading - Approximate acreage for Phase 1B.

Demolition -

Construction Off-road Equipment Mitigation - Potential mitigation measures; watering 3 times daily, Tier IV construction equipment.

Energy Use -

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
tblConstructionPhase	NumDays	75.00	13.00
tblConstructionPhase	NumDays	1,110.00	196.00
tblConstructionPhase	NumDays	70.00	12.00
tblConstructionPhase	NumDays	110.00	19.00
tblConstructionPhase	NumDays	75.00	13.00
tblConstructionPhase	NumDays	40.00	7.00
tblGrading	AcresOfGrading	47.50	46.00
tblLandUse	BuildingSpaceSquareFeet	0.00	167,700.00
tblProjectCharacteristics	OperationalYear	2018	2020

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	873.4338	69.4684	69.7165	0.2361	18.2675	2.3919	20.6594	9.9840	2.2006	12.1846	0.0000	24,102.4721	24,102.4721	1.9495	0.0000	24,146.0321
Maximum	**873.4338**	**69.4684**	**69.7165**	**0.2361**	**18.2675**	**2.3919**	**20.6594**	**9.9840**	**2.2006**	**12.1846**	**0.0000**	**24,102.4721**	**24,102.4721**	**1.9495**	**0.0000**	**24,146.0321**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	873.1971	50.6243	70.0130	0.2361	13.6737	0.4280	14.1018	3.9263	0.4082	4.0911	0.0000	24,102.4721	24,102.4721	1.9495	0.0000	24,146.0321
Maximum	**873.1971**	**50.6243**	**70.0130**	**0.2361**	**13.6737**	**0.4280**	**14.1018**	**3.9263**	**0.4082**	**4.0911**	**0.0000**	**24,102.4721**	**24,102.4721**	**1.9495**	**0.0000**	**24,146.0321**

	ROG	**NOx**	**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	**0.03**	**27.13**	**-0.43**	**0.00**	**25.15**	**82.11**	**31.74**	**60.67**	**81.45**	**66.42**	**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	26.5413	1.9900e-003	0.2158	2.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004		0.4596	0.4596	1.2300e-003		0.4905
Energy	0.0704	0.6403	0.5378	3.8400e-003		0.0487	0.0487		0.0487	0.0487		768.3288	768.3288	0.0147	0.0141	772.8946
Mobile	4.1900	23.6909	60.1794	0.2140	17.8018	0.2209	18.0228	4.7634	0.2075	4.9709		21,753.1092	21,753.1092	1.0978		21,780.5551
Total	**30.8017**	**24.3331**	**60.9331**	**0.2178**	**17.8018**	**0.2704**	**18.0722**	**4.7634**	**0.2569**	**5.0203**		**22,521.8976**	**22,521.8976**	**1.1138**	**0.0141**	**22,553.9401**

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	26.5413	1.9900e-003	0.2158	2.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004		0.4596	0.4596	1.2300e-003		0.4905
Energy	0.0704	0.6403	0.5378	3.8400e-003		0.0487	0.0487		0.0487	0.0487		768.3288	768.3288	0.0147	0.0141	772.8946
Mobile	4.1900	23.6909	60.1794	0.2140	17.8018	0.2209	18.0228	4.7634	0.2075	4.9709		21,753.1092	21,753.1092	1.0978		21,780.5551
Total	**30.8017**	**24.3331**	**60.9331**	**0.2178**	**17.8018**	**0.2704**	**18.0722**	**4.7634**	**0.2569**	**5.0203**		**22,521.8976**	**22,521.8976**	**1.1138**	**0.0141**	**22,553.9401**

	ROG	**NOx**	**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	1/1/2019	1/16/2019	5	12	
2	Site Preparation	Site Preparation	1/17/2019	1/25/2019	5	7	
3	Grading	Grading	1/26/2019	2/21/2019	5	19	
4	Building Construction	Building Construction	2/22/2019	11/22/2019	5	196	

5	Paving	Paving	11/23/2019	12/11/2019	5	13	
6	Architectural Coating	Architectural Coating	12/12/2019	12/30/2019	5	13	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 46

Acres of Paving: 25.37

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,780,800; Non-Residential Outdoor: 593,600; Striped Parking Area: 71,622 (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
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	200.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Building Construction	9	1,000.00	390.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	4.00	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
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

Clean Paved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**3.5134**	**35.7830**	**22.0600**	**0.0388**	**0.0000**	**1.7949**	**1.7949**	**0.0000**	**1.6697**	**1.6697**		**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.8200e-003	0.0984	0.0201	2.6000e-004	5.8200e-003	3.7000e-004	6.1900e-003	1.6000e-003	3.5000e-004	1.9500e-003		27.7150	27.7150	2.0100e-003		27.7653
Vendor	0.0000	0.0000	0.0000	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	**0.0828**	**0.1543**	**0.6282**	**1.9200e-003**	**0.1735**	**1.6700e-003**	**0.1752**	**0.0461**	**1.5500e-003**	**0.0476**		**193.4134**	**193.4134**	**7.1900e-003**		**193.5931**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**0.4623**	**2.0032**	**23.2798**	**0.0388**	**0.0000**	**0.0616**	**0.0616**	**0.0000**	**0.0616**	**0.0616**	**0.0000**	**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.8200e-003	0.0984	0.0201	2.6000e-004	5.8200e-003	3.7000e-004	6.1900e-003	1.6000e-003	3.5000e-004	1.9500e-003		27.7150	27.7150	2.0100e-003		27.7653
Vendor	0.0000	0.0000	0.0000	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	**0.0828**	**0.1543**	**0.6282**	**1.9200e-003**	**0.1735**	**1.6700e-003**	**0.1752**	**0.0461**	**1.5500e-003**	**0.0476**		**193.4134**	**193.4134**	**7.1900e-003**		**193.5931**

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	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0960	0.0672	0.7297	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		198.8380	198.8380	6.2100e-003		198.9933
Total	**0.0960**	**0.0672**	**0.7297**	**2.0000e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4400e-003**	**0.0548**		**198.8380**	**198.8380**	**6.2100e-003**		**198.9933**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**0.4656**	**2.0175**	**20.8690**	**0.0380**	**7.0458**	**0.0621**	**7.1079**	**3.8730**	**0.0621**	**3.9351**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0960	0.0672	0.7297	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		198.8380	198.8380	6.2100e-003		198.9933
Total	**0.0960**	**0.0672**	**0.7297**	**2.0000e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4400e-003**	**0.0548**		**198.8380**	**198.8380**	**6.2100e-003**		**198.9933**

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					8.5896	0.0000	8.5896	3.5875	0.0000	3.5875			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**8.5896**	**2.3827**	**10.9723**	**3.5875**	**2.1920**	**5.7795**		**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037
Total	**0.1067**	**0.0747**	**0.8108**	**2.2200e-003**	**0.2236**	**1.7400e-003**	**0.2253**	**0.0593**	**1.6000e-003**	**0.0609**		**220.9312**	**220.9312**	**6.9000e-003**		**221.1037**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3500	0.0000	3.3500	1.3991	0.0000	1.3991			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0620		0.1015	0.1015		0.1015	0.1015	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**0.7616**	**3.3000**	**32.9991**	**0.0620**	**3.3500**	**0.1015**	**3.4515**	**1.3991**	**0.1015**	**1.5007**	**0.0000**	**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037
Total	**0.1067**	**0.0747**	**0.8108**	**2.2200e-003**	**0.2236**	**1.7400e-003**	**0.2253**	**0.0593**	**1.6000e-003**	**0.0609**		**220.9312**	**220.9312**	**6.9000e-003**		**221.1037**

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	1.5707	44.6568	12.0143	0.0982	2.4961	0.3002	2.7963	0.7186	0.2872	1.0058		10,464.3345	10,464.3345	0.7659		10,483.4831
Worker	5.3323	3.7328	40.5385	0.1109	11.1776	0.0870	11.2646	2.9644	0.0802	3.0445		11,046.5574	11,046.5574	0.3451		11,055.1856
Total	**6.9030**	**48.3896**	**52.5527**	**0.2092**	**13.6737**	**0.3872**	**14.0610**	**3.6830**	**0.3674**	**4.0503**		**21,510.8919**	**21,510.8919**	**1.1111**		**21,538.6687**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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	1.5707	44.6568	12.0143	0.0982	2.4961	0.3002	2.7963	0.7186	0.2872	1.0058		10,464.3345	10,464.3345	0.7659		10,483.4831
Worker	5.3323	3.7328	40.5385	0.1109	11.1776	0.0870	11.2646	2.9644	0.0802	3.0445		11,046.5574	11,046.5574	0.3451		11,055.1856
Total	**6.9030**	**48.3896**	**52.5527**	**0.2092**	**13.6737**	**0.3872**	**14.0610**	**3.6830**	**0.3674**	**4.0503**		**21,510.8919**	**21,510.8919**	**1.1111**		**21,538.6687**

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	5.1130					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**6.5675**	**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	5.1130					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**5.3935**	**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	872.1009					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	**872.3674**	**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	1.0665	0.7466	8.1077	0.0222	2.2355	0.0174	2.2529	0.5929	0.0160	0.6089		2,209.3115	2,209.3115	0.0690		2,211.0371
Total	**1.0665**	**0.7466**	**8.1077**	**0.0222**	**2.2355**	**0.0174**	**2.2529**	**0.5929**	**0.0160**	**0.6089**		**2,209.3115**	**2,209.3115**	**0.0690**		**2,211.0371**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	872.1009					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	**872.1306**	**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	1.0665	0.7466	8.1077	0.0222	2.2355	0.0174	2.2529	0.5929	0.0160	0.6089		2,209.3115	2,209.3115	0.0690		2,211.0371
Total	**1.0665**	**0.7466**	**8.1077**	**0.0222**	**2.2355**	**0.0174**	**2.2529**	**0.5929**	**0.0160**	**0.6089**		**2,209.3115**	**2,209.3115**	**0.0690**		**2,211.0371**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.1900	23.6909	60.1794	0.2140	17.8018	0.2209	18.0228	4.7634	0.2075	4.9709		21,753.1092	21,753.1092	1.0978		21,780.5551
Unmitigated	4.1900	23.6909	60.1794	0.2140	17.8018	0.2209	18.0228	4.7634	0.2075	4.9709		21,753.1092	21,753.1092	1.0978		21,780.5551

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,953.50	1,953.50	1953.50	8,372,165	8,372,165
Total	1,953.50	1,953.50	1,953.50	8,372,165	8,372,165

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
Other 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
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	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
Other Asphalt Surfaces	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
Parking Lot	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	0.0704	0.6403	0.5378	3.8400e-003		0.0487	0.0487		0.0487	0.0487		768.3288	768.3288	0.0147	0.0141	772.8946
NaturalGas Unmitigated	0.0704	0.6403	0.5378	3.8400e-003		0.0487	0.0487		0.0487	0.0487		768.3288	768.3288	0.0147	0.0141	772.8946

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					
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
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	6530.79	0.0704	0.6403	0.5378	3.8400e-003		0.0487	0.0487		0.0487	0.0487		768.3288	768.3288	0.0147	0.0141	772.8946

Total		**0.0704**	**0.6403**	**0.5378**	**3.8400e-003**		**0.0487**	**0.0487**		**0.0487**	**0.0487**		**768.3288**	**768.3288**	**0.0147**	**0.0141**	**772.8946**

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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	6.53079	0.0704	0.6403	0.5378	3.8400e-003		0.0487	0.0487		0.0487	0.0487		768.3288	768.3288	0.0147	0.0141	772.8946
Total		**0.0704**	**0.6403**	**0.5378**	**3.8400e-003**		**0.0487**	**0.0487**		**0.0487**	**0.0487**		**768.3288**	**768.3288**	**0.0147**	**0.0141**	**772.8946**

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	26.5413	1.9900e-003	0.2158	2.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004		0.4596	0.4596	1.2300e-003		0.4905
Unmitigated	26.5413	1.9900e-003	0.2158	2.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004		0.4596	0.4596	1.2300e-003		0.4905

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	3.1061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	23.4149					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0203	1.9900e-003	0.2158	2.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004		0.4596	0.4596	1.2300e-003		0.4905
Total	**26.5413**	**1.9900e-003**	**0.2158**	**2.0000e-005**		**7.7000e-004**	**7.7000e-004**		**7.7000e-004**	**7.7000e-004**		**0.4596**	**0.4596**	**1.2300e-003**		**0.4905**

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	3.1061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	23.4149					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0203	1.9900e-003	0.2158	2.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004		0.4596	0.4596	1.2300e-003		0.4905
Total	**26.5413**	**1.9900e-003**	**0.2158**	**2.0000e-005**		**7.7000e-004**	**7.7000e-004**		**7.7000e-004**	**7.7000e-004**		**0.4596**	**0.4596**	**1.2300e-003**		**0.4905**

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

WOCC - Phase 2 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
Office Park	601.10	1000sqft	13.80	601,100.00	0
Other Asphalt Surfaces	0.00	1000sqft	3.85	167,700.00	0
Parking Lot	2,404.00	Space	21.64	961,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2023
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 - Based on project info

Land Use - Parking estimate based on 4 spaces per 1000 sf per Specific Plan.

Construction Phase - Construction phases scaled down to fit proposed 3 year construction schedule.

Grading - Approximate acreage for Phase 2.

Demolition -

Construction Off-road Equipment Mitigation - Potential mitigation measures; watering 3 times daily, Tier IV construction equipment.

Energy Use -

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
tblConstructionPhase	NumDays	55.00	39.00

tblConstructionPhase	NumDays	740.00	588.00
tblConstructionPhase	NumDays	70.00	36.00
tblConstructionPhase	NumDays	75.00	57.00
tblConstructionPhase	NumDays	55.00	39.00
tblConstructionPhase	NumDays	30.00	21.00
tblConstructionPhase	PhaseEndDate	12/29/2020	12/27/2022
tblConstructionPhase	PhaseEndDate	11/23/2020	9/8/2022
tblConstructionPhase	PhaseEndDate	1/16/2020	2/19/2020
tblConstructionPhase	PhaseEndDate	2/21/2020	6/8/2020
tblConstructionPhase	PhaseEndDate	12/10/2020	11/2/2022
tblConstructionPhase	PhaseEndDate	1/27/2020	3/19/2020
tblConstructionPhase	PhaseStartDate	12/11/2020	11/3/2022
tblConstructionPhase	PhaseStartDate	2/22/2020	6/9/2020
tblConstructionPhase	PhaseStartDate	1/28/2020	3/20/2020
tblConstructionPhase	PhaseStartDate	11/24/2020	9/9/2022
tblConstructionPhase	PhaseStartDate	1/17/2020	2/20/2020
tblGrading	AcresOfGrading	47.50	23.00
tblLandUse	BuildingSpaceSquareFeet	0.00	167,700.00
tblProjectCharacteristics	OperationalYear	2018	2023

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					
2020	8.3961	63.3985	64.5221	0.2318	13.6737	2.1989	15.0813	3.6830	2.0230	5.3866	0.0000	23,650.7121	23,650.7121	1.9486	0.0000	23,692.0011

2021	7.6551	57.5075	60.3066	0.2275	13.6737	1.1182	14.7919	3.6830	1.0510	4.7339	0.0000	23,227.5001	23,227.5001	1.5839	0.0000	23,267.0975
2022	291.7723	53.4889	56.9510	0.2228	13.6737	0.9560	14.6297	3.6829	0.8989	4.5818	0.0000	22,765.2735	22,765.2735	1.5267	0.0000	22,803.4407
Maximum	**291.7723**	**63.3985**	**64.5221**	**0.2318**	**13.6737**	**2.1989**	**15.0813**	**3.6830**	**2.0230**	**5.3866**	**0.0000**	**23,650.7121**	**23,650.7121**	**1.9486**	**0.0000**	**23,692.0011**

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					
2020	6.6040	46.4471	65.1338	0.2318	13.6737	0.3314	14.0051	3.6830	0.3157	3.9987	0.0000	23,650.7121	23,650.7121	1.9486	0.0000	23,692.0011
2021	6.0820	42.3101	61.1916	0.2275	13.6737	0.2004	13.8741	3.6830	0.1905	3.8735	0.0000	23,227.5001	23,227.5001	1.5839	0.0000	23,267.0975
2022	291.5975	40.1080	58.0478	0.2228	13.6737	0.1878	13.8614	3.6829	0.1785	3.8614	0.0000	22,765.2735	22,765.2735	1.5267	0.0000	22,803.4407
Maximum	**291.5975**	**46.4471**	**65.1338**	**0.2318**	**13.6737**	**0.3314**	**14.0051**	**3.6830**	**0.3157**	**3.9987**	**0.0000**	**23,650.7121**	**23,650.7121**	**1.9486**	**0.0000**	**23,692.0011**

	ROG	**NOx**	**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	**1.15**	**26.11**	**-1.43**	**0.00**	**0.00**	**83.16**	**6.21**	**0.00**	**82.76**	**20.19**	**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	15.4363	2.7900e-003	0.3068	2.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		0.6577	0.6577	1.7200e-003		0.7008

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	**15.4363**	**2.7900e-003**	**0.3068**	**2.0000e-005**	**0.0000**	**1.0900e-003**	**1.0900e-003**	**0.0000**	**1.0900e-003**	**1.0900e-003**		**0.6577**	**0.6577**	**1.7200e-003**	**0.0000**	**0.7008**

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	15.4363	2.7900e-003	0.3068	2.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		0.6577	0.6577	1.7200e-003		0.7008
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	**15.4363**	**2.7900e-003**	**0.3068**	**2.0000e-005**	**0.0000**	**1.0900e-003**	**1.0900e-003**	**0.0000**	**1.0900e-003**	**1.0900e-003**		**0.6577**	**0.6577**	**1.7200e-003**	**0.0000**	**0.7008**

	ROG	**NOx**	**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	1/1/2020	2/19/2020	5	36	
2	Site Preparation	Site Preparation	2/20/2020	3/19/2020	5	21	
3	Grading	Grading	3/20/2020	6/8/2020	5	57	
4	Building Construction	Building Construction	6/9/2020	9/8/2022	5	588	
5	Paving	Paving	9/9/2022	11/2/2022	5	39	

6	Architectural Coating	Architectural Coating	11/3/2022	12/27/2022	5	39	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 23

Acres of Paving: 25.49

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,780,800; Non-Residential Outdoor: 593,600; Striped Parking Area: 71,622

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	200.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,000.00	390.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	4.00	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
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

Clean Paved Roads

3.2 Demolition - 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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-004	0.0306	6.4800e-003	8.0000e-005	1.9400e-003	1.0000e-004	2.0400e-003	5.3000e-004	9.0000e-005	6.3000e-004		9.1433	9.1433	6.5000e-004		9.1596
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0500	0.5521	1.6100e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		160.5547	160.5547	4.6000e-003		160.6699
Total	**0.0749**	**0.0806**	**0.5586**	**1.6900e-003**	**0.1696**	**1.3700e-003**	**0.1710**	**0.0450**	**1.2600e-003**	**0.0463**		**169.6981**	**169.6981**	**5.2500e-003**		**169.8295**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**0.4623**	**2.0032**	**23.2798**	**0.0388**	**0.0000**	**0.0616**	**0.0616**	**0.0000**	**0.0616**	**0.0616**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	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-004	0.0306	6.4800e-003	8.0000e-005	1.9400e-003	1.0000e-004	2.0400e-003	5.3000e-004	9.0000e-005	6.3000e-004		9.1433	9.1433	6.5000e-004		9.1596
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Worker	0.0740	0.0500	0.5521	1.6100e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		160.5547	160.5547	4.6000e-003		160.6699
Total	**0.0749**	**0.0806**	**0.5586**	**1.6900e-003**	**0.1696**	**1.3700e-003**	**0.1710**	**0.0450**	**1.2600e-003**	**0.0463**		**169.6981**	**169.6981**	**5.2500e-003**		**169.8295**

3.3 Site Preparation - 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					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**6.0221**	**2.1974**	**8.2195**	**3.3102**	**2.0216**	**5.3319**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0888	0.0599	0.6626	1.9300e-003	0.2012	1.5300e-003	0.2027	0.0534	1.4100e-003	0.0548		192.6657	192.6657	5.5300e-003		192.8038
Total	**0.0888**	**0.0599**	**0.6626**	**1.9300e-003**	**0.2012**	**1.5300e-003**	**0.2027**	**0.0534**	**1.4100e-003**	**0.0548**		**192.6657**	**192.6657**	**5.5300e-003**		**192.8038**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					2.3486	0.0000	2.3486	1.2910	0.0000	1.2910			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**0.4656**	**2.0175**	**20.8690**	**0.0380**	**2.3486**	**0.0621**	**2.4107**	**1.2910**	**0.0621**	**1.3531**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0888	0.0599	0.6626	1.9300e-003	0.2012	1.5300e-003	0.2027	0.0534	1.4100e-003	0.0548		192.6657	192.6657	5.5300e-003		192.8038
Total	**0.0888**	**0.0599**	**0.6626**	**1.9300e-003**	**0.2012**	**1.5300e-003**	**0.2027**	**0.0534**	**1.4100e-003**	**0.0548**		**192.6657**	**192.6657**	**5.5300e-003**		**192.8038**

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					2.4353	0.0000	2.4353	1.1496	0.0000	1.1496			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**2.4353**	**2.1739**	**4.6092**	**1.1496**	**2.0000**	**3.1496**		**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0666	0.7362	2.1500e-003	0.2236	1.7000e-003	0.2253	0.0593	1.5600e-003	0.0609		214.0730	214.0730	6.1400e-003		214.2265
Total	**0.0987**	**0.0666**	**0.7362**	**2.1500e-003**	**0.2236**	**1.7000e-003**	**0.2253**	**0.0593**	**1.5600e-003**	**0.0609**		**214.0730**	**214.0730**	**6.1400e-003**		**214.2265**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.9498	0.0000	0.9498	0.4484	0.0000	0.4484			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0620		0.1015	0.1015		0.1015	0.1015	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**0.7616**	**3.3000**	**32.9991**	**0.0620**	**0.9498**	**0.1015**	**1.0513**	**0.4484**	**0.1015**	**0.5499**	**0.0000**	**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0666	0.7362	2.1500e-003	0.2236	1.7000e-003	0.2253	0.0593	1.5600e-003	0.0609		214.0730	214.0730	6.1400e-003		214.2265
Total	**0.0987**	**0.0666**	**0.7362**	**2.1500e-003**	**0.2236**	**1.7000e-003**	**0.2253**	**0.0593**	**1.5600e-003**	**0.0609**		**214.0730**	**214.0730**	**6.1400e-003**		**214.2265**

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Unmitigated Construction Off-Site

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

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3416	40.8823	10.8649	0.0975	2.4961	0.2058	2.7019	0.7186	0.1969	0.9155		10,393.9995	10,393.9995	0.7217		10,412.0429
Worker	4.9346	3.3301	36.8087	0.1074	11.1776	0.0848	11.2624	2.9644	0.0781	3.0425		10,703.6495	10,703.6495	0.3070		10,711.3238
Total	**6.2762**	**44.2124**	**47.6736**	**0.2049**	**13.6737**	**0.2906**	**13.9643**	**3.6830**	**0.2750**	**3.9579**		**21,097.6490**	**21,097.6490**	**1.0287**		**21,123.3666**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**0.3278**	**2.2347**	**17.4603**	**0.0269**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3416	40.8823	10.8649	0.0975	2.4961	0.2058	2.7019	0.7186	0.1969	0.9155		10,393.9995	10,393.9995	0.7217		10,412.0429
Worker	4.9346	3.3301	36.8087	0.1074	11.1776	0.0848	11.2624	2.9644	0.0781	3.0425		10,703.6495	10,703.6495	0.3070		10,711.3238

Total	**6.2762**	**44.2124**	**47.6736**	**0.2049**	**13.6737**	**0.2906**	**13.9643**	**3.6830**	**0.2750**	**3.9579**		**21,097.6490**	**21,097.6490**	**1.0287**		**21,123.3666**

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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.1423	37.0786	9.8773	0.0967	2.4961	0.0773	2.5734	0.7186	0.0739	0.7925		10,317.4575	10,317.4575	0.6903		10,334.7155
Worker	4.6119	2.9968	33.8540	0.1039	11.1776	0.0823	11.2599	2.9644	0.0758	3.0401		10,356.6787	10,356.6787	0.2776		10,363.6178
Total	**5.7542**	**40.0754**	**43.7314**	**0.2006**	**13.6737**	**0.1596**	**13.8333**	**3.6830**	**0.1497**	**3.8327**		**20,674.1362**	**20,674.1362**	**0.9679**		**20,698.3332**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**0.3278**	**2.2347**	**17.4603**	**0.0269**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.1423	37.0786	9.8773	0.0967	2.4961	0.0773	2.5734	0.7186	0.0739	0.7925		10,317.4575	10,317.4575	0.6903		10,334.7155
Worker	4.6119	2.9968	33.8540	0.1039	11.1776	0.0823	11.2599	2.9644	0.0758	3.0401		10,356.6787	10,356.6787	0.2776		10,363.6178
Total	**5.7542**	**40.0754**	**43.7314**	**0.2006**	**13.6737**	**0.1596**	**13.8333**	**3.6830**	**0.1497**	**3.8327**		**20,674.1362**	**20,674.1362**	**0.9679**		**20,698.3332**

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0717	35.1669	9.3402	0.0957	2.4960	0.0670	2.5631	0.7186	0.0641	0.7827		10,225.5747	10,225.5747	0.6641		10,242.1770
Worker	4.3373	2.7064	31.2474	0.1002	11.1776	0.0799	11.2576	2.9644	0.0736	3.0380		9,985.3652	9,985.3652	0.2507		9,991.6315
Total	**5.4090**	**37.8733**	**40.5876**	**0.1959**	**13.6737**	**0.1470**	**13.8206**	**3.6829**	**0.1377**	**3.8207**		**20,210.9399**	**20,210.9399**	**0.9147**		**20,233.8085**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**0.3278**	**2.2347**	**17.4603**	**0.0269**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0717	35.1669	9.3402	0.0957	2.4960	0.0670	2.5631	0.7186	0.0641	0.7827		10,225.5747	10,225.5747	0.6641		10,242.1770
Worker	4.3373	2.7064	31.2474	0.1002	11.1776	0.0799	11.2576	2.9644	0.0736	3.0380		9,985.3652	9,985.3652	0.2507		9,991.6315
Total	**5.4090**	**37.8733**	**40.5876**	**0.1959**	**13.6737**	**0.1470**	**13.8206**	**3.6829**	**0.1377**	**3.8207**		**20,210.9399**	**20,210.9399**	**0.9147**		**20,233.8085**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	1.7124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.8152**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Unmitigated Construction Off-Site

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

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0651	0.0406	0.4687	1.5000e-003	0.1677	1.2000e-003	0.1689	0.0445	1.1000e-003	0.0456		149.7805	149.7805	3.7600e-003		149.8745
Total	**0.0651**	**0.0406**	**0.4687**	**1.5000e-003**	**0.1677**	**1.2000e-003**	**0.1689**	**0.0445**	**1.1000e-003**	**0.0456**		**149.7805**	**149.7805**	**3.7600e-003**		**149.8745**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	1.7124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9929**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0651	0.0406	0.4687	1.5000e-003	0.1677	1.2000e-003	0.1689	0.0445	1.1000e-003	0.0456		149.7805	149.7805	3.7600e-003		149.8745

Total	**0.0651**	**0.0406**	**0.4687**	**1.5000e-003**	**0.1677**	**1.2000e-003**	**0.1689**	**0.0445**	**1.1000e-003**	**0.0456**		**149.7805**	**149.7805**	**3.7600e-003**		**149.8745**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	290.7003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**290.9049**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8675	0.5413	6.2495	0.0200	2.2355	0.0160	2.2515	0.5929	0.0147	0.6076		1,997.0730	1,997.0730	0.0501		1,998.3263
Total	**0.8675**	**0.5413**	**6.2495**	**0.0200**	**2.2355**	**0.0160**	**2.2515**	**0.5929**	**0.0147**	**0.6076**		**1,997.0730**	**1,997.0730**	**0.0501**		**1,998.3263**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	290.7003					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	0.0183		281.9062
Total	**290.7300**	**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**	**0.0183**		**281.9062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8675	0.5413	6.2495	0.0200	2.2355	0.0160	2.2515	0.5929	0.0147	0.6076		1,997.0730	1,997.0730	0.0501		1,998.3263
Total	**0.8675**	**0.5413**	**6.2495**	**0.0200**	**2.2355**	**0.0160**	**2.2515**	**0.5929**	**0.0147**	**0.6076**		**1,997.0730**	**1,997.0730**	**0.0501**		**1,998.3263**

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
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	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
Other 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
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Office Park	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Other Asphalt Surfaces	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Parking Lot	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868

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					
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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**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					
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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**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	15.4363	2.7900e-003	0.3068	2.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		0.6577	0.6577	1.7200e-003		0.7008
Unmitigated	15.4363	2.7900e-003	0.3068	2.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		0.6577	0.6577	1.7200e-003		0.7008

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	3.1061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	12.3018					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0284	2.7900e-003	0.3068	2.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		0.6577	0.6577	1.7200e-003		0.7008
Total	**15.4363**	**2.7900e-003**	**0.3068**	**2.0000e-005**		**1.0900e-003**	**1.0900e-003**		**1.0900e-003**	**1.0900e-003**		**0.6577**	**0.6577**	**1.7200e-003**		**0.7008**

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	3.1061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	12.3018					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0284	2.7900e-003	0.3068	2.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		0.6577	0.6577	1.7200e-003		0.7008
Total	**15.4363**	**2.7900e-003**	**0.3068**	**2.0000e-005**		**1.0900e-003**	**1.0900e-003**		**1.0900e-003**	**1.0900e-003**		**0.6577**	**0.6577**	**1.7200e-003**		**0.7008**

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

WOCC-Phase 1 Opening Year w/Refrig-Operation 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
Refrigerated Warehouse-No Rail	100.00	1000sqft	2.30	100,000.00	0
Unrefrigerated Warehouse-No Rail	2,115.60	1000sqft	66.60	2,115,600.00	0
Parking Lot	1,963.50	1000sqft	45.08	1,963,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**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 - Acreage assigned to warehousing

Construction Phase - Construction data is just placeholder. See other runs for construction emissions.

Off-road Equipment -

Vehicle Trips - Trip generation based on traffic study.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating -

Fleet Mix - Fleet mix adjusted to match traffic study.

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
tblAreaCoating	ReapplicationRatePercent	10	3.33
tblConstructionPhase	NumDays	220.00	100.00
tblConstructionPhase	NumDays	3,100.00	100.00
tblConstructionPhase	NumDays	200.00	100.00
tblConstructionPhase	NumDays	310.00	100.00
tblConstructionPhase	NumDays	220.00	100.00
tblConstructionPhase	NumDays	120.00	100.00
tblFleetMix	HHD	0.03	0.12
tblFleetMix	HHD	0.03	0.12
tblFleetMix	HHD	0.03	0.12
tblFleetMix	LDA	0.55	0.80
tblFleetMix	LDA	0.55	0.80
tblFleetMix	LDA	0.55	0.80
tblFleetMix	LDT1	0.04	3.9000e-003
tblFleetMix	LDT1	0.04	3.9000e-003
tblFleetMix	LDT1	0.04	3.9000e-003
tblFleetMix	LDT2	0.20	0.02
tblFleetMix	LDT2	0.20	0.02
tblFleetMix	LDT2	0.20	0.02
tblFleetMix	LHD1	0.02	1.5500e-003

tblFleetMix	LHD1	0.02	1.5500e-003
tblFleetMix	LHD1	0.02	1.5500e-003
tblFleetMix	LHD2	5.8620e-003	5.2000e-004
tblFleetMix	LHD2	5.8620e-003	5.2000e-004
tblFleetMix	LHD2	5.8620e-003	5.2000e-004
tblFleetMix	MCY	4.7770e-003	0.00
tblFleetMix	MCY	4.7770e-003	0.00
tblFleetMix	MCY	4.7770e-003	0.00
tblFleetMix	MDV	0.12	0.01
tblFleetMix	MDV	0.12	0.01
tblFleetMix	MDV	0.12	0.01
tblFleetMix	MH	9.5600e-004	0.00
tblFleetMix	MH	9.5600e-004	0.00
tblFleetMix	MH	9.5600e-004	0.00
tblFleetMix	MHD	0.02	0.05
tblFleetMix	MHD	0.02	0.05
tblFleetMix	MHD	0.02	0.05
tblFleetMix	OBUS	2.0370e-003	0.00
tblFleetMix	OBUS	2.0370e-003	0.00
tblFleetMix	OBUS	2.0370e-003	0.00
tblFleetMix	SBUS	7.0500e-004	0.00
tblFleetMix	SBUS	7.0500e-004	0.00
tblFleetMix	SBUS	7.0500e-004	0.00
tblFleetMix	UBUS	1.9440e-003	0.00
tblFleetMix	UBUS	1.9440e-003	0.00
tblFleetMix	UBUS	1.9440e-003	0.00
tblGrading	AcresOfGrading	250.00	775.00
tblLandUse	LotAcreage	48.57	66.60

tblProjectCharacteristics	OperationalYear	2018	2020
tblSolidWaste	SolidWasteGenerationRate	94.00	47.00
tblSolidWaste	SolidWasteGenerationRate	1,988.66	2,082.66
tblVehicleTrips	ST_TR	1.68	3.52
tblVehicleTrips	ST_TR	1.68	3.52
tblVehicleTrips	SU_TR	1.68	3.52
tblVehicleTrips	SU_TR	1.68	3.52
tblVehicleTrips	WD_TR	1.68	3.52
tblVehicleTrips	WD_TR	1.68	3.52
tblWater	IndoorWaterUseRate	23,125,000.00	11,562,500.00
tblWater	IndoorWaterUseRate	489,232,500.00	512,357,500.00

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	5.0792	52.3628	24.3884	0.0406	18.2675	2.8802	21.1477	9.9840	2.6498	12.6339	0.0000	4,106.2066	4,106.2066	1.2014	0.0000	4,136.2415
2018	16.0032	113.9672	120.2224	0.4023	24.0010	2.6355	26.2731	9.9840	2.4247	12.3563	0.0000	41,186.6713	41,186.6713	2.7209	0.0000	41,254.6939
2019	521.0639	15.3000	16.0703	0.0419	3.9234	0.8259	4.0827	1.0405	0.7598	1.1974	0.0000	4,158.7897	4,158.7897	0.7193	0.0000	4,162.4125
Maximum	**521.0639**	**113.9672**	**120.2224**	**0.4023**	**24.0010**	**2.8802**	**26.2731**	**9.9840**	**2.6498**	**12.6339**	**0.0000**	**41,186.6713**	**41,186.6713**	**2.7209**	**0.0000**	**41,254.6939**

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	5.0792	52.3628	24.3884	0.0406	18.2675	2.8802	21.1477	9.9840	2.6498	12.6339	0.0000	4,106.2066	4,106.2066	1.2014	0.0000	4,136.2415
2018	16.0032	113.9672	120.2224	0.4023	24.0010	2.6355	26.2731	9.9840	2.4247	12.3563	0.0000	41,186.6713	41,186.6713	2.7209	0.0000	41,254.6939
2019	521.0639	15.3000	16.0703	0.0419	3.9234	0.8259	4.0827	1.0405	0.7598	1.1974	0.0000	4,158.7897	4,158.7897	0.7193	0.0000	4,162.4125
Maximum	**521.0639**	**113.9672**	**120.2224**	**0.4023**	**24.0010**	**2.8802**	**26.2731**	**9.9840**	**2.6498**	**12.6339**	**0.0000**	**41,186.6713**	**41,186.6713**	**2.7209**	**0.0000**	**41,254.6939**

	ROG	**NOx**	**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	46.5284	3.9700e-003	0.4294	3.0000e-005		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		0.9146	0.9146	2.4500e-003		0.9759
Energy	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000
Mobile	15.8226	250.4381	204.8908	1.0882	71.9742	1.7173	73.6915	19.3131	1.6294	20.9426		112,847.9179	112,847.9179	5.6951		112,990.2947
Total	**62.6321**	**252.9978**	**207.4671**	**1.1035**	**71.9742**	**1.9131**	**73.8873**	**19.3131**	**1.8252**	**21.1383**		**115,915.7076**	**115,915.7076**	**5.7563**	**0.0562**	**116,076.3706**

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	46.5284	3.9700e-003	0.4294	3.0000e-005		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		0.9146	0.9146	2.4500e-003		0.9759
Energy	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000
Mobile	15.8226	250.4381	204.8908	1.0882	71.9742	1.7173	73.6915	19.3131	1.6294	20.9426		112,847.9179	112,847.9179	5.6951		112,990.2947
Total	**62.6321**	**252.9978**	**207.4671**	**1.1035**	**71.9742**	**1.9131**	**73.8873**	**19.3131**	**1.8252**	**21.1383**		**115,915.7076**	**115,915.7076**	**5.7563**	**0.0562**	**116,076.3706**

	ROG	**NOx**	**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	5/30/2017	10/16/2017	5	100	
2	Site Preparation	Site Preparation	10/17/2017	3/5/2018	5	100	
3	Grading	Grading	3/6/2018	7/23/2018	5	100	
4	Building Construction	Building Construction	7/24/2018	12/10/2018	5	100	
5	Paving	Paving	12/11/2018	4/29/2019	5	100	
6	Architectural Coating	Architectural Coating	4/30/2019	9/16/2019	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 775

Acres of Paving: 45.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,323,400; Non-Residential Outdoor: 1,107,800; Striped Parking Area: 117,810

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	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	1,755.00	685.00	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	351.00	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	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**		**2.1935**	**2.1935**		**2.0425**	**2.0425**		**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

Unmitigated Construction Off-Site

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

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**		**2.1935**	**2.1935**		**2.0425**	**2.0425**	**0.0000**	**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

Mitigated Construction Off-Site

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

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

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	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563

Total	**0.1184**	**0.0875**	**0.9330**	**2.1200e-003**	**0.2012**	**1.6600e-003**	**0.2029**	**0.0534**	**1.5300e-003**	**0.0549**		**211.2566**	**211.2566**	**7.9900e-003**		**211.4563**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563
Total	**0.1184**	**0.0875**	**0.9330**	**2.1200e-003**	**0.2012**	**1.6600e-003**	**0.2029**	**0.0534**	**1.5300e-003**	**0.0549**		**211.2566**	**211.2566**	**7.9900e-003**		**211.4563**

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					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	0.0000	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**	**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					14.2410	0.0000	14.2410	4.1977	0.0000	4.1977			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**	**14.2410**	**2.6337**	**16.8747**	**4.1977**	**2.4230**	**6.6207**		**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					14.2410	0.0000	14.2410	4.1977	0.0000	4.1977			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278

Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**14.2410**	**2.6337**	**16.8747**	**4.1977**	**2.4230**	**6.6207**	**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

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	3.0421	83.1497	22.9484	0.1743	4.3842	0.6158	5.0001	1.2622	0.5891	1.8513		18,546.8162	18,546.8162	1.3957		18,581.7076
Worker	10.2817	7.4274	79.6935	0.2011	19.6168	0.1564	19.7731	5.2025	0.1441	5.3466		20,018.9200	20,018.9200	0.6831		20,035.9981
Total	**13.3237**	**90.5771**	**102.6419**	**0.3754**	**24.0010**	**0.7722**	**24.7732**	**6.4647**	**0.7333**	**7.1979**		**38,565.7362**	**38,565.7362**	**2.0788**		**38,617.7057**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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	0.0000	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**	**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	3.0421	83.1497	22.9484	0.1743	4.3842	0.6158	5.0001	1.2622	0.5891	1.8513		18,546.8162	18,546.8162	1.3957		18,581.7076
Worker	10.2817	7.4274	79.6935	0.2011	19.6168	0.1564	19.7731	5.2025	0.1441	5.3466		20,018.9200	20,018.9200	0.6831		20,035.9981
Total	**13.3237**	**90.5771**	**102.6419**	**0.3754**	**24.0010**	**0.7722**	**24.7732**	**6.4647**	**0.7333**	**7.1979**		**38,565.7362**	**38,565.7362**	**2.0788**		**38,617.7057**

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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797		2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.1811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.8248**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**		**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.1811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.8248**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**	**0.0000**	**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Mitigated Construction Off-Site

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

3.6 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	1.1811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.6355**	**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	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	1.1811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.6355**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**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	518.9258					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	**519.1922**	**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	1.8716	1.3102	14.2290	0.0389	3.9234	0.0305	3.9539	1.0405	0.0281	1.0686		3,877.3417	3,877.3417	0.1211		3,880.3701
Total	**1.8716**	**1.3102**	**14.2290**	**0.0389**	**3.9234**	**0.0305**	**3.9539**	**1.0405**	**0.0281**	**1.0686**		**3,877.3417**	**3,877.3417**	**0.1211**		**3,880.3701**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	518.9258					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**519.1922**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.8716	1.3102	14.2290	0.0389	3.9234	0.0305	3.9539	1.0405	0.0281	1.0686		3,877.3417	3,877.3417	0.1211		3,880.3701
Total	**1.8716**	**1.3102**	**14.2290**	**0.0389**	**3.9234**	**0.0305**	**3.9539**	**1.0405**	**0.0281**	**1.0686**		**3,877.3417**	**3,877.3417**	**0.1211**		**3,880.3701**

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	15.8226	250.4381	204.8908	1.0882	71.9742	1.7173	73.6915	19.3131	1.6294	20.9426		112,847.9179	112,847.9179	5.6951		112,990.2947
Unmitigated	15.8226	250.4381	204.8908	1.0882	71.9742	1.7173	73.6915	19.3131	1.6294	20.9426		112,847.9179	112,847.9179	5.6951		112,990.2947

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	352.00	352.00	352.00	1,508,572	1,508,572
Unrefrigerated Warehouse-No Rail	7,446.91	7,446.91	7446.91	31,915,357	31,915,357
Total	7,798.91	7,798.91	7,798.91	33,423,929	33,423,929

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Refrigerated Warehouse-No Rail	0.795700	0.003900	0.017620	0.011010	0.001550	0.000520	0.046400	0.123300	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.795700	0.003900	0.017620	0.011010	0.001550	0.000520	0.046400	0.123300	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.795700	0.003900	0.017620	0.011010	0.001550	0.000520	0.046400	0.123300	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	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000
NaturalGas Unmitigated	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000

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					
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
Refrigerated Warehouse-No Rail	14186.3	0.1530	1.3908	1.1683	8.3400e-003		0.1057	0.1057		0.1057	0.1057		1,668.9766	1,668.9766	0.0320	0.0306	1,678.8945
Unrefrigerated Warehouse-No Rail	11882.1	0.1281	1.1649	0.9785	6.9900e-003		0.0885	0.0885		0.0885	0.0885		1,397.8985	1,397.8985	0.0268	0.0256	1,406.2055
Total		**0.2811**	**2.5557**	**2.1468**	**0.0153**		**0.1942**	**0.1942**		**0.1942**	**0.1942**		**3,066.8751**	**3,066.8751**	**0.0588**	**0.0562**	**3,085.1000**

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
Refrigerated Warehouse-No Rail	14.1863	0.1530	1.3908	1.1683	8.3400e-003		0.1057	0.1057		0.1057	0.1057		1,668.9766	1,668.9766	0.0320	0.0306	1,678.8945
Unrefrigerated Warehouse-No Rail	11.8821	0.1281	1.1649	0.9785	6.9900e-003		0.0885	0.0885		0.0885	0.0885		1,397.8985	1,397.8985	0.0268	0.0256	1,406.2055
Total		**0.2811**	**2.5557**	**2.1468**	**0.0153**		**0.1942**	**0.1942**		**0.1942**	**0.1942**		**3,066.8751**	**3,066.8751**	**0.0588**	**0.0562**	**3,085.1000**

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	46.5284	3.9700e-003	0.4294	3.0000e-005		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		0.9146	0.9146	2.4500e-003		0.9759
Unmitigated	46.5284	3.9700e-003	0.4294	3.0000e-005		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		0.9146	0.9146	2.4500e-003		0.9759

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	1.9236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	44.5644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0404	3.9700e-003	0.4294	3.0000e-005		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		0.9146	0.9146	2.4500e-003		0.9759
Total	**46.5284**	**3.9700e-003**	**0.4294**	**3.0000e-005**		**1.5400e-003**	**1.5400e-003**		**1.5400e-003**	**1.5400e-003**		**0.9146**	**0.9146**	**2.4500e-003**		**0.9759**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.9236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	44.5644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0404	3.9700e-003	0.4294	3.0000e-005		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		0.9146	0.9146	2.4500e-003		0.9759
Total	**46.5284**	**3.9700e-003**	**0.4294**	**3.0000e-005**		**1.5400e-003**	**1.5400e-003**		**1.5400e-003**	**1.5400e-003**		**0.9146**	**0.9146**	**2.4500e-003**		**0.9759**

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

WOCC-Phase 1 2023 With Refrig-Operation 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
Refrigerated Warehouse-No Rail	100.00	1000sqft	2.30	100,000.00	0
Unrefrigerated Warehouse-No Rail	2,115.60	1000sqft	66.60	2,115,600.00	0
Parking Lot	1,963.50	1000sqft	45.08	1,963,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2023
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 - Acreage assigned to warehousing

Construction Phase - Construction data is just placeholder. See other runs for construction emissions.

Off-road Equipment -

Vehicle Trips - Trip generation based on traffic study.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating -

Fleet Mix - Fleet mix adjusted to match traffic study.

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
tblAreaCoating	ReapplicationRatePercent	10	3.33
tblConstructionPhase	NumDays	220.00	100.00
tblConstructionPhase	NumDays	3,100.00	100.00
tblConstructionPhase	NumDays	200.00	100.00
tblConstructionPhase	NumDays	310.00	100.00
tblConstructionPhase	NumDays	220.00	100.00
tblConstructionPhase	NumDays	120.00	100.00
tblFleetMix	HHD	0.03	0.12
tblFleetMix	HHD	0.03	0.12
tblFleetMix	HHD	0.03	0.12
tblFleetMix	LDA	0.55	0.80
tblFleetMix	LDA	0.55	0.80
tblFleetMix	LDA	0.55	0.80
tblFleetMix	LDT1	0.04	3.9000e-003
tblFleetMix	LDT1	0.04	3.9000e-003
tblFleetMix	LDT1	0.04	3.9000e-003
tblFleetMix	LDT2	0.20	0.02
tblFleetMix	LDT2	0.20	0.02
tblFleetMix	LDT2	0.20	0.02
tblFleetMix	LHD1	0.02	0.02

tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.8250e-003	5.2000e-004
tblFleetMix	LHD2	5.8250e-003	5.2000e-004
tblFleetMix	LHD2	5.8250e-003	5.2000e-004
tblFleetMix	MCY	4.8760e-003	0.00
tblFleetMix	MCY	4.8760e-003	0.00
tblFleetMix	MCY	4.8760e-003	0.00
tblFleetMix	MDV	0.12	0.01
tblFleetMix	MDV	0.12	0.01
tblFleetMix	MDV	0.12	0.01
tblFleetMix	MH	8.6800e-004	0.00
tblFleetMix	MH	8.6800e-004	0.00
tblFleetMix	MH	8.6800e-004	0.00
tblFleetMix	MHD	0.02	0.05
tblFleetMix	MHD	0.02	0.05
tblFleetMix	MHD	0.02	0.05
tblFleetMix	OBUS	2.1230e-003	0.00
tblFleetMix	OBUS	2.1230e-003	0.00
tblFleetMix	OBUS	2.1230e-003	0.00
tblFleetMix	SBUS	7.1000e-004	0.00
tblFleetMix	SBUS	7.1000e-004	0.00
tblFleetMix	SBUS	7.1000e-004	0.00
tblFleetMix	UBUS	1.7800e-003	0.00
tblFleetMix	UBUS	1.7800e-003	0.00
tblFleetMix	UBUS	1.7800e-003	0.00
tblGrading	AcresOfGrading	250.00	775.00
tblLandUse	LotAcreage	48.57	66.60

tblProjectCharacteristics	OperationalYear	2018	2023
tblSolidWaste	SolidWasteGenerationRate	94.00	47.00
tblSolidWaste	SolidWasteGenerationRate	1,988.66	2,082.66
tblVehicleTrips	ST_TR	1.68	3.52
tblVehicleTrips	ST_TR	1.68	3.52
tblVehicleTrips	SU_TR	1.68	3.52
tblVehicleTrips	SU_TR	1.68	3.52
tblVehicleTrips	WD_TR	1.68	3.52
tblVehicleTrips	WD_TR	1.68	3.52
tblWater	IndoorWaterUseRate	23,125,000.00	11,562,500.00
tblWater	IndoorWaterUseRate	489,232,500.00	512,357,500.00

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	5.0792	52.3628	24.3884	0.0406	18.2675	2.8802	21.1477	9.9840	2.6498	12.6339	0.0000	4,106.2066	4,106.2066	1.2014	0.0000	4,136.2415
2018	16.0032	113.9672	120.2224	0.4023	24.0010	2.6355	26.2731	9.9840	2.4247	12.3563	0.0000	41,186.6713	41,186.6713	2.7209	0.0000	41,254.6939
2019	521.0639	15.3000	16.0703	0.0419	3.9234	0.8259	4.0827	1.0405	0.7598	1.1974	0.0000	4,158.7897	4,158.7897	0.7193	0.0000	4,162.4125
Maximum	**521.0639**	**113.9672**	**120.2224**	**0.4023**	**24.0010**	**2.8802**	**26.2731**	**9.9840**	**2.6498**	**12.6339**	**0.0000**	**41,186.6713**	**41,186.6713**	**2.7209**	**0.0000**	**41,254.6939**

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	5.0792	52.3628	24.3884	0.0406	18.2675	2.8802	21.1477	9.9840	2.6498	12.6339	0.0000	4,106.2066	4,106.2066	1.2014	0.0000	4,136.2415
2018	16.0032	113.9672	120.2224	0.4023	24.0010	2.6355	26.2731	9.9840	2.4247	12.3563	0.0000	41,186.6713	41,186.6713	2.7209	0.0000	41,254.6939
2019	521.0639	15.3000	16.0703	0.0419	3.9234	0.8259	4.0827	1.0405	0.7598	1.1974	0.0000	4,158.7897	4,158.7897	0.7193	0.0000	4,162.4125
Maximum	**521.0639**	**113.9672**	**120.2224**	**0.4023**	**24.0010**	**2.8802**	**26.2731**	**9.9840**	**2.6498**	**12.6339**	**0.0000**	**41,186.6713**	**41,186.6713**	**2.7209**	**0.0000**	**41,254.6939**

	ROG	**NOx**	**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	46.5275	3.8800e-003	0.4266	3.0000e-005		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003		0.9146	0.9146	2.4000e-003		0.9746
Energy	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000
Mobile	9.8854	142.5039	153.2804	0.9928	72.2183	0.5911	72.8093	19.4126	0.5526	19.9652		103,397.0761	103,397.0761	4.4107		103,507.3431
Total	**56.6940**	**145.0635**	**155.8538**	**1.0082**	**72.2183**	**0.7868**	**73.0051**	**19.4126**	**0.7483**	**20.1609**		**106,464.8658**	**106,464.8658**	**4.4719**	**0.0562**	**106,593.4177**

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	46.5275	3.8800e-003	0.4266	3.0000e-005		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003		0.9146	0.9146	2.4000e-003		0.9746
Energy	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000
Mobile	9.8854	142.5039	153.2804	0.9928	72.2183	0.5911	72.8093	19.4126	0.5526	19.9652		103,397.0761	103,397.0761	4.4107		103,507.3431
Total	**56.6940**	**145.0635**	**155.8538**	**1.0082**	**72.2183**	**0.7868**	**73.0051**	**19.4126**	**0.7483**	**20.1609**		**106,464.8658**	**106,464.8658**	**4.4719**	**0.0562**	**106,593.4177**

	ROG	NOx	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	5/30/2017	10/16/2017	5	100	
2	Site Preparation	Site Preparation	10/17/2017	3/5/2018	5	100	
3	Grading	Grading	3/6/2018	7/23/2018	5	100	
4	Building Construction	Building Construction	7/24/2018	12/10/2018	5	100	
5	Paving	Paving	12/11/2018	4/29/2019	5	100	
6	Architectural Coating	Architectural Coating	4/30/2019	9/16/2019	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 775

Acres of Paving: 45.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,323,400; Non-Residential Outdoor: 1,107,800; Striped Parking Area: 117,810

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	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	1,755.00	685.00	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	351.00	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	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**		**2.1935**	**2.1935**		**2.0425**	**2.0425**		**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

Unmitigated Construction Off-Site

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

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**		**2.1935**	**2.1935**		**2.0425**	**2.0425**	**0.0000**	**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

Mitigated Construction Off-Site

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

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

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	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563

Total	**0.1184**	**0.0875**	**0.9330**	**2.1200e-003**	**0.2012**	**1.6600e-003**	**0.2029**	**0.0534**	**1.5300e-003**	**0.0549**		**211.2566**	**211.2566**	**7.9900e-003**		**211.4563**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563
Total	**0.1184**	**0.0875**	**0.9330**	**2.1200e-003**	**0.2012**	**1.6600e-003**	**0.2029**	**0.0534**	**1.5300e-003**	**0.0549**		**211.2566**	**211.2566**	**7.9900e-003**		**211.4563**

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					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	0.0000	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**	**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					14.2410	0.0000	14.2410	4.1977	0.0000	4.1977			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**	**14.2410**	**2.6337**	**16.8747**	**4.1977**	**2.4230**	**6.6207**		**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					14.2410	0.0000	14.2410	4.1977	0.0000	4.1977			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278

Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**14.2410**	**2.6337**	**16.8747**	**4.1977**	**2.4230**	**6.6207**	**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

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	3.0421	83.1497	22.9484	0.1743	4.3842	0.6158	5.0001	1.2622	0.5891	1.8513		18,546.8162	18,546.8162	1.3957		18,581.7076
Worker	10.2817	7.4274	79.6935	0.2011	19.6168	0.1564	19.7731	5.2025	0.1441	5.3466		20,018.9200	20,018.9200	0.6831		20,035.9981
Total	**13.3237**	**90.5771**	**102.6419**	**0.3754**	**24.0010**	**0.7722**	**24.7732**	**6.4647**	**0.7333**	**7.1979**		**38,565.7362**	**38,565.7362**	**2.0788**		**38,617.7057**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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	0.0000	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**	**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	3.0421	83.1497	22.9484	0.1743	4.3842	0.6158	5.0001	1.2622	0.5891	1.8513		18,546.8162	18,546.8162	1.3957		18,581.7076
Worker	10.2817	7.4274	79.6935	0.2011	19.6168	0.1564	19.7731	5.2025	0.1441	5.3466		20,018.9200	20,018.9200	0.6831		20,035.9981
Total	**13.3237**	**90.5771**	**102.6419**	**0.3754**	**24.0010**	**0.7722**	**24.7732**	**6.4647**	**0.7333**	**7.1979**		**38,565.7362**	**38,565.7362**	**2.0788**		**38,617.7057**

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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797		2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.1811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.8248**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**		**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.1811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.8248**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**	**0.0000**	**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Mitigated Construction Off-Site

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

3.6 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	1.1811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.6355**	**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	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	1.1811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.6355**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**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	518.9258					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	**519.1922**	**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	1.8716	1.3102	14.2290	0.0389	3.9234	0.0305	3.9539	1.0405	0.0281	1.0686		3,877.3417	3,877.3417	0.1211		3,880.3701
Total	**1.8716**	**1.3102**	**14.2290**	**0.0389**	**3.9234**	**0.0305**	**3.9539**	**1.0405**	**0.0281**	**1.0686**		**3,877.3417**	**3,877.3417**	**0.1211**		**3,880.3701**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	518.9258					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**519.1922**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.8716	1.3102	14.2290	0.0389	3.9234	0.0305	3.9539	1.0405	0.0281	1.0686		3,877.3417	3,877.3417	0.1211		3,880.3701
Total	**1.8716**	**1.3102**	**14.2290**	**0.0389**	**3.9234**	**0.0305**	**3.9539**	**1.0405**	**0.0281**	**1.0686**		**3,877.3417**	**3,877.3417**	**0.1211**		**3,880.3701**

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	9.8854	142.5039	153.2804	0.9928	72.2183	0.5911	72.8093	19.4126	0.5526	19.9652		103,397.0761	103,397.0761	4.4107		103,507.3431
Unmitigated	9.8854	142.5039	153.2804	0.9928	72.2183	0.5911	72.8093	19.4126	0.5526	19.9652		103,397.0761	103,397.0761	4.4107		103,507.3431

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	352.00	352.00	352.00	1,508,572	1,508,572
Unrefrigerated Warehouse-No Rail	7,446.91	7,446.91	7446.91	31,915,357	31,915,357
Total	7,798.91	7,798.91	7,798.91	33,423,929	33,423,929

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Refrigerated Warehouse-No Rail	0.795700	0.003900	0.017620	0.011010	0.015500	0.000520	0.046400	0.123300	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.795700	0.003900	0.017620	0.011010	0.015500	0.000520	0.046400	0.123300	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.795700	0.003900	0.017620	0.011010	0.015500	0.000520	0.046400	0.123300	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	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000
NaturalGas Unmitigated	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000

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					
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
Refrigerated Warehouse-No Rail	14186.3	0.1530	1.3908	1.1683	8.3400e-003		0.1057	0.1057		0.1057	0.1057		1,668.9766	1,668.9766	0.0320	0.0306	1,678.8945
Unrefrigerated Warehouse-No Rail	11882.1	0.1281	1.1649	0.9785	6.9900e-003		0.0885	0.0885		0.0885	0.0885		1,397.8985	1,397.8985	0.0268	0.0256	1,406.2055
Total		**0.2811**	**2.5557**	**2.1468**	**0.0153**		**0.1942**	**0.1942**		**0.1942**	**0.1942**		**3,066.8751**	**3,066.8751**	**0.0588**	**0.0562**	**3,085.1000**

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
Refrigerated Warehouse-No Rail	14.1863	0.1530	1.3908	1.1683	8.3400e-003		0.1057	0.1057		0.1057	0.1057		1,668.9766	1,668.9766	0.0320	0.0306	1,678.8945
Unrefrigerated Warehouse-No Rail	11.8821	0.1281	1.1649	0.9785	6.9900e-003		0.0885	0.0885		0.0885	0.0885		1,397.8985	1,397.8985	0.0268	0.0256	1,406.2055
Total		**0.2811**	**2.5557**	**2.1468**	**0.0153**		**0.1942**	**0.1942**		**0.1942**	**0.1942**		**3,066.8751**	**3,066.8751**	**0.0588**	**0.0562**	**3,085.1000**

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	46.5275	3.8800e-003	0.4266	3.0000e-005		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003		0.9146	0.9146	2.4000e-003		0.9746
Unmitigated	46.5275	3.8800e-003	0.4266	3.0000e-005		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003		0.9146	0.9146	2.4000e-003		0.9746

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	1.9236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	44.5644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0395	3.8800e-003	0.4266	3.0000e-005		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003		0.9146	0.9146	2.4000e-003		0.9746
Total	**46.5275**	**3.8800e-003**	**0.4266**	**3.0000e-005**		**1.5200e-003**	**1.5200e-003**		**1.5200e-003**	**1.5200e-003**		**0.9146**	**0.9146**	**2.4000e-003**		**0.9746**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.9236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	44.5644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0395	3.8800e-003	0.4266	3.0000e-005		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003		0.9146	0.9146	2.4000e-003		0.9746
Total	**46.5275**	**3.8800e-003**	**0.4266**	**3.0000e-005**		**1.5200e-003**	**1.5200e-003**		**1.5200e-003**	**1.5200e-003**		**0.9146**	**0.9146**	**2.4000e-003**		**0.9746**

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

WOCC-Phase 2 2023 Year-Operation 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
Office Park	555.05	1000sqft	12.74	555,050.00	0
Parking Lot	2,404.00	Space	10.26	961,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2023
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 - Acreage assigned to Business Park

Construction Phase - Construction data is just placeholder. See other runs for construction emissions.

Off-road Equipment -

Vehicle Trips - Trip generation based on traffic study.

Area Coating -

Fleet Mix - Fleet mix adjusted to match traffic study.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

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
tblLandUse	LotAcreage	21.64	10.26
tblProjectCharacteristics	OperationalYear	2018	2023
tblVehicleTrips	ST_TR	1.64	1.71
tblVehicleTrips	SU_TR	0.76	0.79
tblVehicleTrips	WD_TR	11.42	11.92

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	5.0792	52.3628	24.3884	0.0406	18.2675	2.8802	21.1477	9.9840	2.6498	12.6339	0.0000	4,106.2066	4,106.2066	1.2014	0.0000	4,136.2415
2018	7.1891	59.6064	52.3051	0.1568	18.2675	2.6355	20.8460	9.9840	2.4247	12.3563	0.0000	15,990.1167	15,990.1167	1.9518	0.0000	16,024.5067
2019	657.4202	15.3000	15.2729	0.0245	1.2966	0.8259	1.4355	0.3439	0.7598	0.8043	0.0000	2,422.7008	2,422.7008	0.7193	0.0000	2,440.6826
Maximum	**657.4202**	**59.6064**	**52.3051**	**0.1568**	**18.2675**	**2.8802**	**21.1477**	**9.9840**	**2.6498**	**12.6339**	**0.0000**	**15,990.1167**	**15,990.1167**	**1.9518**	**0.0000**	**16,024.5067**

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	5.0792	52.3628	24.3884	0.0406	18.2675	2.8802	21.1477	9.9840	2.6498	12.6339	0.0000	4,106.2066	4,106.2066	1.2014	0.0000	4,136.2415
2018	7.1891	59.6064	52.3051	0.1568	18.2675	2.6355	20.8460	9.9840	2.4247	12.3563	0.0000	15,990.1167	15,990.1167	1.9518	0.0000	16,024.5067
2019	657.4202	15.3000	15.2729	0.0245	1.2966	0.8259	1.4355	0.3439	0.7598	0.8043	0.0000	2,422.7008	2,422.7008	0.7193	0.0000	2,440.6826
Maximum	**657.4202**	**59.6064**	**52.3051**	**0.1568**	**18.2675**	**2.8802**	**21.1477**	**9.9840**	**2.6498**	**12.6339**	**0.0000**	**15,990.1167**	**15,990.1167**	**1.9518**	**0.0000**	**16,024.5067**

	ROG	**NOx**	**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	12.8415	2.7500e-003	0.3021	2.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		0.6476	0.6476	1.7000e-003		0.6901
Energy	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040
Mobile	9.9286	46.7613	132.0464	0.5298	47.5322	0.3821	47.9143	12.7173	0.3553	13.0726		54,017.0460	54,017.0460	2.4813		54,079.0787
Total	**22.8182**	**47.2008**	**132.7154**	**0.5324**	**47.5322**	**0.4163**	**47.9485**	**12.7173**	**0.3896**	**13.1069**		**54,541.8826**	**54,541.8826**	**2.4931**	**9.6100e-003**	**54,607.0728**

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	12.8415	2.7500e-003	0.3021	2.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		0.6476	0.6476	1.7000e-003		0.6901
Energy	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040
Mobile	9.9286	46.7613	132.0464	0.5298	47.5322	0.3821	47.9143	12.7173	0.3553	13.0726		54,017.0460	54,017.0460	2.4813		54,079.0787
Total	**22.8182**	**47.2008**	**132.7154**	**0.5324**	**47.5322**	**0.4163**	**47.9485**	**12.7173**	**0.3896**	**13.1069**		**54,541.8826**	**54,541.8826**	**2.4931**	**9.6100e-003**	**54,607.0728**

	ROG	NOx	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	5/30/2017	10/16/2017	5	20	
2	Site Preparation	Site Preparation	10/17/2017	3/5/2018	5	10	
3	Grading	Grading	3/6/2018	7/23/2018	5	35	
4	Building Construction	Building Construction	7/24/2018	12/10/2018	5	370	
5	Paving	Paving	12/11/2018	4/29/2019	5	20	
6	Architectural Coating	Architectural Coating	4/30/2019	9/16/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 10.26

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 832,575; Non-Residential Outdoor: 277,525; Striped Parking Area: 57,696

OffRoad Equipment

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

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	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	581.00	249.00	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	116.00	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	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**		**2.1935**	**2.1935**		**2.0425**	**2.0425**		**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**		**2.1935**	**2.1935**		**2.0425**	**2.0425**	**0.0000**	**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

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	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852

Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563
Total	**0.1184**	**0.0875**	**0.9330**	**2.1200e-003**	**0.2012**	**1.6600e-003**	**0.2029**	**0.0534**	**1.5300e-003**	**0.0549**		**211.2566**	**211.2566**	**7.9900e-003**		**211.4563**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563
Total	**0.1184**	**0.0875**	**0.9330**	**2.1200e-003**	**0.2012**	**1.6600e-003**	**0.2029**	**0.0534**	**1.5300e-003**	**0.0549**		**211.2566**	**211.2566**	**7.9900e-003**		**211.4563**

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					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	0.0000	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**	**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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			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**	**8.6733**	**2.6337**	**11.3071**	**3.5965**	**2.4230**	**6.0195**		**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**8.6733**	**2.6337**	**11.3071**	**3.5965**	**2.4230**	**6.0195**	**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

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	1.1058	30.2252	8.3418	0.0634	1.5937	0.2239	1.8175	0.4588	0.2142	0.6730		6,741.8354	6,741.8354	0.5073		6,754.5185
Worker	3.4038	2.4589	26.3829	0.0666	6.4942	0.0518	6.5460	1.7223	0.0477	1.7700		6,627.3462	6,627.3462	0.2262		6,632.9999
Total	**4.5096**	**32.6841**	**34.7247**	**0.1299**	**8.0879**	**0.2756**	**8.3635**	**2.1811**	**0.2619**	**2.4430**		**13,369.1815**	**13,369.1815**	**0.7335**		**13,387.5185**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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	0.0000	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**	**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	1.1058	30.2252	8.3418	0.0634	1.5937	0.2239	1.8175	0.4588	0.2142	0.6730		6,741.8354	6,741.8354	0.5073		6,754.5185
Worker	3.4038	2.4589	26.3829	0.0666	6.4942	0.0518	6.5460	1.7223	0.0477	1.7700		6,627.3462	6,627.3462	0.2262		6,632.9999
Total	**4.5096**	**32.6841**	**34.7247**	**0.1299**	**8.0879**	**0.2756**	**8.3635**	**2.1811**	**0.2619**	**2.4430**		**13,369.1815**	**13,369.1815**	**0.7335**		**13,387.5185**

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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797		2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.3441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.9878**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**		**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.3441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.9878**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**	**0.0000**	**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Mitigated Construction Off-Site

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

3.6 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	1.3441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.7985**	**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	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	1.3441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.7985**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**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	656.5352					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	**656.8017**	**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	0.6186	0.4330	4.7025	0.0129	1.2966	0.0101	1.3067	0.3439	9.3000e-003	0.3532		1,281.4007	1,281.4007	0.0400		1,282.4015
Total	**0.6186**	**0.4330**	**4.7025**	**0.0129**	**1.2966**	**0.0101**	**1.3067**	**0.3439**	**9.3000e-003**	**0.3532**		**1,281.4007**	**1,281.4007**	**0.0400**		**1,282.4015**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	656.5352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**656.8017**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6186	0.4330	4.7025	0.0129	1.2966	0.0101	1.3067	0.3439	9.3000e-003	0.3532		1,281.4007	1,281.4007	0.0400		1,282.4015
Total	**0.6186**	**0.4330**	**4.7025**	**0.0129**	**1.2966**	**0.0101**	**1.3067**	**0.3439**	**9.3000e-003**	**0.3532**		**1,281.4007**	**1,281.4007**	**0.0400**		**1,282.4015**

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	9.9286	46.7613	132.0464	0.5298	47.5322	0.3821	47.9143	12.7173	0.3553	13.0726		54,017.0460	54,017.0460	2.4813		54,079.0787
Unmitigated	9.9286	46.7613	132.0464	0.5298	47.5322	0.3821	47.9143	12.7173	0.3553	13.0726		54,017.0460	54,017.0460	2.4813		54,079.0787

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Office Park	6,616.20	949.14	438.49	16,636,768	16,636,768

Parking Lot	0.00	0.00	0.00		
Total	6,616.20	949.14	438.49	16,636,768	16,636,768

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
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Parking Lot	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
Office Park	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Parking Lot	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868

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	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040
NaturalGas Unmitigated	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040

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					
Office Park	4455.61	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0481**	**0.4368**	**0.3669**	**2.6200e-003**		**0.0332**	**0.0332**		**0.0332**	**0.0332**		**524.1890**	**524.1890**	**0.0101**	**9.6100e-003**	**527.3040**

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					
Office Park	4.45561	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0481**	**0.4368**	**0.3669**	**2.6200e-003**		**0.0332**	**0.0332**		**0.0332**	**0.0332**		**524.1890**	**524.1890**	**0.0101**	**9.6100e-003**	**527.3040**

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	12.8415	2.7500e-003	0.3021	2.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		0.6476	0.6476	1.7000e-003		0.6901
Unmitigated	12.8415	2.7500e-003	0.3021	2.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		0.6476	0.6476	1.7000e-003		0.6901

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	1.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.3306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0280	2.7500e-003	0.3021	2.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		0.6476	0.6476	1.7000e-003		0.6901
Total	**12.8415**	**2.7500e-003**	**0.3021**	**2.0000e-005**		**1.0800e-003**	**1.0800e-003**		**1.0800e-003**	**1.0800e-003**		**0.6476**	**0.6476**	**1.7000e-003**		**0.6901**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.3306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0280	2.7500e-003	0.3021	2.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		0.6476	0.6476	1.7000e-003		0.6901

Total	**12.8415**	**2.7500e-003**	**0.3021**	**2.0000e-005**		**1.0800e-003**	**1.0800e-003**		**1.0800e-003**	**1.0800e-003**		**0.6476**	**0.6476**	**1.7000e-003**		**0.6901**

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

WOCC-Phase 1 2040 Year With Refrig-Operation 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
Refrigerated Warehouse-No Rail	100.00	1000sqft	2.30	100,000.00	0
Unrefrigerated Warehouse-No Rail	2,115.60	1000sqft	66.60	2,115,600.00	0
Parking Lot	1,963.50	1000sqft	45.08	1,963,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2040
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 - Acreage assigned to warehousing

Construction Phase - Construction data is just placeholder. See other runs for construction emissions.

Off-road Equipment -

Vehicle Trips - Trip generation based on traffic study.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating -

Fleet Mix - Fleet mix adjusted to match traffic study.

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
tblAreaCoating	ReapplicationRatePercent	10	3.33
tblConstructionPhase	NumDays	220.00	100.00
tblConstructionPhase	NumDays	3,100.00	100.00
tblConstructionPhase	NumDays	200.00	100.00
tblConstructionPhase	NumDays	310.00	100.00
tblConstructionPhase	NumDays	220.00	100.00
tblConstructionPhase	NumDays	120.00	100.00
tblFleetMix	HHD	0.04	0.12
tblFleetMix	HHD	0.04	0.12
tblFleetMix	HHD	0.04	0.12
tblFleetMix	LDA	0.55	0.80
tblFleetMix	LDA	0.55	0.80
tblFleetMix	LDA	0.55	0.80
tblFleetMix	LDT1	0.04	3.9000e-003
tblFleetMix	LDT1	0.04	3.9000e-003
tblFleetMix	LDT1	0.04	3.9000e-003
tblFleetMix	LDT2	0.21	0.02
tblFleetMix	LDT2	0.21	0.02
tblFleetMix	LDT2	0.21	0.02
tblFleetMix	LHD1	0.01	1.5500e-003

tblFleetMix	LHD1	0.01	1.5500e-003
tblFleetMix	LHD1	0.01	1.5500e-003
tblFleetMix	LHD2	5.7230e-003	5.2000e-004
tblFleetMix	LHD2	5.7230e-003	5.2000e-004
tblFleetMix	LHD2	5.7230e-003	5.2000e-004
tblFleetMix	MCY	4.9230e-003	0.00
tblFleetMix	MCY	4.9230e-003	0.00
tblFleetMix	MCY	4.9230e-003	0.00
tblFleetMix	MDV	0.11	0.01
tblFleetMix	MDV	0.11	0.01
tblFleetMix	MDV	0.11	0.01
tblFleetMix	MH	7.2200e-004	0.00
tblFleetMix	MH	7.2200e-004	0.00
tblFleetMix	MH	7.2200e-004	0.00
tblFleetMix	MHD	0.02	0.05
tblFleetMix	MHD	0.02	0.05
tblFleetMix	MHD	0.02	0.05
tblFleetMix	OBUS	2.2590e-003	0.00
tblFleetMix	OBUS	2.2590e-003	0.00
tblFleetMix	OBUS	2.2590e-003	0.00
tblFleetMix	SBUS	7.0900e-004	0.00
tblFleetMix	SBUS	7.0900e-004	0.00
tblFleetMix	SBUS	7.0900e-004	0.00
tblFleetMix	UBUS	1.4120e-003	0.00
tblFleetMix	UBUS	1.4120e-003	0.00
tblFleetMix	UBUS	1.4120e-003	0.00
tblGrading	AcresOfGrading	250.00	775.00
tblLandUse	LotAcreage	48.57	66.60

tblProjectCharacteristics	OperationalYear	2018	2040
tblSolidWaste	SolidWasteGenerationRate	94.00	47.00
tblSolidWaste	SolidWasteGenerationRate	1,988.66	2,082.66
tblVehicleTrips	ST_TR	1.68	3.52
tblVehicleTrips	ST_TR	1.68	3.52
tblVehicleTrips	SU_TR	1.68	3.52
tblVehicleTrips	SU_TR	1.68	3.52
tblVehicleTrips	WD_TR	1.68	3.52
tblVehicleTrips	WD_TR	1.68	3.52
tblWater	IndoorWaterUseRate	23,125,000.00	11,562,500.00
tblWater	IndoorWaterUseRate	489,232,500.00	512,357,500.00

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	5.0792	52.3628	24.3884	0.0406	18.2675	2.8802	21.1477	9.9840	2.6498	12.6339	0.0000	4,106.2066	4,106.2066	1.2014	0.0000	4,136.2415
2018	16.0032	113.9672	120.2224	0.4023	24.0010	2.6355	26.2731	9.9840	2.4247	12.3563	0.0000	41,186.6713	41,186.6713	2.7209	0.0000	41,254.6939
2019	521.0639	15.3000	16.0703	0.0419	3.9234	0.8259	4.0827	1.0405	0.7598	1.1974	0.0000	4,158.7897	4,158.7897	0.7193	0.0000	4,162.4125
Maximum	**521.0639**	**113.9672**	**120.2224**	**0.4023**	**24.0010**	**2.8802**	**26.2731**	**9.9840**	**2.6498**	**12.6339**	**0.0000**	**41,186.6713**	**41,186.6713**	**2.7209**	**0.0000**	**41,254.6939**

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	5.0792	52.3628	24.3884	0.0406	18.2675	2.8802	21.1477	9.9840	2.6498	12.6339	0.0000	4,106.2066	4,106.2066	1.2014	0.0000	4,136.2415
2018	16.0032	113.9672	120.2224	0.4023	24.0010	2.6355	26.2731	9.9840	2.4247	12.3563	0.0000	41,186.6713	41,186.6713	2.7209	0.0000	41,254.6939
2019	521.0639	15.3000	16.0703	0.0419	3.9234	0.8259	4.0827	1.0405	0.7598	1.1974	0.0000	4,158.7897	4,158.7897	0.7193	0.0000	4,162.4125
Maximum	**521.0639**	**113.9672**	**120.2224**	**0.4023**	**24.0010**	**2.8802**	**26.2731**	**9.9840**	**2.6498**	**12.6339**	**0.0000**	**41,186.6713**	**41,186.6713**	**2.7209**	**0.0000**	**41,254.6939**

	ROG	**NOx**	**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	46.5268	3.8100e-003	0.4240	3.0000e-005		1.5000e-003	1.5000e-003		1.5000e-003	1.5000e-003		0.9146	0.9146	2.3600e-003		0.9735
Energy	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000
Mobile	5.4924	119.1057	88.9327	0.8150	71.9754	0.3061	72.2815	19.3135	0.2875	19.6009		85,745.3864	85,745.3864	3.4098		85,830.6317
Total	**52.3003**	**121.6652**	**91.5035**	**0.8303**	**71.9754**	**0.5019**	**72.4773**	**19.3135**	**0.4832**	**19.7967**		**88,813.1761**	**88,813.1761**	**3.4710**	**0.0562**	**88,916.7052**

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	46.5268	3.8100e-003	0.4240	3.0000e-005		1.5000e-003	1.5000e-003		1.5000e-003	1.5000e-003		0.9146	0.9146	2.3600e-003		0.9735
Energy	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000
Mobile	5.4924	119.1057	88.9327	0.8150	71.9754	0.3061	72.2815	19.3135	0.2875	19.6009		85,745.3864	85,745.3864	3.4098		85,830.6317
Total	**52.3003**	**121.6652**	**91.5035**	**0.8303**	**71.9754**	**0.5019**	**72.4773**	**19.3135**	**0.4832**	**19.7967**		**88,813.1761**	**88,813.1761**	**3.4710**	**0.0562**	**88,916.7052**

	ROG	**NOx**	**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	5/30/2017	10/16/2017	5	100	
2	Site Preparation	Site Preparation	10/17/2017	3/5/2018	5	100	
3	Grading	Grading	3/6/2018	7/23/2018	5	100	
4	Building Construction	Building Construction	7/24/2018	12/10/2018	5	100	
5	Paving	Paving	12/11/2018	4/29/2019	5	100	
6	Architectural Coating	Architectural Coating	4/30/2019	9/16/2019	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 775

Acres of Paving: 45.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,323,400; Non-Residential Outdoor: 1,107,800; Striped Parking Area: 117,810

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	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	1,755.00	685.00	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	351.00	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	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**		**2.1935**	**2.1935**		**2.0425**	**2.0425**		**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

Unmitigated Construction Off-Site

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

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**		**2.1935**	**2.1935**		**2.0425**	**2.0425**	**0.0000**	**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

Mitigated Construction Off-Site

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

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

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	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563

Total	**0.1184**	**0.0875**	**0.9330**	**2.1200e-003**	**0.2012**	**1.6600e-003**	**0.2029**	**0.0534**	**1.5300e-003**	**0.0549**		**211.2566**	**211.2566**	**7.9900e-003**		**211.4563**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563
Total	**0.1184**	**0.0875**	**0.9330**	**2.1200e-003**	**0.2012**	**1.6600e-003**	**0.2029**	**0.0534**	**1.5300e-003**	**0.0549**		**211.2566**	**211.2566**	**7.9900e-003**		**211.4563**

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					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	0.0000	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**	**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					14.2410	0.0000	14.2410	4.1977	0.0000	4.1977			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**	**14.2410**	**2.6337**	**16.8747**	**4.1977**	**2.4230**	**6.6207**		**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					14.2410	0.0000	14.2410	4.1977	0.0000	4.1977			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278

Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**14.2410**	**2.6337**	**16.8747**	**4.1977**	**2.4230**	**6.6207**	**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

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	3.0421	83.1497	22.9484	0.1743	4.3842	0.6158	5.0001	1.2622	0.5891	1.8513		18,546.8162	18,546.8162	1.3957		18,581.7076
Worker	10.2817	7.4274	79.6935	0.2011	19.6168	0.1564	19.7731	5.2025	0.1441	5.3466		20,018.9200	20,018.9200	0.6831		20,035.9981
Total	**13.3237**	**90.5771**	**102.6419**	**0.3754**	**24.0010**	**0.7722**	**24.7732**	**6.4647**	**0.7333**	**7.1979**		**38,565.7362**	**38,565.7362**	**2.0788**		**38,617.7057**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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	0.0000	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**	**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	3.0421	83.1497	22.9484	0.1743	4.3842	0.6158	5.0001	1.2622	0.5891	1.8513		18,546.8162	18,546.8162	1.3957		18,581.7076
Worker	10.2817	7.4274	79.6935	0.2011	19.6168	0.1564	19.7731	5.2025	0.1441	5.3466		20,018.9200	20,018.9200	0.6831		20,035.9981
Total	**13.3237**	**90.5771**	**102.6419**	**0.3754**	**24.0010**	**0.7722**	**24.7732**	**6.4647**	**0.7333**	**7.1979**		**38,565.7362**	**38,565.7362**	**2.0788**		**38,617.7057**

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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797		2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.1811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.8248**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**		**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.1811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.8248**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**	**0.0000**	**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Mitigated Construction Off-Site

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

3.6 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	1.1811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.6355**	**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	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	1.1811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.6355**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**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	518.9258					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	**519.1922**	**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	1.8716	1.3102	14.2290	0.0389	3.9234	0.0305	3.9539	1.0405	0.0281	1.0686		3,877.3417	3,877.3417	0.1211		3,880.3701
Total	**1.8716**	**1.3102**	**14.2290**	**0.0389**	**3.9234**	**0.0305**	**3.9539**	**1.0405**	**0.0281**	**1.0686**		**3,877.3417**	**3,877.3417**	**0.1211**		**3,880.3701**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	518.9258					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**519.1922**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.8716	1.3102	14.2290	0.0389	3.9234	0.0305	3.9539	1.0405	0.0281	1.0686		3,877.3417	3,877.3417	0.1211		3,880.3701
Total	**1.8716**	**1.3102**	**14.2290**	**0.0389**	**3.9234**	**0.0305**	**3.9539**	**1.0405**	**0.0281**	**1.0686**		**3,877.3417**	**3,877.3417**	**0.1211**		**3,880.3701**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4924	119.1057	88.9327	0.8150	71.9754	0.3061	72.2815	19.3135	0.2875	19.6009		85,745.3864	85,745.3864	3.4098		85,830.6317
Unmitigated	5.4924	119.1057	88.9327	0.8150	71.9754	0.3061	72.2815	19.3135	0.2875	19.6009		85,745.3864	85,745.3864	3.4098		85,830.6317

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	352.00	352.00	352.00	1,508,572	1,508,572
Unrefrigerated Warehouse-No Rail	7,446.91	7,446.91	7446.91	31,915,357	31,915,357
Total	7,798.91	7,798.91	7,798.91	33,423,929	33,423,929

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Refrigerated Warehouse-No Rail	0.795700	0.003900	0.017620	0.011010	0.001550	0.000520	0.046400	0.123300	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.795700	0.003900	0.017620	0.011010	0.001550	0.000520	0.046400	0.123300	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.795700	0.003900	0.017620	0.011010	0.001550	0.000520	0.046400	0.123300	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	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000
NaturalGas Unmitigated	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000

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					
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
Refrigerated Warehouse-No Rail	14186.3	0.1530	1.3908	1.1683	8.3400e-003		0.1057	0.1057		0.1057	0.1057		1,668.9766	1,668.9766	0.0320	0.0306	1,678.8945
Unrefrigerated Warehouse-No Rail	11882.1	0.1281	1.1649	0.9785	6.9900e-003		0.0885	0.0885		0.0885	0.0885		1,397.8985	1,397.8985	0.0268	0.0256	1,406.2055
Total		**0.2811**	**2.5557**	**2.1468**	**0.0153**		**0.1942**	**0.1942**		**0.1942**	**0.1942**		**3,066.8751**	**3,066.8751**	**0.0588**	**0.0562**	**3,085.1000**

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
Refrigerated Warehouse-No Rail	14.1863	0.1530	1.3908	1.1683	8.3400e-003		0.1057	0.1057		0.1057	0.1057		1,668.9766	1,668.9766	0.0320	0.0306	1,678.8945
Unrefrigerated Warehouse-No Rail	11.8821	0.1281	1.1649	0.9785	6.9900e-003		0.0885	0.0885		0.0885	0.0885		1,397.8985	1,397.8985	0.0268	0.0256	1,406.2055
Total		**0.2811**	**2.5557**	**2.1468**	**0.0153**		**0.1942**	**0.1942**		**0.1942**	**0.1942**		**3,066.8751**	**3,066.8751**	**0.0588**	**0.0562**	**3,085.1000**

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	46.5268	3.8100e-003	0.4240	3.0000e-005		1.5000e-003	1.5000e-003		1.5000e-003	1.5000e-003		0.9146	0.9146	2.3600e-003		0.9735
Unmitigated	46.5268	3.8100e-003	0.4240	3.0000e-005		1.5000e-003	1.5000e-003		1.5000e-003	1.5000e-003		0.9146	0.9146	2.3600e-003		0.9735

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	1.9236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	44.5644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0388	3.8100e-003	0.4240	3.0000e-005		1.5000e-003	1.5000e-003		1.5000e-003	1.5000e-003		0.9146	0.9146	2.3600e-003		0.9735
Total	**46.5268**	**3.8100e-003**	**0.4240**	**3.0000e-005**		**1.5000e-003**	**1.5000e-003**		**1.5000e-003**	**1.5000e-003**		**0.9146**	**0.9146**	**2.3600e-003**		**0.9735**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.9236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	44.5644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0388	3.8100e-003	0.4240	3.0000e-005		1.5000e-003	1.5000e-003		1.5000e-003	1.5000e-003		0.9146	0.9146	2.3600e-003		0.9735
Total	**46.5268**	**3.8100e-003**	**0.4240**	**3.0000e-005**		**1.5000e-003**	**1.5000e-003**		**1.5000e-003**	**1.5000e-003**		**0.9146**	**0.9146**	**2.3600e-003**		**0.9735**

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

WOCC-Phase 2 2040 Year-Operation 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
Office Park	555.05	1000sqft	12.74	555,050.00	0
Parking Lot	2,404.00	Space	10.26	961,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2040
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 - Acreage assigned to Business Park

Construction Phase - Construction data is just placeholder. See other runs for construction emissions.

Off-road Equipment -

Vehicle Trips - Trip generation based on traffic study.

Area Coating -

Fleet Mix - Fleet mix adjusted to match traffic study.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

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
tblLandUse	LotAcreage	21.64	10.26
tblProjectCharacteristics	OperationalYear	2018	2040
tblVehicleTrips	ST_TR	1.64	1.71
tblVehicleTrips	SU_TR	0.76	0.79
tblVehicleTrips	WD_TR	11.42	11.92

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	5.0792	52.3628	24.3884	0.0406	18.2675	2.8802	21.1477	9.9840	2.6498	12.6339	0.0000	4,106.2066	4,106.2066	1.2014	0.0000	4,136.2415
2018	7.1891	59.6064	52.3051	0.1568	18.2675	2.6355	20.8460	9.9840	2.4247	12.3563	0.0000	15,990.1167	15,990.1167	1.9518	0.0000	16,024.5067
2019	657.4202	15.3000	15.2729	0.0245	1.2966	0.8259	1.4355	0.3439	0.7598	0.8043	0.0000	2,422.7008	2,422.7008	0.7193	0.0000	2,440.6826
Maximum	**657.4202**	**59.6064**	**52.3051**	**0.1568**	**18.2675**	**2.8802**	**21.1477**	**9.9840**	**2.6498**	**12.6339**	**0.0000**	**15,990.1167**	**15,990.1167**	**1.9518**	**0.0000**	**16,024.5067**

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	5.0792	52.3628	24.3884	0.0406	18.2675	2.8802	21.1477	9.9840	2.6498	12.6339	0.0000	4,106.2066	4,106.2066	1.2014	0.0000	4,136.2415
2018	7.1891	59.6064	52.3051	0.1568	18.2675	2.6355	20.8460	9.9840	2.4247	12.3563	0.0000	15,990.1167	15,990.1167	1.9518	0.0000	16,024.5067
2019	657.4202	15.3000	15.2729	0.0245	1.2966	0.8259	1.4355	0.3439	0.7598	0.8043	0.0000	2,422.7008	2,422.7008	0.7193	0.0000	2,440.6826
Maximum	**657.4202**	**59.6064**	**52.3051**	**0.1568**	**18.2675**	**2.8802**	**21.1477**	**9.9840**	**2.6498**	**12.6339**	**0.0000**	**15,990.1167**	**15,990.1167**	**1.9518**	**0.0000**	**16,024.5067**

	ROG	**NOx**	**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	12.8410	2.7000e-003	0.3002	2.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		0.6476	0.6476	1.6700e-003		0.6893
Energy	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040
Mobile	5.3978	37.6610	70.6964	0.4180	47.5390	0.1732	47.7121	12.7156	0.1612	12.8768		43,040.6284	43,040.6284	1.6061		43,080.7801

Total	**18.2869**	**38.1005**	**71.3635**	**0.4207**	**47.5390**	**0.2074**	**47.7464**	**12.7156**	**0.1955**	**12.9111**		**43,565.4650**	**43,565.4650**	**1.6178**	**9.6100e-003**	**43,608.7735**

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	12.8410	2.7000e-003	0.3002	2.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		0.6476	0.6476	1.6700e-003		0.6893
Energy	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040
Mobile	5.3978	37.6610	70.6964	0.4180	47.5390	0.1732	47.7121	12.7156	0.1612	12.8768		43,040.6284	43,040.6284	1.6061		43,080.7801
Total	**18.2869**	**38.1005**	**71.3635**	**0.4207**	**47.5390**	**0.2074**	**47.7464**	**12.7156**	**0.1955**	**12.9111**		**43,565.4650**	**43,565.4650**	**1.6178**	**9.6100e-003**	**43,608.7735**

	ROG	**NOx**	**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	5/30/2017	10/16/2017	5	20	
2	Site Preparation	Site Preparation	10/17/2017	3/5/2018	5	10	
3	Grading	Grading	3/6/2018	7/23/2018	5	35	
4	Building Construction	Building Construction	7/24/2018	12/10/2018	5	370	
5	Paving	Paving	12/11/2018	4/29/2019	5	20	

6	Architectural Coating	Architectural Coating	4/30/2019	9/16/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 10.26

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 832,575; Non-Residential Outdoor: 277,525; Striped Parking Area: 57,696

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	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	581.00	249.00	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	116.00	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	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**		**2.1935**	**2.1935**		**2.0425**	**2.0425**		**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**		**2.1935**	**2.1935**		**2.0425**	**2.0425**	**0.0000**	**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

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	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Unmitigated Construction Off-Site

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

Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563
Total	**0.1184**	**0.0875**	**0.9330**	**2.1200e-003**	**0.2012**	**1.6600e-003**	**0.2029**	**0.0534**	**1.5300e-003**	**0.0549**		**211.2566**	**211.2566**	**7.9900e-003**		**211.4563**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563
Total	**0.1184**	**0.0875**	**0.9330**	**2.1200e-003**	**0.2012**	**1.6600e-003**	**0.2029**	**0.0534**	**1.5300e-003**	**0.0549**		**211.2566**	**211.2566**	**7.9900e-003**		**211.4563**

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					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	0.0000	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**	**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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			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**	**8.6733**	**2.6337**	**11.3071**	**3.5965**	**2.4230**	**6.0195**		**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**8.6733**	**2.6337**	**11.3071**	**3.5965**	**2.4230**	**6.0195**	**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

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	1.1058	30.2252	8.3418	0.0634	1.5937	0.2239	1.8175	0.4588	0.2142	0.6730		6,741.8354	6,741.8354	0.5073		6,754.5185
Worker	3.4038	2.4589	26.3829	0.0666	6.4942	0.0518	6.5460	1.7223	0.0477	1.7700		6,627.3462	6,627.3462	0.2262		6,632.9999
Total	**4.5096**	**32.6841**	**34.7247**	**0.1299**	**8.0879**	**0.2756**	**8.3635**	**2.1811**	**0.2619**	**2.4430**		**13,369.1815**	**13,369.1815**	**0.7335**		**13,387.5185**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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	0.0000	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**	**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	1.1058	30.2252	8.3418	0.0634	1.5937	0.2239	1.8175	0.4588	0.2142	0.6730		6,741.8354	6,741.8354	0.5073		6,754.5185
Worker	3.4038	2.4589	26.3829	0.0666	6.4942	0.0518	6.5460	1.7223	0.0477	1.7700		6,627.3462	6,627.3462	0.2262		6,632.9999
Total	**4.5096**	**32.6841**	**34.7247**	**0.1299**	**8.0879**	**0.2756**	**8.3635**	**2.1811**	**0.2619**	**2.4430**		**13,369.1815**	**13,369.1815**	**0.7335**		**13,387.5185**

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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797		2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.3441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.9878**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**		**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Unmitigated Construction Off-Site

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

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.3441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.9878**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**	**0.0000**	**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Mitigated Construction Off-Site

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

Vendor	0.0000	0.0000	0.0000	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**

3.6 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	1.3441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.7985**	**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	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	1.3441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.7985**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**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	656.5352					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	**656.8017**	**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	0.6186	0.4330	4.7025	0.0129	1.2966	0.0101	1.3067	0.3439	9.3000e-003	0.3532		1,281.4007	1,281.4007	0.0400		1,282.4015
Total	**0.6186**	**0.4330**	**4.7025**	**0.0129**	**1.2966**	**0.0101**	**1.3067**	**0.3439**	**9.3000e-003**	**0.3532**		**1,281.4007**	**1,281.4007**	**0.0400**		**1,282.4015**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	656.5352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**656.8017**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6186	0.4330	4.7025	0.0129	1.2966	0.0101	1.3067	0.3439	9.3000e-003	0.3532		1,281.4007	1,281.4007	0.0400		1,282.4015
Total	**0.6186**	**0.4330**	**4.7025**	**0.0129**	**1.2966**	**0.0101**	**1.3067**	**0.3439**	**9.3000e-003**	**0.3532**		**1,281.4007**	**1,281.4007**	**0.0400**		**1,282.4015**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.3978	37.6610	70.6964	0.4180	47.5390	0.1732	47.7121	12.7156	0.1612	12.8768		43,040.6284	43,040.6284	1.6061		43,080.7801
Unmitigated	5.3978	37.6610	70.6964	0.4180	47.5390	0.1732	47.7121	12.7156	0.1612	12.8768		43,040.6284	43,040.6284	1.6061		43,080.7801

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Office Park	6,616.20	949.14	438.49	16,636,768	16,636,768
Parking Lot	0.00	0.00	0.00		
Total	6,616.20	949.14	438.49	16,636,768	16,636,768

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
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Parking Lot	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
Office Park	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Parking Lot	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

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	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040
NaturalGas Unmitigated	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040

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					
Office Park	4455.61	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0481**	**0.4368**	**0.3669**	**2.6200e-003**		**0.0332**	**0.0332**		**0.0332**	**0.0332**		**524.1890**	**524.1890**	**0.0101**	**9.6100e-003**	**527.3040**

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					
Office Park	4.45561	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0481**	**0.4368**	**0.3669**	**2.6200e-003**		**0.0332**	**0.0332**		**0.0332**	**0.0332**		**524.1890**	**524.1890**	**0.0101**	**9.6100e-003**	**527.3040**

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	12.8410	2.7000e-003	0.3002	2.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		0.6476	0.6476	1.6700e-003		0.6893
Unmitigated	12.8410	2.7000e-003	0.3002	2.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		0.6476	0.6476	1.6700e-003		0.6893

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	1.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.3306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0275	2.7000e-003	0.3002	2.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		0.6476	0.6476	1.6700e-003		0.6893
Total	**12.8410**	**2.7000e-003**	**0.3002**	**2.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**		**0.6476**	**0.6476**	**1.6700e-003**		**0.6893**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.3306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0275	2.7000e-003	0.3002	2.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003		0.6476	0.6476	1.6700e-003		0.6893
Total	**12.8410**	**2.7000e-003**	**0.3002**	**2.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**		**0.6476**	**0.6476**	**1.6700e-003**		**0.6893**

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

WOCC-Phase 1 With Refrig 2023 for LST

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	100.00	1000sqft	2.30	100,000.00	0
Unrefrigerated Warehouse-No Rail	2,115.60	1000sqft	66.60	2,115,600.00	0
Parking Lot	1,963.50	1000sqft	45.08	1,963,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2023
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 - Acreage assigned to warehousing

Construction Phase - Construction data is just placeholder. See other runs for construction emissions.

Off-road Equipment -

Vehicle Trips - Trip generation based on traffic study.

Trip length is worst case on-site travel

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating -

Fleet Mix - Fleet mix adjusted to match traffic study.

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	0.12
tblFleetMix	HHD	0.03	0.12
tblFleetMix	HHD	0.03	0.12
tblFleetMix	LDA	0.55	0.80
tblFleetMix	LDA	0.55	0.80
tblFleetMix	LDA	0.55	0.80
tblFleetMix	LDT1	0.04	3.9000e-003
tblFleetMix	LDT1	0.04	3.9000e-003
tblFleetMix	LDT1	0.04	3.9000e-003
tblFleetMix	LDT2	0.20	0.02
tblFleetMix	LDT2	0.20	0.02
tblFleetMix	LDT2	0.20	0.02
tblFleetMix	LHD1	0.02	1.5500e-003
tblFleetMix	LHD1	0.02	1.5500e-003
tblFleetMix	LHD1	0.02	1.5500e-003
tblFleetMix	LHD2	5.8250e-003	5.2000e-004
tblFleetMix	LHD2	5.8250e-003	5.2000e-004
tblFleetMix	LHD2	5.8250e-003	5.2000e-004
tblFleetMix	MCY	4.8760e-003	0.00
tblFleetMix	MCY	4.8760e-003	0.00

tblFleetMix	MCY	4.8760e-003	0.00
tblFleetMix	MDV	0.12	0.01
tblFleetMix	MDV	0.12	0.01
tblFleetMix	MDV	0.12	0.01
tblFleetMix	MH	8.6800e-004	0.00
tblFleetMix	MH	8.6800e-004	0.00
tblFleetMix	MH	8.6800e-004	0.00
tblFleetMix	MHD	0.02	0.05
tblFleetMix	MHD	0.02	0.05
tblFleetMix	MHD	0.02	0.05
tblFleetMix	OBUS	2.1230e-003	0.00
tblFleetMix	OBUS	2.1230e-003	0.00
tblFleetMix	OBUS	2.1230e-003	0.00
tblFleetMix	SBUS	7.1000e-004	0.00
tblFleetMix	SBUS	7.1000e-004	0.00
tblFleetMix	SBUS	7.1000e-004	0.00
tblFleetMix	UBUS	1.7800e-003	0.00
tblFleetMix	UBUS	1.7800e-003	0.00
tblFleetMix	UBUS	1.7800e-003	0.00
tblLandUse	LotAcreage	48.57	66.60
tblProjectCharacteristics	OperationalYear	2018	2023
tblVehicleTrips	CC_TL	8.40	0.40
tblVehicleTrips	CC_TL	8.40	0.40
tblVehicleTrips	CNW_TL	6.90	0.40
tblVehicleTrips	CNW_TL	6.90	0.40
tblVehicleTrips	CW_TL	16.60	0.40
tblVehicleTrips	CW_TL	16.60	0.40
tblVehicleTrips	ST_TR	1.68	3.52

tblVehicleTrips	ST_TR	1.68	3.52
tblVehicleTrips	SU_TR	1.68	3.52
tblVehicleTrips	SU_TR	1.68	3.52
tblVehicleTrips	WD_TR	1.68	3.52
tblVehicleTrips	WD_TR	1.68	3.52

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	5.0792	52.3628	24.3884	0.0406	18.2675	2.8802	21.1477	9.9840	2.6498	12.6339	0.0000	4,106.2066	4,106.2066	1.2014	0.0000	4,136.2415
2018	16.0032	113.9672	120.2224	0.4023	24.0010	2.6355	26.2731	9.9840	2.4247	12.3563	0.0000	41,186.6713	41,186.6713	2.7209	0.0000	41,254.6939
2019	238.0134	15.3000	16.0703	0.0419	3.9234	0.8259	4.0827	1.0405	0.7598	1.1974	0.0000	4,158.7897	4,158.7897	0.7193	0.0000	4,162.4125
Maximum	**238.0134**	**113.9672**	**120.2224**	**0.4023**	**24.0010**	**2.8802**	**26.2731**	**9.9840**	**2.6498**	**12.6339**	**0.0000**	**41,186.6713**	**41,186.6713**	**2.7209**	**0.0000**	**41,254.6939**

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	5.0792	52.3628	24.3884	0.0406	18.2675	2.8802	21.1477	9.9840	2.6498	12.6339	0.0000	4,106.2066	4,106.2066	1.2014	0.0000	4,136.2415
2018	16.0032	113.9672	120.2224	0.4023	24.0010	2.6355	26.2731	9.9840	2.4247	12.3563	0.0000	41,186.6713	41,186.6713	2.7209	0.0000	41,254.6939
2019	238.0134	15.3000	16.0703	0.0419	3.9234	0.8259	4.0827	1.0405	0.7598	1.1974	0.0000	4,158.7897	4,158.7897	0.7193	0.0000	4,162.4125
Maximum	**238.0134**	**113.9672**	**120.2224**	**0.4023**	**24.0010**	**2.8802**	**26.2731**	**9.9840**	**2.6498**	**12.6339**	**0.0000**	**41,186.6713**	**41,186.6713**	**2.7209**	**0.0000**	**41,254.6939**

	ROG	**NOx**	**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	50.3805	3.8800e-003	0.4266	3.0000e-005		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003		0.9146	0.9146	2.4000e-003		0.9746
Energy	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000
Mobile	5.5466	82.8925	34.6991	0.1222	2.2985	0.0724	2.3709	0.6168	0.0677	0.6844		12,990.7251	12,990.7251	1.6205		13,031.2385
Total	**56.2082**	**85.4521**	**37.2725**	**0.1376**	**2.2985**	**0.2682**	**2.5666**	**0.6168**	**0.2634**	**0.8802**		**16,058.5148**	**16,058.5148**	**1.6817**	**0.0562**	**16,117.3131**

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	50.3805	3.8800e-003	0.4266	3.0000e-005		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003		0.9146	0.9146	2.4000e-003		0.9746
Energy	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000
Mobile	5.5466	82.8925	34.6991	0.1222	2.2985	0.0724	2.3709	0.6168	0.0677	0.6844		12,990.7251	12,990.7251	1.6205		13,031.2385
Total	**56.2082**	**85.4521**	**37.2725**	**0.1376**	**2.2985**	**0.2682**	**2.5666**	**0.6168**	**0.2634**	**0.8802**		**16,058.5148**	**16,058.5148**	**1.6817**	**0.0562**	**16,117.3131**

	ROG	NOx	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	5/30/2017	10/16/2017	5	200	
2	Site Preparation	Site Preparation	10/17/2017	3/5/2018	5	120	
3	Grading	Grading	3/6/2018	7/23/2018	5	310	
4	Building Construction	Building Construction	7/24/2018	12/10/2018	5	3100	
5	Paving	Paving	12/11/2018	4/29/2019	5	220	
6	Architectural Coating	Architectural Coating	4/30/2019	9/16/2019	5	220	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 775

Acres of Paving: 45.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,323,400; Non-Residential Outdoor: 1,107,800; Striped Parking Area: 117,810

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	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	1,755.00	685.00	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	351.00	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	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**		**2.1935**	**2.1935**		**2.0425**	**2.0425**		**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136

Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**		**2.1935**	**2.1935**		**2.0425**	**2.0425**	**0.0000**	**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

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	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563
Total	**0.1184**	**0.0875**	**0.9330**	**2.1200e-003**	**0.2012**	**1.6600e-003**	**0.2029**	**0.0534**	**1.5300e-003**	**0.0549**		**211.2566**	**211.2566**	**7.9900e-003**		**211.4563**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563
Total	**0.1184**	**0.0875**	**0.9330**	**2.1200e-003**	**0.2012**	**1.6600e-003**	**0.2029**	**0.0534**	**1.5300e-003**	**0.0549**		**211.2566**	**211.2566**	**7.9900e-003**		**211.4563**

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					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	0.0000	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**	**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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			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**	**8.6733**	**2.6337**	**11.3071**	**3.5965**	**2.4230**	**6.0195**		**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**8.6733**	**2.6337**	**11.3071**	**3.5965**	**2.4230**	**6.0195**	**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

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	3.0421	83.1497	22.9484	0.1743	4.3842	0.6158	5.0001	1.2622	0.5891	1.8513		18,546.8162	18,546.8162	1.3957		18,581.7076
Worker	10.2817	7.4274	79.6935	0.2011	19.6168	0.1564	19.7731	5.2025	0.1441	5.3466		20,018.9200	20,018.9200	0.6831		20,035.9981
Total	**13.3237**	**90.5771**	**102.6419**	**0.3754**	**24.0010**	**0.7722**	**24.7732**	**6.4647**	**0.7333**	**7.1979**		**38,565.7362**	**38,565.7362**	**2.0788**		**38,617.7057**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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	0.0000	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**	**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	3.0421	83.1497	22.9484	0.1743	4.3842	0.6158	5.0001	1.2622	0.5891	1.8513		18,546.8162	18,546.8162	1.3957		18,581.7076

Worker	10.2817	7.4274	79.6935	0.2011	19.6168	0.1564	19.7731	5.2025	0.1441	5.3466		20,018.9200	20,018.9200	0.6831		20,035.9981
Total	**13.3237**	**90.5771**	**102.6419**	**0.3754**	**24.0010**	**0.7722**	**24.7732**	**6.4647**	**0.7333**	**7.1979**		**38,565.7362**	**38,565.7362**	**2.0788**		**38,617.7057**

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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797		2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	0.5369					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1806**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**		**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	0.5369					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1806**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**	**0.0000**	**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Mitigated Construction Off-Site

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

3.6 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	0.5369					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9913**	**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	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.5369					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9913**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**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	235.8754					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	**236.1418**	**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	1.8716	1.3102	14.2290	0.0389	3.9234	0.0305	3.9539	1.0405	0.0281	1.0686		3,877.3417	3,877.3417	0.1211		3,880.3701
Total	**1.8716**	**1.3102**	**14.2290**	**0.0389**	**3.9234**	**0.0305**	**3.9539**	**1.0405**	**0.0281**	**1.0686**		**3,877.3417**	**3,877.3417**	**0.1211**		**3,880.3701**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	235.8754					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**236.1418**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.8716	1.3102	14.2290	0.0389	3.9234	0.0305	3.9539	1.0405	0.0281	1.0686		3,877.3417	3,877.3417	0.1211		3,880.3701
Total	**1.8716**	**1.3102**	**14.2290**	**0.0389**	**3.9234**	**0.0305**	**3.9539**	**1.0405**	**0.0281**	**1.0686**		**3,877.3417**	**3,877.3417**	**0.1211**		**3,880.3701**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.5466	82.8925	34.6991	0.1222	2.2985	0.0724	2.3709	0.6168	0.0677	0.6844		12,990.7251	12,990.7251	1.6205		13,031.2385
Unmitigated	5.5466	82.8925	34.6991	0.1222	2.2985	0.0724	2.3709	0.6168	0.0677	0.6844		12,990.7251	12,990.7251	1.6205		13,031.2385

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	7,446.91	7,446.91	7446.91	1,019,214	1,019,214
Refrigerated Warehouse-No Rail	352.00	352.00	352.00	48,176	48,176
Total	7,798.91	7,798.91	7,798.91	1,067,390	1,067,390

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	0.40	0.40	0.40	59.00	0.00	41.00	92	5	3
Refrigerated Warehouse-No Rail	0.40	0.40	0.40	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Refrigerated Warehouse-No Rail	0.795700	0.003900	0.017620	0.011010	0.001550	0.000520	0.046400	0.123300	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.795700	0.003900	0.017620	0.011010	0.001550	0.000520	0.046400	0.123300	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.795700	0.003900	0.017620	0.011010	0.001550	0.000520	0.046400	0.123300	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	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000
NaturalGas Unmitigated	0.2811	2.5557	2.1468	0.0153		0.1942	0.1942		0.1942	0.1942		3,066.8751	3,066.8751	0.0588	0.0562	3,085.1000

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					
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
Refrigerated Warehouse-No Rail	14186.3	0.1530	1.3908	1.1683	8.3400e-003		0.1057	0.1057		0.1057	0.1057		1,668.9766	1,668.9766	0.0320	0.0306	1,678.8945
Unrefrigerated Warehouse-No Rail	11882.1	0.1281	1.1649	0.9785	6.9900e-003		0.0885	0.0885		0.0885	0.0885		1,397.8985	1,397.8985	0.0268	0.0256	1,406.2055
Total		**0.2811**	**2.5557**	**2.1468**	**0.0153**		**0.1942**	**0.1942**		**0.1942**	**0.1942**		**3,066.8751**	**3,066.8751**	**0.0588**	**0.0562**	**3,085.1000**

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
Refrigerated Warehouse-No Rail	14.1863	0.1530	1.3908	1.1683	8.3400e-003		0.1057	0.1057		0.1057	0.1057		1,668.9766	1,668.9766	0.0320	0.0306	1,678.8945
Unrefrigerated Warehouse-No Rail	11.8821	0.1281	1.1649	0.9785	6.9900e-003		0.0885	0.0885		0.0885	0.0885		1,397.8985	1,397.8985	0.0268	0.0256	1,406.2055
Total		**0.2811**	**2.5557**	**2.1468**	**0.0153**		**0.1942**	**0.1942**		**0.1942**	**0.1942**		**3,066.8751**	**3,066.8751**	**0.0588**	**0.0562**	**3,085.1000**

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	50.3805	3.8800e-003	0.4266	3.0000e-005		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003		0.9146	0.9146	2.4000e-003		0.9746
Unmitigated	50.3805	3.8800e-003	0.4266	3.0000e-005		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003		0.9146	0.9146	2.4000e-003		0.9746

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	5.7766					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	44.5644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0395	3.8800e-003	0.4266	3.0000e-005		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003		0.9146	0.9146	2.4000e-003		0.9746
Total	**50.3805**	**3.8800e-003**	**0.4266**	**3.0000e-005**		**1.5200e-003**	**1.5200e-003**		**1.5200e-003**	**1.5200e-003**		**0.9146**	**0.9146**	**2.4000e-003**		**0.9746**

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	5.7766					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	44.5644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0395	3.8800e-003	0.4266	3.0000e-005		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003		0.9146	0.9146	2.4000e-003		0.9746
Total	**50.3805**	**3.8800e-003**	**0.4266**	**3.0000e-005**		**1.5200e-003**	**1.5200e-003**		**1.5200e-003**	**1.5200e-003**		**0.9146**	**0.9146**	**2.4000e-003**		**0.9746**

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

WOCC-Phase 2 2023 Year-LST Analysis

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	555.05	1000sqft	12.74	555,050.00	0
Parking Lot	2,404.00	Space	10.26	961,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2023
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 - Acreage assigned to Business Park

Construction Phase - Construction data is just placeholder. See other runs for construction emissions.

Off-road Equipment -

Vehicle Trips - Trip generation based on traffic study.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating -

Fleet Mix - Fleet mix adjusted to match traffic study.

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
tblLandUse	LotAcreage	21.64	10.26
tblProjectCharacteristics	OperationalYear	2018	2023
tblVehicleTrips	CC_TL	8.40	0.20
tblVehicleTrips	CC_TL	8.40	0.20
tblVehicleTrips	CNW_TL	6.90	0.20
tblVehicleTrips	CNW_TL	6.90	0.20
tblVehicleTrips	CW_TL	16.60	0.20
tblVehicleTrips	CW_TL	16.60	0.20
tblVehicleTrips	ST_TR	1.64	1.71
tblVehicleTrips	SU_TR	0.76	0.79
tblVehicleTrips	WD_TR	11.42	11.92

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	5.0792	52.3628	24.3884	0.0406	18.2675	2.8802	21.1477	9.9840	2.6498	12.6339	0.0000	4,106.2066	4,106.2066	1.2014	0.0000	4,136.2415
2018	7.1891	59.6064	52.3051	0.1568	18.2675	2.6355	20.8460	9.9840	2.4247	12.3563	0.0000	15,990.1167	15,990.1167	1.9518	0.0000	16,024.5067
2019	657.4202	15.3000	15.2729	0.0245	1.2966	0.8259	1.4355	0.3439	0.7598	0.8043	0.0000	2,422.7008	2,422.7008	0.7193	0.0000	2,440.6826
Maximum	**657.4202**	**59.6064**	**52.3051**	**0.1568**	**18.2675**	**2.8802**	**21.1477**	**9.9840**	**2.6498**	**12.6339**	**0.0000**	**15,990.1167**	**15,990.1167**	**1.9518**	**0.0000**	**16,024.5067**

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	5.0792	52.3628	24.3884	0.0406	18.2675	2.8802	21.1477	9.9840	2.6498	12.6339	0.0000	4,106.2066	4,106.2066	1.2014	0.0000	4,136.2415
2018	7.1891	59.6064	52.3051	0.1568	18.2675	2.6355	20.8460	9.9840	2.4247	12.3563	0.0000	15,990.1167	15,990.1167	1.9518	0.0000	16,024.5067
2019	657.4202	15.3000	15.2729	0.0245	1.2966	0.8259	1.4355	0.3439	0.7598	0.8043	0.0000	2,422.7008	2,422.7008	0.7193	0.0000	2,440.6826
Maximum	**657.4202**	**59.6064**	**52.3051**	**0.1568**	**18.2675**	**2.8802**	**21.1477**	**9.9840**	**2.6498**	**12.6339**	**0.0000**	**15,990.1167**	**15,990.1167**	**1.9518**	**0.0000**	**16,024.5067**

	ROG	**NOx**	**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	12.8415	2.7500e-003	0.3021	2.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		0.6476	0.6476	1.7000e-003		0.6901
Energy	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040
Mobile	5.7887	23.2483	26.2093	0.0397	0.8936	0.0444	0.9380	0.2391	0.0411	0.2802		4,119.5500	4,119.5500	0.5100		4,132.3003
Total	**18.6783**	**23.6878**	**26.8783**	**0.0424**	**0.8936**	**0.0787**	**0.9723**	**0.2391**	**0.0754**	**0.3145**		**4,644.3866**	**4,644.3866**	**0.5218**	**9.6100e-003**	**4,660.2944**

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	12.8415	2.7500e-003	0.3021	2.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		0.6476	0.6476	1.7000e-003		0.6901
Energy	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040
Mobile	5.7887	23.2483	26.2093	0.0397	0.8936	0.0444	0.9380	0.2391	0.0411	0.2802		4,119.5500	4,119.5500	0.5100		4,132.3003
Total	**18.6783**	**23.6878**	**26.8783**	**0.0424**	**0.8936**	**0.0787**	**0.9723**	**0.2391**	**0.0754**	**0.3145**		**4,644.3866**	**4,644.3866**	**0.5218**	**9.6100e-003**	**4,660.2944**

	ROG	**NOx**	**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	5/30/2017	10/16/2017	5	20	
2	Site Preparation	Site Preparation	10/17/2017	3/5/2018	5	10	
3	Grading	Grading	3/6/2018	7/23/2018	5	35	
4	Building Construction	Building Construction	7/24/2018	12/10/2018	5	370	
5	Paving	Paving	12/11/2018	4/29/2019	5	20	
6	Architectural Coating	Architectural Coating	4/30/2019	9/16/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 10.26

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 832,575; Non-Residential Outdoor: 277,525; Striped Parking Area: 57,696

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	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	581.00	249.00	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	116.00	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	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**		**2.1935**	**2.1935**		**2.0425**	**2.0425**		**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**		**2.1935**	**2.1935**		**2.0425**	**2.0425**	**0.0000**	**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

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	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563
Total	**0.1184**	**0.0875**	**0.9330**	**2.1200e-003**	**0.2012**	**1.6600e-003**	**0.2029**	**0.0534**	**1.5300e-003**	**0.0549**		**211.2566**	**211.2566**	**7.9900e-003**		**211.4563**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563
Total	**0.1184**	**0.0875**	**0.9330**	**2.1200e-003**	**0.2012**	**1.6600e-003**	**0.2029**	**0.0534**	**1.5300e-003**	**0.0549**		**211.2566**	**211.2566**	**7.9900e-003**		**211.4563**

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					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	0.0000	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**	**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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			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**	**8.6733**	**2.6337**	**11.3071**	**3.5965**	**2.4230**	**6.0195**		**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**8.6733**	**2.6337**	**11.3071**	**3.5965**	**2.4230**	**6.0195**	**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	**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**

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	1.1058	30.2252	8.3418	0.0634	1.5937	0.2239	1.8175	0.4588	0.2142	0.6730		6,741.8354	6,741.8354	0.5073		6,754.5185
Worker	3.4038	2.4589	26.3829	0.0666	6.4942	0.0518	6.5460	1.7223	0.0477	1.7700		6,627.3462	6,627.3462	0.2262		6,632.9999
Total	**4.5096**	**32.6841**	**34.7247**	**0.1299**	**8.0879**	**0.2756**	**8.3635**	**2.1811**	**0.2619**	**2.4430**		**13,369.1815**	**13,369.1815**	**0.7335**		**13,387.5185**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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	0.0000	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**	**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	1.1058	30.2252	8.3418	0.0634	1.5937	0.2239	1.8175	0.4588	0.2142	0.6730		6,741.8354	6,741.8354	0.5073		6,754.5185
Worker	3.4038	2.4589	26.3829	0.0666	6.4942	0.0518	6.5460	1.7223	0.0477	1.7700		6,627.3462	6,627.3462	0.2262		6,632.9999
Total	**4.5096**	**32.6841**	**34.7247**	**0.1299**	**8.0879**	**0.2756**	**8.3635**	**2.1811**	**0.2619**	**2.4430**		**13,369.1815**	**13,369.1815**	**0.7335**		**13,387.5185**

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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797		2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.3441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.9878**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**		**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.3441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.9878**	**17.5209**	**14.7964**	**0.0228**		**0.9561**	**0.9561**		**0.8797**	**0.8797**	**0.0000**	**2,294.0887**	**2,294.0887**	**0.7142**		**2,311.9432**

Mitigated Construction Off-Site

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

3.6 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	1.3441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.7985**	**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	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	1.3441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.7985**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**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	656.5352					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	**656.8017**	**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	0.6186	0.4330	4.7025	0.0129	1.2966	0.0101	1.3067	0.3439	9.3000e-003	0.3532		1,281.4007	1,281.4007	0.0400		1,282.4015

Total	**0.6186**	**0.4330**	**4.7025**	**0.0129**	**1.2966**	**0.0101**	**1.3067**	**0.3439**	**9.3000e-003**	**0.3532**		**1,281.4007**	**1,281.4007**	**0.0400**		**1,282.4015**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	656.5352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**656.8017**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6186	0.4330	4.7025	0.0129	1.2966	0.0101	1.3067	0.3439	9.3000e-003	0.3532		1,281.4007	1,281.4007	0.0400		1,282.4015
Total	**0.6186**	**0.4330**	**4.7025**	**0.0129**	**1.2966**	**0.0101**	**1.3067**	**0.3439**	**9.3000e-003**	**0.3532**		**1,281.4007**	**1,281.4007**	**0.0400**		**1,282.4015**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.7887	23.2483	26.2093	0.0397	0.8936	0.0444	0.9380	0.2391	0.0411	0.2802		4,119.5500	4,119.5500	0.5100		4,132.3003
Unmitigated	5.7887	23.2483	26.2093	0.0397	0.8936	0.0444	0.9380	0.2391	0.0411	0.2802		4,119.5500	4,119.5500	0.5100		4,132.3003

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Office Park	6,616.20	949.14	438.49	312,768	312,768
Parking Lot	0.00	0.00	0.00		
Total	6,616.20	949.14	438.49	312,768	312,768

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
Office Park	0.20	0.20	0.20	33.00	48.00	19.00	82	15	3
Parking Lot	0.20	0.20	0.20	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
Office Park	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868

Parking Lot	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868

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	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040
NaturalGas Unmitigated	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040

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					
Office Park	4455.61	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Total		**0.0481**	**0.4368**	**0.3669**	**2.6200e-003**		**0.0332**	**0.0332**		**0.0332**	**0.0332**		**524.1890**	**524.1890**	**0.0101**	**9.6100e-003**	**527.3040**

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					
Office Park	4.45561	0.0481	0.4368	0.3669	2.6200e-003		0.0332	0.0332		0.0332	0.0332		524.1890	524.1890	0.0101	9.6100e-003	527.3040
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0481**	**0.4368**	**0.3669**	**2.6200e-003**		**0.0332**	**0.0332**		**0.0332**	**0.0332**		**524.1890**	**524.1890**	**0.0101**	**9.6100e-003**	**527.3040**

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	12.8415	2.7500e-003	0.3021	2.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		0.6476	0.6476	1.7000e-003		0.6901
Unmitigated	12.8415	2.7500e-003	0.3021	2.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		0.6476	0.6476	1.7000e-003		0.6901

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	1.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.3306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0280	2.7500e-003	0.3021	2.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		0.6476	0.6476	1.7000e-003		0.6901
Total	**12.8415**	**2.7500e-003**	**0.3021**	**2.0000e-005**		**1.0800e-003**	**1.0800e-003**		**1.0800e-003**	**1.0800e-003**		**0.6476**	**0.6476**	**1.7000e-003**		**0.6901**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.3306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0280	2.7500e-003	0.3021	2.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		0.6476	0.6476	1.7000e-003		0.6901
Total	**12.8415**	**2.7500e-003**	**0.3021**	**2.0000e-005**		**1.0800e-003**	**1.0800e-003**		**1.0800e-003**	**1.0800e-003**		**0.6476**	**0.6476**	**1.7000e-003**		**0.6901**

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

Vehicle Distribution Conversion

Stantec's Categories for Warehouse

Pass Veh	large 2 axle	3 axle	4 axle	Total Trucks	Total
79.57%	3.46%	4.64%	12.33%	20.43%	100.00%

Default CalEEMods Categories/Distribution for Warehouse

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.546418	0.044132	0.199182	0.124467	0.017484	0.00587	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
			0.391135									

Final CalEEMod Values Used for Warehouse Only

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.7957	0.003904	0.017620	0.011010	0.001547	0.000519	0.0464	0.1233	0	0	0	0	0

For Noise Modeling

Auto	MT	HT		
79.57%	3.46%	16.97%	100.00%	Phase 1
77.71%	12.68%	9.61%	100.00%	Phase 2

For Phase 1 + Phase 2

Phase 1	54.10%	Phase 2	45.90%
Auto	MT	HT	
78.72%	7.69%	13.59%	100.00%

G&A

Health Risk Assessment for the West Ontario Commerce Center

Report #17-037A
July 14, 2017

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TABLE OF CONTENTS

1.0 Existing Air Quality 1

1.1 Project Description 1

1.2 Existing Sensitive Receptors 3

1.3 Background on Diesel Particulate Matter 3

2.0 Methodology 5

2.1 Emission Factors 5

2.2 Truck Activity 6

2.3 Dispersion Model 6

2.4 Determination of Cancer Risk 7

2.5 Determination of Non-Cancer Risks 11

3.0 Potential Impacts 12

3.1 Threshold of Significance 12

3.2 Modeled DPM Concentrations 12

3.3 Cancer Risk Increase Due to Project 13

3.4 Non-Cancer Health Risk Due to Project 13

4.0 Mitigation Measures 14

LIST OF TABLES

Table 1 Diesel Truck PM10 Emission Factors (grams per mile) 6

Table 2 Point Estimates for Daily Breathing Rate 9

Table 3 Cancer Risk Parameters by Receptor Type 11

Table 4 DPM Concentrations (micrograms per cubic meter) 12

Table 5 Cancer Risk Increase at Receptors 13

Table 6 Chronic Hazard Index at Receptors 14

LIST OF EXHIBITS

Exhibit 1 Proposed Land Use Plan 2

Exhibit 2 Modeled Receptor Locations 8

1.0 EXISTING AIR QUALITY

1.1 Project Description

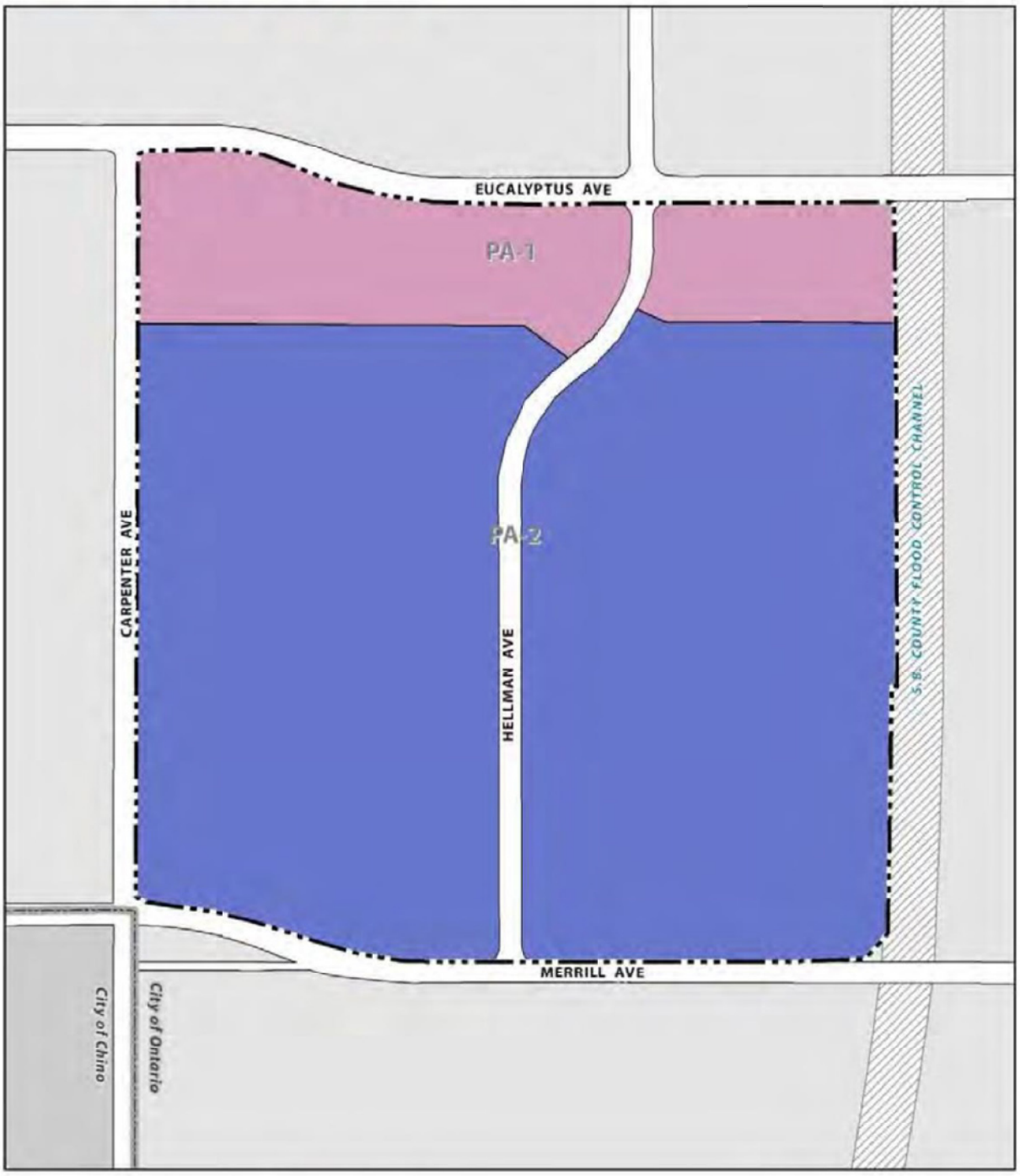
The proposed West Ontario Commerce Center Specific Plan includes two (2) Planning Areas (PAs) totaling approximately 120 net acres and will allow a maximum development of 555,505 square feet of Business Park use and 2,350,005 square feet of Industrial use with a total development of 2,905,510 square feet (Exhibit 1). The proposed Business Park use will accommodate industrial-serving commercial and office uses, very light industrial uses, and allow multi-tenant buildings and single-tenant buildings. The proposed Industrial use will allow storage and warehousing use. The proposed Industrial use will also allow the development of e-commerce use, distribution, and a wide-range of manufacturing and assembly uses. Business Park uses are depicted as Future Development, on the northern portion of the site.

The project will be developed in two phases. The first phase of development includes the development of two industrial buildings (totaling up to 2,350,005 square feet) and surface parking for each building. The second phase of development includes the Business Park and commercial uses for the northern portion of the site along the south side of Eucalyptus Avenue with Business Park and commercial uses oriented towards Eucalyptus Avenue.

The purpose of this report is to assess the potential of Diesel Particulate Matter (DPM) emitted from diesel trucks serving the proposed project on the existing land uses surrounding the project site. DPM is one of several airborne Toxic Air Contaminants (TAC). The California Air Resources Board (ARB) and South Coast Air Quality Management District (SCAQMD) studies show that DPM contributes approximately 70% of the potential inhalation cancer risk. Total cancer risk from TACs is estimated based on this ratio.

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). As a part of the identification process, the ARB's Office of Environmental Health Hazard Assessment (OEHHA) evaluated the potential for DPM to affect human health. The OEHHA found that exposures to DPM resulted in an increased risk of cancer and an increase in chronic noncancer health effects including a greater incidence of cough, labored breathing, chest tightness, wheezing, and bronchitis.

Exhibit 1 - Proposed Land Use Plan



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1.2 Existing Sensitive Receptors

Land uses that are considered sensitive receptors for impacts include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. There is a single residence located immediately south of the project. There are a few rural residences located to the west of the project along Merrill Avenue approximately 0.2 miles from the site. Single family homes are also located approximately 0.4 miles southeast of the project site. These homes lie in the southeast quadrant of Merrill Avenue and South Archibald Avenue. Workers at the project site will also be considered.

1.3 Background on Diesel Particulate Matter

DPM has historically been used as a surrogate measure of exposure for whole diesel exhaust emissions. DPM consists of fine particles (fine particles have a diameter <2.5 µm), including a subgroup with a large number of ultrafine particles (ultrafine particles have a diameter <0.1 µm). Collectively, these particles have a large surface area which makes them an excellent medium for absorbing organic chemicals. Their small size makes them highly respirable and able to reach the deep lung.

During an exhaustive 10-year scientific process, the OEHHA found that human exposure to DPM resulted in an increased risk of cancer and chronic non-cancer health effects, including a greater incidence of cough, labored breathing, chest tightness, wheezing, and bronchitis. The OEHHA estimates that, based on available studies, the potential cancer risk from exposure to DPM of 1 microgram per cubic meter (µg/m3) over a 70-year lifetime ranged from 130 to 2,400 excess cancers per million people. The ARB's Scientific Review Panel (SRP) approved the OEHHA's determination concerning health effects and approved these values as the range of risk for DPM. This wide range demonstrates the uncertainty in the cancer risk from DPM.

The SRP concluded that a value of 300 excess cancers per million people per $\mu g/m^3$ of DPM was appropriate as a point estimate of unit risk factor (URF) for DPM. There is not yet a scientific consensus concerning the appropriate URF for DPM. In "Health Assessment Document for Diesel Engine Exhaust" (May 2002), the U.S. Environmental Protection Agency (EPA) determined that the literature did not support identifying a URF for DPM. The EPA data indicated that the potential cancer risk from exposure to DPM of 1 microgram per cubic meter ($\mu g/m^3$) over a 70-year lifetime ranged from 10 to 1,000 excess cancers per million, although lower risk and even zero risk cannot be ruled out by the current data.

The OEHHA also concluded that exposure to DPM concentrations greater than 5 $\mu g/m^3$ can result in a number of long-term (chronic) non-cancer health effects including greater incidence of cough, phlegm, and bronchitis. The EPA has come to the same conclusion. The 5 $\mu g/m^3$ value is referred to as the Chronic Reference Exposure Value (REL) for DPM. The SRP supported the OEHHA's conclusion and noted that the REL may need to be lowered further as more data emerge on potential adverse non-cancer effects of DPM.

To provide a perspective on the contribution that DPM has on the overall statewide average ambient air toxics potential cancer risk, the ARB evaluated risks from specific compounds using data from ARB's ambient monitoring network. ARB maintains a 21-site air toxics monitoring network which measures outdoor ambient concentration levels for approximately 60 air toxics. The ARB has determined that, of the top ten inhalation risk contributors, DPM contributes 71% of the total potential cancer risk (the remaining 29% is split among butadiene, benzene, carbonyls and other pollutants).

Average ambient concentrations of air toxics are higher in the SCAB than elsewhere in the state, resulting in higher estimates of risk for residents in the SCAB. In general, the highest risks areas have high concentrations of mobile sources. Higher risk levels occur in the south-central Los Angeles area and in the Los Angeles/Long Beach harbor area.

To address the impacts of DPM, the ARB developed a DPM Risk Reduction Plan in 2008 containing several measures including new vehicle emission standards, reformulated diesel fuels, idling limitations, retrofitting existing diesel fueled vehicles used by government agencies, along with measures to control rail emissions as well as other DPM sources. The emissions calculations in this report used EMFAC2014 to calculate emission factors. EMFAC2014 is a computer model published by the ARB that calculates vehicular emission factors. Emission factors calculated with EMFAC2014 include the effects of the new diesel fueled vehicle emissions standards as well as other DPM Risk Reduction measures.

2.0 METHODOLOGY

Estimating cancer risk increase and non-cancer health hazards from Diesel Particulate Matter (DPM) requires estimating DPM concentrations at sensitive receptors in the vicinity of the source. Concentrations are the mass of pollutant per volume of air, and are typically measured in terms of micrograms (µg) of DPM per cubic meter (m^3) of air. Concentrations are location specific and depend on the amount of pollutants emitted, the location of the emissions relative to the receptor, how the emissions are released, and weather conditions (primarily wind speed and direction). Determination of pollutant concentrations requires the use of a dispersion model which takes all of the pollutant source and weather information and estimates pollutant concentrations.

The following sections describe the information used to estimate the emissions of DPM due to activity associated with the proposed project, the dispersion model and assumptions used to estimate pollutant concentrations at nearby sensitive receptors, and the calculations used to estimate cancer risk and non-cancer health impacts from the DPM emissions.

2.1 Emission Factors

EMFAC2014 is the California Air Resource Board's on-road vehicle emissions model. This model is used for all regulatory modeling of on-road vehicle emissions in the State of California. The EMFAC2014 model was used to estimate particulate emissions from diesel trucks. Specifically, particulate emission rates from Heavy Duty Diesel trucks were calculated for idling conditions as well as traveling at 5 miles per hour (mph) and 25 mph. The trucks were assumed to travel at an overall average speed of 25 miles per hour on public roads and 5 miles an hour within the project. DPM emission factors decrease as speeds increase (up to approximately 35 mph), so using lower speeds represents a worst-case assumption. The idling emission factor was used to represent trucks idling as they arrive or depart their destination within the project.

Table 1 presents the emission factors obtained from EMFAC2014 used to model diesel truck emissions for this project. These emissions represent an average diesel truck in the South Coast Air Basin in 2023. Emission factors for 2033, 2043, and 2050 are also shown in Table 1. In the future, newer, cleaner trucks will replace older, higher polluting, trucks reducing the fleet average emissions. Cancer risk is based on a multi-year exposure. By basing the calculations on 2023 emission factors, worst-case cancer risks will be determined because they will not include projected future emissions reductions that will result in receptors being exposed to slightly reduced concentrations.

Table 1
Diesel Truck PM10 Emission Factors (grams per mile)

	2023 (1)	2033	2043	2050
5 mph	0.0133	0.0115	0.0110	0.0110
25 mph	0.0078	0.0069	0.0067	0.0067
Idle		0.27955 grams/second		

1. 2023 Emission factors used for analysis as worst case.

2.2 Truck Activity

Truck activity levels were provided by the traffic engineer for the project (Stantec, June 2017). Average Daily Traffic (ADT) volumes, p.m. peak, and a.m. peak hour traffic volumes were provided for a roadway network that essentially extended to the freeways in the west, north, and east directions. Truck percentages were also provided for each warehouse building (Phases 1A and 1B) and the Business Park (Phase 2).

2.3 Dispersion Model

The "Air Toxic Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments," (ARB Office of Environmental Health Hazard Assessment (OEHHA), February 2015) is acknowledged as the primary guidance document for preparing Health Risk Assessments. For many projects AERMOD is the recommended model. However, AERMOD models point sources (e.g., industrial stacks) and area sources very well, but is not well suited for modeling traffic. The OEHHA document states "At the present time, CALINE (CALINE3, CAL3QHCR, and CALINE4) is the only model dedicated to modeling the enhanced mechanical and thermal turbulence created by motor vehicles traveling on a roadway. Of these, CAL3QHCR is the only model that accepts hourly meteorological data and can estimate annual average concentrations." The document continues with "…AERMOD does not include the enhanced roadway turbulence. Therefore, in the case where roadway emissions dominate the risk assessment, it may be most important to simulate the enhanced thermal and mechanical turbulence from motor vehicles with the CAL3QHCR model." Since the modeling of the diesel truck traffic is the only source of DPM, it follows that the CAL3QHCR model would be the best tool.

The U.S. Environmental Protection Agency's pollutant dispersion model CAL3QHCR was used to estimate pollutant concentrations at sensitive receptors in the vicinity of the project. Specifically, the CAL3QHCR release 13196 was used. The model automatically calculates the highest 1-hour, 24-hour, and annual concentrations.

One year of weather data, prepared by the South Coast Air Quality Management District, specifically for dispersion modeling (http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data) was used. This data file represents actual measured weather conditions at the nearest station, in this case the Upland station.

CARB regulations limit idling to five minutes or less. There are mitigation measures for air quality that limit idling to the minimum amount feasible. Therefore, an idling time of 2 minutes for each arriving truck was used for the analysis.

Five receptor locations were modeled (Exhibit 2). Two receptors (Receptors 1 and 2) along Merrill Avenue west of the project were modeled. Receptor 1 represents the residential area closest to the project site to the west. A third receptor (Receptor 3) representing a residential area was modeled near the corner of Archibald Avenue and Merrill Avenue. This represents the closest residence to the east. A fourth receptor (Receptor 4) was modeled on the project site to represent worker exposure to DPM. Receptor 5 is a single residence immediately south of the project site, and is the closest receptor to the project site.

2.4 Determination of Cancer Risk

It is important to understand that cancer risk represents the probability that a person develops some form of cancer. The estimated risk does not represent mortality rates. It is also important to understand that the risk described in these calculations reflects a level of exposure that would be virtually impossible to experience, and that for most individuals, exposure to a particular contaminant such as DPM, would be considerably less due to shorter duration of residence in the area, amount of time spent at the residence daily and throughout the year, and the split between time spent indoors versus outdoors. Studies have shown that the typical person spends approximately 87 percent of their time indoors, 5 percent of their time outdoors, and 7 percent of their time in vehicles. Indoor DPM levels are typically lower than outdoor levels. One study indicated that indoor concentrations were 67 percent of outdoor concentrations. However, this would be dependent on factors such as open windows and HVAC system filtration efficiencies. The least expensive ventilation system filters have little or no effect on the small diesel particulates. More expensive filters can filter out the larger diesel particulates but the ultra-fine particulates are primarily unaffected.

Exhibit 2 - Modeled Receptor Locations

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The cancer risk from DPM is estimated by first calculating the dose of DPM through inhalation. The dose is then multiplied by the Cancer Potency Factor to determine potential risk of developing cancer over a specific time period. The dose is calculated through the following equation:

$$Dose_{inh} = \frac{C_{air} \times DBR \times A \times EF \times ED \times 10^{-6}}{AT}$$

where,

$Dose_{inh}$	Average daily dose per body weight through inhalation (mg/kg/day)
C_{air}	Annual average DPM concentration in air (µg/m3)
DBR	Daily breathing rate in volume (liters) per body weight (kilograms) per day (L/kg/day)
A	Inhalation absorption factor (unitless)
EF	Exposure Frequency (days/year)
ED	Exposure Duration (years)
AT	Averaging Time Period (days)

The annual average concentration was determined by the CAL3QHCR modeling discussed above. The estimates for daily breathing rate from the OEHHA Hotspot guidelines are presented in Table 2.

Table 2
Point Estimates for Daily Breathing Rate

Exposure Duration	Rate (L/kg/Day)
9 Years	
Average	452
High End	581
30 & 70 Years	
Average	271
High End	393
Off-Site Worker	
(Single Value)	149

The values for a 9-year duration are higher than the others because they are representative of a child's breathing rate. The data is intended to represent the first 9-years of life. The 30 and 70-year rates are based on average human lifetime breathing rates. The Off-Site Worker rate

is based on a 70 kg worker breathing 1.3 m^3/hour for an eight-hour day. The breathing rate recommended by the EPA is 1.3 m^3/hr as an average for outdoor workers.

The Inhalation Absorption Factor (A) is an adjustment factor to be used if the fraction of the substance that is absorbed by the body is different from the fraction used to determine the Cancer Potency Factor. Per OEHHA recommendations it is assumed that for most TAC's, including DPM, there is no difference and the factor is 1.

Exposure Frequency (EF) is the number of days in a year that a receptor is exposed to the substance being analyzed. For a residential receptor one assumes this is 365 days per year. For a worker the exposure is 5 days per week or 261 days per year. For teachers and students the exposure is 5 days a week for 36 weeks per year, or 180 days per year.

The Exposure Duration (ED) is the amount of time in a person's life that they are exposed to the TAC being analyzed. This is typically 9, 30 or 70 years. Nine years represents the average time a person lives at one residence. Thirty years represents the high end of time a person lives at a residence. Seventy years represents a typical lifetime. Because the methodology used to determine the Cancer Potency Factor is based on long term—near lifetime—exposure, applying this factor to assess shorter duration exposures introduces uncertainty into the analysis. OEHHA does not support the use of cancer potency factors for exposures of less than 9 years.

The Averaging Time Period (AT) is the time over which the cancer risk is assessed. Standard risk assessment methodology calculates the risk over an average, 70-year, lifetime. Therefore, the Averaging Time Period is 25,500 days.

The cancer risk is determined by multiplying the Dose with the Cancer Risk Potency Factor. The Cancer Risk Potency Factor describes the potential risk of developing cancer per unit of average daily dose over a 70-year lifetime. The Cancer inhalation potency factors have been determined by the OEHHA or by the U.S. EPA and endorsed by the OEHHA. The inhalation potency factor determined by OEHHA is 1.1 (mg/kg-day). Multiplying this factor by the dose and by 1,000,000 (one-million) gives the cancer risk caused by the DPM in terms of number of cancers per million of exposed persons.

Table 3
Cancer Risk Parameters by Receptor Type

Receptor Type	Daily Breathing Rate (L/kg/day)	Inhalation Absorption Factor	Exposure Frequency (Days/Year)	Exposure Duration (Years)	Averaging Time Period (Days)
Resident	393	1	365	70	25,550
Worker	149	1	261	40	25,550
Teacher	149	1	190	40	25,550
Student	581	1	180	9	25,550

2.5 Determination of Non-Cancer Risks

The relationship for the non-cancer health effects of DPM is estimated by the following equation:

$$HI_{DPM} = C_{DPM}/REL_{DPM}$$

where,

HI_{DPM} Hazard Index; an expression of the potential for non-cancer health effects.

C_{DPM} Worst-case 24-hour average DPM concentration (μg/m^3).

REL_{DPM} Reference exposure level (REL) for DPM; the DPM concentration at which no adverse health effects are anticipated. The chronic REL for DPM was established by OEHHA as 5 μg/m^3.

3.0 POTENTIAL IMPACTS

3.1 Threshold of Significance

The South Coast Air Quality Management District (SCAQMD) recommends significance thresholds for new sources of toxic air contaminants at its CEQA Air Quality Analysis Guidance Handbook website (http://www.aqmd.gov/ceqa/hdbk.html). SCAQMD's recommended significance threshold for increased cancer risk is an increase due to the project of greater than 10 in a million. The recommended threshold for non-carcinogen impacts is a Chronic Hazard Index greater than 1. These thresholds will be used for this project.

The project will result significant impact due to diesel truck pollutant emissions if:

- The cancer risk due to exposure of DPM from the project is greater than 10 in a million

OR

- The Chronic Hazard Index due to exposure of DPM from the project is greater than 1.

3.2 Modeled DPM Concentrations

Table 4 shows the results of the dispersion modeling. The projected DPM concentrations for the four receptors are shown. Both the annual average concentrations and peak 24-hour average concentrations are presented.

Table 4 DPM Concentrations (μg/m^3)

Receptor	24 Hour	Annual
1	0.00125	0.000355
2	0.00159	0.000377
3	0.00408	0.001140
4	0.01108	0.003595
5	0.00243	0.000311

The highest annual average DPM concentration of 0.003595 μg/m^3 is projected to occur at Receptor 4, which is on the project site and representative of worker exposure. The maximum concentration for a residential receptor area is 0.001140 μg/m^3 at Receptor 3. More trucks travel to the east of the project site than to the west, and this explains why the concentrations are higher at Receptor 3 than for Receptors 1or 2.

The highest projected 24-hour average DPM concentration is 0.01108 μg/m^3 and again occurs within the project site. The 24-hour maximum concentration for a sensitive receptor area is 0.00408 μg/m^3 and again occurs at Receptor 3.

3.3 Cancer Risk Increase Due to Project

Table 5 presents the maximum annual average DPM concentrations for the four receptors near the project. Residents, workers, teachers, and students were all considered. Although there is no school in the area, it was modeled as though a school existed at Receptor 3, which is the worst case residential area. The worker category represents an on-site location. The table also presents the increased cancer risk due to exposure due to all toxic air contaminants (TAC). SCAQMD data indicates that the cancer risk from DPM represents approximately 70% of the total cancer risk from all TACs. The final column shows the overall increase in cancer risk due to exposure to all TACs.

Table 5
Cancer Risk Increase at Receptors

			Increase in Cancer Risk Per Million	
Receptor	**Use**	**Annual DPM Conc. (μg/m3)**	**DPM**	**All TAC (1)**
1	Resident	0.000355	0.15	0.22
2	Resident	0.000377	0.16	0.23
3	Resident	0.001140	0.49	0.70
3	Teacher	0.001140	0.06	0.08
3	Student	0.001140	0.05	0.07
4	Worker	0.003595	0.24	0.34
5	Resident	0.000311	0.13	0.19

1. Estimated Assuming DPM Represents 70% of Total Cancer Risk

Table 5 shows that the maximum cancer risk increase due to the proposed project is 0.7 in a million which is well below the significance threshold of 10 in a million. Therefore, the project will not result in a significant impact due to increased cancer risk from DPM emissions.

3.4 Non-Cancer Health Risk Due to Project

Table 6 presents the maximum annual average DPM concentrations for the four receptors ner the project. The table also presents the Hazard Index due to exposure due to DPM calculated from the concentration as described in Section 2.5.

Table 6
Chronic Hazard Index at Receptors

Receptor	Use	24-Hour DPM Conc. (µg/m3)	Hazard Index
1	Resident	0.00125	0.0003
2	Resident	0.00159	0.0003
3	Resident	0.00408	0.0008
3	Teacher	0.00408	0.0008
3	Student	0.00408	0.0008
4	Worker	0.01108	0.0022
5	Resident	0.00243	0.0005

Table 6 shows that the maximum Chronic Hazard Index due to the proposed project is 0.0022, which is well below the significance threshold of 1. Therefore, the project will not result in a significant impact due to non-cancer health risk from DPM emissions.

4.0 MITIGATION MEASURES

The analysis presented above shows that Diesel Particulate Matter (DPM) emissions associated with the proposed project will not result in a significant impact. Therefore, mitigation is not required.

APPENDIX

CAL3QHCR Input and Output Files

NOTE: EMISSION FACTORS MULTIPLIED BY 100.

```
'WOCC HEALTH RISK ASSESSMENT'  60. 108.  0. 0.  5  0.3048 1
 1 1 81 12 31 81
 54147  81  99999 81
 1 0 'U'
'REC 1   '      2972.     3048.      6.0
'REC 2   '      6183.     3300.      6.0
'REC 3   '     12000.     2909.      6.0
'REC 4   '      9479.     4222.      6.0
'REC 5   '      7866.     3009.      6.0
2 'p'
1 1 1 1 1 1 1
'LINK NETWORK FOR PROJECT'       6
   1  1
'L1 GROVE           ' 'AG'  1315.  5878.  1343.  3206.    0.  68.
   2  1
'L2 MERRIL          ' 'AG'  1343.  3206.  8929.  3905.    0.  68.
   3  1
'L3 MERRILL         ' 'AG'  8929.  3905. 11823.  3048.    0.  68.
   4  1
'L4 ARCHN           ' 'AG' 11823.  3048. 11833.  5747.    0.  97.
   5  1
'L5 ARCHN           ' 'AG' 11823.  3048. 11842.   340.    0.  97.
   6  1
'L6 INTERNAL        ' 'AG'  8929.  3905.  8928.  4971.    0.  68.
 1   0.00
   1     4.0      0.78
   2     6.0      0.78
   3    12.0      0.78
   4    10.0      0.78
   5     2.0      0.78
   6    26.0      2.65
 2   0.00
   1     4.0      0.78
   2     6.0      0.78
   3    12.0      0.78
   4    10.0      0.78
```

```
  5     2.0      0.78
  6    26.0      2.65
3   0.00
  1     4.0      0.78
  2     6.0      0.78
  3    12.0      0.78
  4    10.0      0.78
  5     2.0      0.78
  6    26.0      2.65
4   0.00
  1     4.0      0.78
  2     6.0      0.78
  3    12.0      0.78
  4    10.0      0.78
  5     2.0      0.78
  6    26.0      2.65
5   0.00
  1     4.0      0.78
  2     6.0      0.78
  3    12.0      0.78
  4    10.0      0.78
  5     2.0      0.78
  6    26.0      2.65
6   0.00
  1     4.0      0.78
  2     6.0      0.78
  3    12.0      0.78
  4    10.0      0.78
  5     2.0      0.78
  6    26.0      2.65
7   0.00
  1     4.0      0.78
  2     6.0      0.78
  3    12.0      0.78
  4    10.0      0.78
  5     2.0      0.78
```

```
   6    26.0      2.65
 8   0.00
   1    42.0      0.78
   2    46.0      0.78
   3   120.0      0.78
   4    85.0      0.78
   5    16.0      0.78
   6   232.0      2.65
 9   0.00
   1    22.0      0.78
   2    35.0      0.78
   3    65.0      0.78
   4    55.0      0.78
   5    11.0      0.78
   6   146.0      2.65
10   0.00
   1    22.0      0.78
   2    35.0      0.78
   3    65.0      0.78
   4    55.0      0.78
   5    11.0      0.78
   6   146.0      2.65
11   0.00
   1    22.0      0.78
   2    35.0      0.78
   3    65.0      0.78
   4    55.0      0.78
   5    11.0      0.78
   6   146.0      2.65
12   0.00
   1    22.0      0.78
   2    35.0      0.78
   3    65.0      0.78
   4    55.0      0.78
   5    11.0      0.78
   6   146.0      2.65
```

```
13   0.00
   1    22.0      0.78
   2    35.0      0.78
   3    65.0      0.78
   4    55.0      0.78
   5    11.0      0.78
   6   146.0      2.65
14   0.00
   1    22.0      0.78
   2    35.0      0.78
   3    65.0      0.78
   4    55.0      0.78
   5    11.0      0.78
   6   146.0      2.65
15   0.00
   1    22.0      0.78
   2    35.0      0.78
   3    65.0      0.78
   4    55.0      0.78
   5    11.0      0.78
   6   146.0      2.65
16   0.00
   1    22.0      0.78
   2    35.0      0.78
   3    65.0      0.78
   4    55.0      0.78
   5    11.0      0.78
   6   146.0      2.65
17   0.00
   1    22.0      0.78
   2    35.0      0.78
   3    65.0      0.78
   4    55.0      0.78
   5    11.0      0.78
   6   146.0      2.65
18   0.00
```

```
   1    20.0      0.78
   2    49.0      0.78
   3   100.0      0.78
   4    69.0      0.78
   5    15.0      0.78
   6   211.0      2.65
19   0.00
   1    22.0      0.78
   2    35.0      0.78
   3    65.0      0.78
   4    55.0      0.78
   5    11.0      0.78
   6   146.0      2.65
20   0.00
   1    16.0      0.78
   2    24.0      0.78
   3    47.0      0.78
   4    38.0      0.78
   5     8.0      0.78
   6   103.0      2.65
21   0.00
   1    16.0      0.78
   2    24.0      0.78
   3    47.0      0.78
   4    38.0      0.78
   5     8.0      0.78
   6   103.0      2.65
22   0.00
   1    16.0      0.78
   2    24.0      0.78
   3    47.0      0.78
   4    38.0      0.78
   5     8.0      0.78
   6   103.0      2.65
23   0.00
   1     4.0      0.78
```

```
   2     6.0      0.78
   3    12.0      0.78
   4    10.0      0.78
   5     2.0      0.78
   6    26.0      2.65
24   0.00
   1     4.0      0.78
   2     6.0      0.78
   3    12.0      0.78
   4    10.0      0.78
   5     2.0      0.78
   6    26.0      2.65
```

Note: Emission Factors Multiplied by Factor of 100, Concentrations Must Be Divided By 100.

CAL3QHCR (Dated: 13196)

DATE : 07/14/17
PAGE: 1
TIME : 13:05:00

JOB: WOCC HEALTH RISK ASSESSMENT RUN: LINK NETWORK FOR PROJECT

==========
General Information
==========

Run start date: 01/01/81 Julian: 1
end date: 12/31/81 Julian: 365

A Tier 2 approach was used for input data preparation.

The MODE flag has been set to p for calculating PM averages.

Ambient background concentrations are excluded from the averages below.

Site & Meteorological Constants

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 108. CM ATIM = 60.

Met. Sfc. Sta. Id & Yr = 54147 81
Upper Air Sta. Id & Yr = 99999 81

Urban mixing heights were processed.

In 1981, Julian day 1 is a Thursday.

The patterns from the input file
have been assigned as follows:

```
          Pattern # 1 is assigned to Monday.
          Pattern # 1 is assigned to Tuesday.
          Pattern # 1 is assigned to Wednesday.
          Pattern # 1 is assigned to Thursday.
          Pattern # 1 is assigned to Friday.
          Pattern # 1 is assigned to Saturday.
          Pattern # 1 is assigned to Sunday.

      Link Data Constants - (Variable data in *.LNK file)
      -------------------

            LINK DESCRIPTION     *         LINK COORDINATES (FT)          *   LENGTH   BRG  TYPE
H     W  NLANES
                                 *     X1        Y1        X2        Y2   *    (FT)   (DEG)
(FT)  (FT)
         -------------------------*----------------------------------------
*-------------------------------------
          1. L1 GROVE            *   1315.0    5878.0    1343.0    3206.0 *    2672.   179.  AG
0.0  68.0
          2. L2 MERRIL           *   1343.0    3206.0    8929.0    3905.0 *    7618.    85.  AG
0.0  68.0
          3. L3 MERRILL          *   8929.0    3905.0   11823.0    3048.0 *    3018.   106.  AG
0.0  68.0
          4. L4 ARCHN            *  11823.0    3048.0   11833.0    5747.0 *    2699.     0.  AG
0.0  97.0
          5. L5 ARCHN            *  11823.0    3048.0   11842.0     340.0 *    2708.   180.  AG
0.0  97.0
          6. L6 INTERNAL         *   8929.0    3905.0    8928.0    4971.0 *    1066.   360.  AG
0.0  68.0

                                                          CAL3QHCR (Dated: 13196)

     DATE : 07/14/17
PAGE:  2
     TIME : 13:05:00
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JOB: WOCC HEALTH RISK ASSESSMENT RUN: LINK NETWORK FOR PROJECT

Receptor Data

RECEPTOR	COORDINATES (FT) X	Y	Z
1. REC 1	2972.0	3048.0	6.0
2. REC 2	6183.0	3300.0	6.0
3. REC 3	12000.0	2909.0	6.0
4. REC 4	9479.0	4222.0	6.0
5. REC 5	7866.0	3009.0	6.0

Model Results

Remarks : In search of the wind direction corresponding to the maximum concentration, only the first direction, of the directions with the same maximum concentrations, is indicated as the maximum.

* MAXIMUM HOURLY CONCENTRATIONS WITH ANY AMBIENT BACKGROUND CONCENTRATIONS (BKG) ADDED

(MICROGRAMS/M**3)

	REC0001	REC0002	REC0003	REC0004	REC0005
MAX+BKG	0.7469	1.2215	3.0847	3.6709	1.9627
- BKG	0.0000	0.0000	0.0000	0.0000	0.0000
MAX	0.7469	1.2215	3.0847	3.6709	1.9627
WIND DIR	77	68	293	261	41
JULIAN	213	318	57	121	8
HOUR	8	8	8	8	8

THE HIGHEST CONCENTRATION OF 3.6709 UG/M**3 OCCURRED AT RECEPTOR REC0004.

CAL3QHCR (Dated: 13196)

==========
Output Section
==========

NOTES PERTAINING TO THE REPORT

1. THE HIGHEST AVERAGE IN EACH OF THE FIRST TWO COLUMNS OF EACH TABLE BELOW ARE SUFFIXED BY AN ASTERISK (*).
FOR PM OUTPUT, THERE IS ONLY ONE COLUMN AND ASTERISK FOR THE ANNUAL AVERAGE/PERIOD OF CONCERN TABLE.

2. THE NUMBERS IN PARENTHESES ARE THE JULIAN DAY AND ENDING HOUR FOR THE PRECEDING AVERAGE.

3. THE NUMBER OF CALM HOURS USED IN PRODUCING EACH AVERAGE ARE PREFIXED BY A C.

PRIMARY AND SECONDARY AVERAGES.

SIX HIGHEST 24-HOUR END-TO-END AVERAGE CONCENTRATIONS IN MICROGRAMS/M**3
EXCLUDING AMBIENT BACKGROUND CONCENTRATIONS.

```
                  Highest                Second Highest         Third Highest        Fourth
Highest         Fifth Highest         Sixth Highest
            Rcptr         Ending               Ending               Ending               Ending
Ending               Ending
            No.   Conc  Day Hr  Calm    Conc  Day Hr  Calm    Conc  Day Hr  Calm    Conc  Day Hr
Calm    Conc  Day Hr  Calm    Conc  Day Hr  Calm

              1   0.1251 (361,24) C 2   0.1205 (353,24) C 2   0.1056 ( 27,24) C 6   0.0995
(359,24) C 2   0.0988 ( 12,24) C 4   0.0987 ( 59,24) C 0
              2   0.1590 (361,24) C 2   0.1465 (364,24) C 4   0.1163 (353,24) C 2   0.1066
( 27,24) C 6   0.1061 ( 59,24) C 0   0.1052 (344,24) C 2
              3   0.4082 ( 12,24) C 4   0.4013 (337,24) C 1   0.3788 (  9,24) C 8   0.3666
(340,24) C 1   0.3418 (345,24) C 4   0.3382 (350,24) C 1
              4   1.1081*( 12,24) C 4   0.8600*( 19,24) C 5   0.8586 (124,24) C 4   0.8102
(100,24) C 1   0.7724 ( 33,24) C 3   0.7699 (357,24) C 0
              5   0.2429 (331,24) C 2   0.2033 ( 39,24) C 4   0.1690 (  8,24) C 8   0.1651
( 59,24) C 0   0.1516 ( 64,24) C 0   0.1478 ( 10,24) C 4

         THE HIGHEST ANNUAL AVERAGE CONCENTRATIONS
                 IN MICROGRAMS/M**3
         EXCLUDING AMBIENT BACKGROUND CONCENTRATIONS.

            Receptor       Maximum  Ending
             Number        Conc     Day Hr  Calm
               1           0.0355  (365,24) C 490
               2           0.0377  (365,24) C 490
               3           0.1140  (365,24) C 490
               4           0.3595* (365,24) C 490
               5           0.0311  (365,24) C 490

                                                                CAL3QHCR (Dated: 13196)
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JOB: WOCC HEALTH RISK ASSESSMENT RUN: LINK NETWORK FOR PROJECT

LINK CONTRIBUTION TABLES

MAXIMUM 24-HOUR AVERAGED LINK CONTRIBUTIONS
IN MICROGRAMS/M**3
EXCLUDING AMBIENT BACKGROUND CONCENTRATIONS.

Rcptr No.	Total Conc	Ending Day Hr	Ambient Backgnd	Total Link	Link +1	Link +2	Link +3	Link +4	Link +5	Link +6
1	0.1251	(361,24)	0.00	0.1251	0.0059	0.1030	0.0027	0.0016	0.0004	0.0117
2	0.1590	(361,24)	0.00	0.1590	0.0015	0.0937	0.0086	0.0038	0.0005	0.0508
3	0.4082	(12,24)	0.00	0.4082	0.0009	0.0094	0.1869	0.1056	0.0573	0.0482
4	1.1081	(12,24)	0.00	1.1081	0.0014	0.0564	0.0271	0.0000	0.0000	1.0232
5	0.2429	(331,24)	0.00	0.2429	0.0002	0.0354	0.0124	0.0027	0.0000	0.1922

SECOND HIGHEST 24-HOUR AVERAGED LINK CONTRIBUTIONS
IN MICROGRAMS/M**3
EXCLUDING AMBIENT BACKGROUND CONCENTRATIONS.

Rcptr No.	Total Conc	Ending Day Hr	Ambient Backgnd	Total Link	Link +1	Link +2	Link +3	Link +4	Link +5	Link +6
1	0.1205	(353,24)	0.00	0.1205	0.0119	0.0920	0.0028	0.0017	0.0001	0.0120
2	0.1465	(364,24)	0.00	0.1465	0.0001	0.0487	0.0100	0.0056	0.0001	0.0821
3	0.4013	(337,24)	0.00	0.4013	0.0007	0.0088	0.2105	0.0815	0.0441	

0.0556
4 0.8600 (19,24) 0.00 0.8600 0.0007 0.0383 0.0599 0.0007 0.0006
0.7598
5 0.2033 (39,24) 0.00 0.2033 0.0000 0.0346 0.0080 0.0019 0.0004
0.1585

MAXIMUM ANNUAL AVERAGED LINK CONTRIBUTIONS
IN MICROGRAMS/M**3
EXCLUDING AMBIENT BACKGROUND CONCENTRATIONS.

Rcptr No.	Total Conc	Ending Day Hr	Ambient Backgnd	Total Link	Link +1	Link +2	Link +3	Link +4	Link +5	Link +6
1	0.0355	(365,24)	0.00	0.0355	0.0027	0.0302	0.0005	0.0003	0.0000	0.0018
2	0.0377	(365,24)	0.00	0.0377	0.0005	0.0289	0.0014	0.0006	0.0001	0.0063
3	0.1140	(365,24)	0.00	0.1140	0.0001	0.0015	0.0364	0.0371	0.0303	0.0087
4	0.3595	(365,24)	0.00	0.3595	0.0002	0.0221	0.0537	0.0023	0.0003	0.2809
5	0.0311	(365,24)	0.00	0.0311	0.0003	0.0132	0.0038	0.0010	0.0002	0.0128

CAL3QHCR (Dated: 13196)

DATE : 07/14/17
PAGE: 5
TIME : 13:05:00

JOB: WOCC HEALTH RISK ASSESSMENT RUN: LINK NETWORK FOR PROJECT

CALM DURATION FREQUENCY

Hours of Consecutive Calm Winds	Frequency of Occurrence	(Julian day/hour ending) of Significant Occurrences
1	327	(1, 8)(1,10)(1,20)(2, 1)(2, 4)(2,17)(2,24) (3, 2)(3,18)(4, 7) (5, 5)(5, 8)(5,11)(6,24)(7,10)(7,12)(7,20) (7,22)(8,11)(8,20) (8,23)(9, 1)(9, 9)(9,19)(9,21)(10, 9)(10,21) (11,10)(11,13)(11,20) (12, 6)(12,15)(12,21)(12,23)(13, 2)(14, 2)(14,12) (15, 1)(15,10)(15,12) (15,21)(16, 1)(16, 3)(16, 9)(16,11)(16,23)(17, 1) (17, 6)(17, 8)(17,11) (17,14)(17,16)(18, 7)(18,13)(19, 5)(19,11)(19,21) (20,11)(21,13)(21,22) (22, 2)(24, 1)(24,11)(24,20)(24,24)(25, 5)(25, 8) (25,18)(26, 5)(26, 8) (26,11)(27, 7)(28,14)(28,19)(28,23)(29, 7)(29,22) (30,22)(30,24)(31, 6) (32, 3)(32, 6)(32, 8)(32,12)(33, 9)(33,19)(33,22) (34,18)(35,13)(35,22) (36,10)(36,24)(37,10)(37,20)(37,22)(38,17)(39, 8) (39,24)(40, 2)(41, 3) (41, 7)(41,22)(42, 5)(43, 1)(45, 9)(48, 6)(49,11) (55, 1)(55, 7)(56,23) (61, 2)(62, 7)(65, 7)(65,14)(65,23)(66, 1)(66,13) (68, 7)(69, 3)(69, 7) (72, 4)(75, 1)(76, 7)(78, 1)(78, 3)(80, 2)(81, 7) (81,24)(83, 6)(84, 2) (86, 2)(86,24)(93,24)(97, 5)(99, 3)(100,24)(101, 4) (101, 8)(103,23)(105, 1) (106, 2)(106, 5)(106,23)(109,22)(110, 3)(110, 7)(111, 4) (111, 7)(111,22)(113, 4) (113, 6)(113,23)(114, 3)(115, 4)(115, 7)(117, 4)(117,21) (117,23)(121, 3)(121, 6)

(126, 6)(127,24)(130, 7)

(144, 5)(145, 5)(146, 4)

(157, 4)(159, 2)(159,24)

(174, 1)(174, 8)(175, 1)

(181,24)(183, 2)(183, 5)

(196, 6)(202, 2)(202, 4)

(210, 3)(210,23)(211, 7)

(219,24)(221, 6)(222, 7)

(242, 3)(244, 1)(248,24)

(254, 2)(254, 4)(254, 8)

(266, 5)(266, 8)(270,22)

(300, 2)(300,15)(311, 6)

(327, 1)(328, 1)(332,24)

(341, 9)(342,16)(344, 6)

(347, 4)(347,14)(347,21)

(359, 2)(359,22)(360, 8)

2 52

(9, 4)(9, 7)(10, 2)

(121, 9)(122, 4)(122, 6)(122, 9)(123,23)(125, 6)(126, 2)

(131, 1)(136, 6)(137, 6)(140, 6)(142, 1)(142,23)(143, 1)

(151, 6)(153, 6)(154, 2)(154,22)(155,16)(156, 3)(156, 7)

(161, 2)(163,23)(164, 4)(169, 9)(170, 1)(171, 1)(172, 6)

(176, 4)(176,23)(179, 3)(179, 5)(180, 5)(180, 8)(180,23)

(183, 7)(187,23)(190, 2)(191, 8)(192, 2)(194, 3)(195, 5)

(203,23)(204, 7)(205, 6)(206, 6)(208, 1)(209, 1)(209, 3)

(213,22)(213,24)(214,22)(215,24)(218, 2)(218, 6)(219, 4)

(222,24)(226, 1)(226, 6)(232,21)(234, 7)(237, 2)(238,23)

(249, 5)(249, 9)(250, 7)(250,24)(252,24)(253,22)(253,24)

(255,21)(256, 8)(256,20)(256,24)(258,21)(263,23)(266, 2)

(279, 4)(283, 1)(283,24)(287, 2)(294, 7)(294,20)(297,23)

(312, 9)(316, 8)(320, 8)(324,12)(325,21)(325,24)(326,19)

(333, 8)(334, 8)(336,17)(337,14)(339,17)(339,22)(340,11)

(344,19)(345, 5)(345,17)(345,21)(345,23)(346, 1)(346,18)

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(361, 1)(361,22)(362,10)(362,19)(363, 8)(363,21)(365, 6)

(1, 5)(2,12)(3,22)(4, 1)(4,17)(6,22)(8, 7)

(11,18)(13, 6)(13, 9)(14, 6)(14, 9)(15, 7)(17, 4)

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( 19, 3)( 24, 5)( 24, 8)
                                    ( 29, 2)( 29, 5)( 31, 3)( 31,21)( 35, 8)( 36, 8)( 37, 5)
( 39, 4)( 40, 5)( 43, 9)
                                    ( 60,23)( 82, 4)( 91, 6)( 99, 7)(103, 8)(114,24)(131, 6)
(137, 3)(141,23)(149, 7)
                                    (157, 1)(171, 4)(190, 7)(191, 5)(192, 6)(218,24)(258, 6)
(331, 8)(348, 2)(353, 6)
                                    (364, 3)(364, 6)
              3             9       (  8, 4)( 30, 2)( 67,24)(103, 4)(122, 1)(173, 3)(181, 6)
(244, 5)(326,23)
              4             3       ( 25,23)(102, 4)(124, 6)
              6             2       ( 18, 1)( 27, 5)
              7             1       ( 35, 4)

     Program terminated normally
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