AIR QUALITY ASSESSMENT

Aventine Residential Development
County of San Diego, CA

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EXECUTIVE SUMMARY

This air quality impact study has been completed to determine the air quality impacts associated with the development of the proposed 92-unit Aventine at Sweetwater residential project which is located on a 10.48-acre site located on the southwest corner of Sweetwater Springs Boulevard and Austin Drive within the County of San Diego.

All construction phases of the proposed Project are anticipated to start in 2020 and full operations expected in 2022.

Based upon the analysis of construction and operation activities for the proposed Project, direct operational or direct construction impacts would not be expected.

Per discussions with the Project applicant, the applicant is fully committed to implementing Tier IV construction equipment as a design feature during all phases of the grading and construction process. Using Tier IV equipment was found to produce health risk impacts of less than 10 in one million exposed which would not be considered a significant impact under CEQA.

The Project would likely generate short term odors from temporary construction equipment such as paving equipment. Since odors from this equipment would be short term, no significant odor impacts would be expected. Also, the Project would not produce Long term odors and would therefore not produce long term significant odor impacts.

The proposed Project would not be expected to generate cumulative construction impacts. Operationally, the Project would not generate any significant direct impacts. Furthermore, the Project land use (C36) was found to be more intensive than the proposed development. The existing site has 118,700 SF of commercial space currently onsite. As it exists at the time of this report, the site is underutilized with 44,740 SF being leased out. The Project is considered consistent with both the Regional Air Quality Strategy (RAQS) and State Implementation Plan (SIP) because it will be less intensive than the existing commercial uses on the site and would not interfere with the SDAPCD's goals for improving air quality in the SDAB. Therefore, the Project would not create a cumulatively considerable impact.

1.0 INTRODUCTION

1.1 Purpose of this Study

The purpose of this Air Quality study is to determine potential air quality impacts (if any) that may be created by construction, area or operational emissions (short term or long term) from the proposed Project. Should impacts be determined, the intent of this study would be to recommend suitable mitigation measures to bring those impacts to a level that would be considered less than significant.

1.2 Project Location

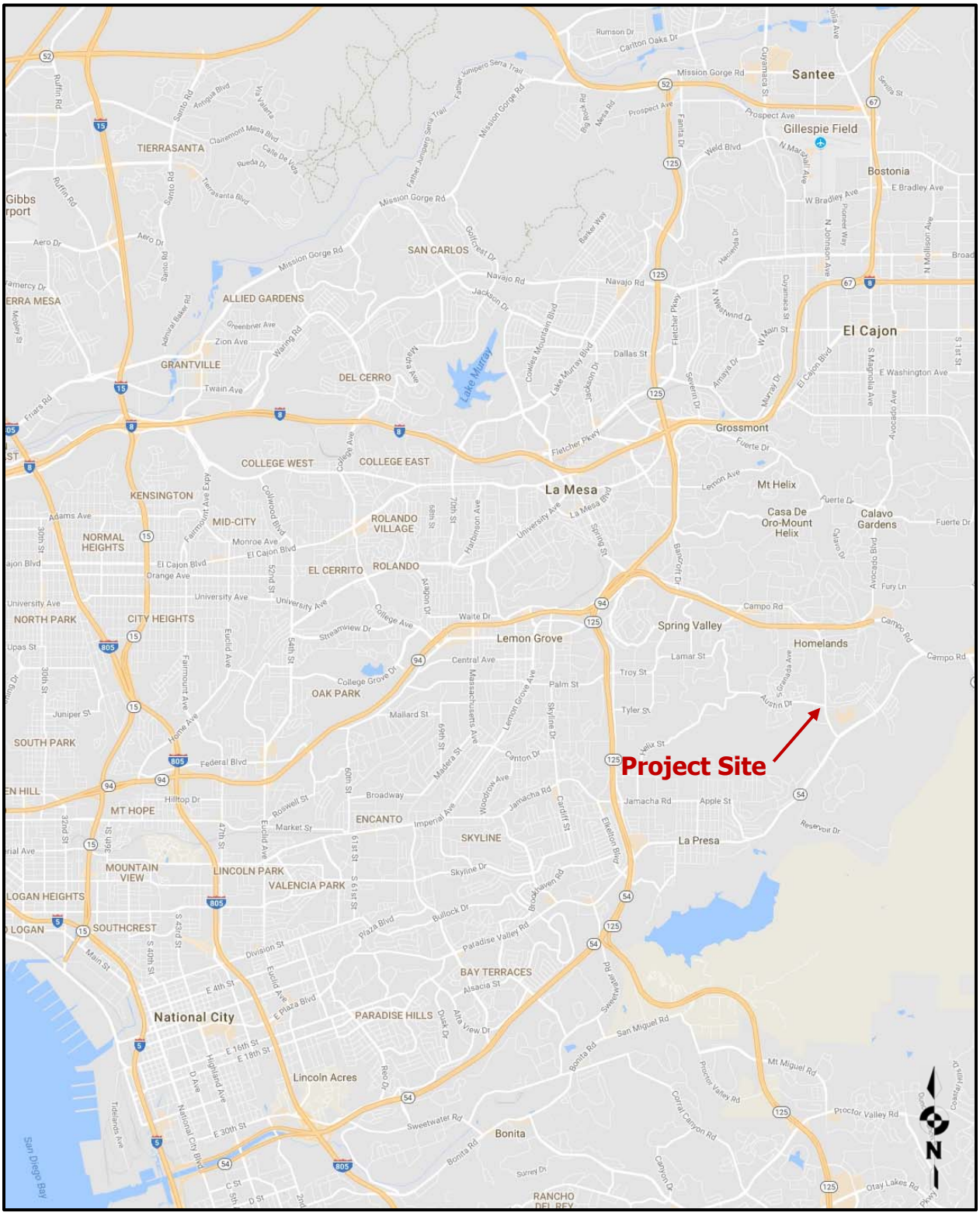
The proposed 92-unit Aventine at Sweetwater residential project is located on a 10.48-acre site that covers four parcels (Assessor Parcel Numbers: 505-580-07-00, 505-580-08-00, 505-580-09-00, and 505-580-10-00) within the Spring Valley Community Planning Area within the County of San Diego. The Project is located on the southwest corner of the Sweetwater Springs Boulevard and Austin Drive. A general Project vicinity map is shown in Figure 1–A on Page 3 of this report.

1.3 Project Description

The proposed Project would demolish an existing 118,700 Square Foot (SF) commercial development of which roughly 44,740 SF is occupied and operational. The Project will also include an active recreation area, water retention basin, with two access points. Furthermore, the proposed Project would install solar on every residential unit along with installing 100% high efficiency Light Emitting Diode (LED) lighting both on the inside and outside areas. Additional Project design features are provided in Section 1.4 below. The Project site plan is shown in Figure 1-B.

Construction of the Project would be expected to begin with demolition of the existing commercial development followed by grading, utility trenching and building construction. Demolition would be expected mid to late 2020 with initial units expected late 2021. Units will be constructed based on market demands and full buildout and operations would be expected in 2022.

Figure 1-A: Project Vicinity Map



Source: (Google, 2018)

Figure 1-B: Proposed Project Site Layout

Source: (Hunsaker and Associates, 2018)

1.4 Project Design Features

Project design features have been incorporated into the Project to reduce emissions associated with construction, energy use, area sources and water demand. It should be noted that not all project design features are analyzed with respect to air quality emission reductions. This report will define specifically which design features were included within air quality estimation software and it should be expected that whenever a design feature is included within air quality modeling that those particular design features would be required for the project to implement such that the County can recommend approval. A list of design features included within the air quality analysis is shown below:

- Project-related construction activities would use Tier 4 United States (U.S.) Environmental Protection Agency (EPA)/ California Air Resources Board (CARB)-certified construction equipment with diesel particulate filters. The project developer has confirmed commitment to this feature.
- The project will utilize architectural coatings compliant with SDAPCD Rule 67 (SDAPCD, 2015).
- High-efficiency LED street and area lighting will be installed to achieve reduction in overall lighting energy.
- Areas for storage and collection of recyclables will be provide along with literature. This feature would promote recycling in support of the County's 25% waste diversion goal, consistent with AB 341.
- The project applicant will be required to comply with County's Water Conservation in Landscaping Ordinance and demonstrate a 40% reduction in outdoor water use, and will submit a Landscape Document Package to show such compliance.

The project will also install design features, as listed in the Project's Specific Plan Amendment, that could result in additional operational emissions reductions that are not quantified within this report. These design features are included informational purposes only and since modeling results would not be dependent on installation of these design features. Project design features not included in the emissions modeling include:

- Installation of a 1.8 kWh solar/photovoltaic system on each dwelling unit, which is equivalent to approximately six 300-watt panels for each dwelling unit within the Project.
- Landscaped and screened parking areas consistent with the County's Parking Design Manual, including Section 7 (Landscaping) and the "cool parking" mitigation requirements identified by the CARB.
- Provision of short-term bicycle parking rack at the private recreation area within the Project.
- Plumb every residential unit for the future installation of a Level 2 electric vehicle (EV) charging station.

- Building efficiency features such as High-Efficiency HVAC system, sealed (tight) air ducts that minimize heating and cooling HVAC losses, tankless water heaters and Low E dual pane windows.
- Work with the regional or local water agency to determine if incentives/rebates are available for the purchase and installation of rain barrels.
- Incorporate into Project Covenants, Conditions & Restrictions (CC&Rs) requirements that the HOA coordinate with SANDAG to provide informational materials on rideshare programs such as iCommute San Diego.
- Provide natural gas and electrical outlets in all private rear yards,
- Increase new tree plantings throughout the neighborhood by planting two trees per dwelling unit which is equivalent to a minimum of 184 trees within the Project Site.
- Install weather-based irrigation systems which include rain sensing timers.

2.0 EXISTING ENVIRONMENTAL SETTING

2.1 Existing Setting

The property has a General Plan Regional Category designation of Village and General Plan land use designation of C36 General Commercial and has commercial facilities with an approximate size of 118,700 SF. The site is within the Multiple Species Conservation Program (MSCP) boundaries and the Spring Valley Community Plan.

Land uses surrounding the Project site include residential and commercial. Elevations onsite range from roughly 480 feet on the southern boundary to roughly 492 feet on the northern boundary of the Project.

2.2 Climate and Meteorology

Climate within the San Diego Air Basin (SDAB) area often varies dramatically over short geographical distances with cooler temperatures on the western coast gradually warming to the east as prevailing winds from the west heat up. Most of southern California is dominated by high-pressure systems for much of the year, which keeps San Diego mostly sunny and warm. Typically, during the winter months, the high-pressure system drops to the south and brings cooler, moister weather from the north. It is common for inversion layers to develop within high-pressure areas, which mostly define pressure patterns over the SDAB. These inversions are caused when a thin layer of the atmosphere increases in temperature with height. An inversion acts like a lid preventing vertical mixing of air through convective overturning.

Meteorological trends within the Spring Valley area generally show daytime highs ranging between 67ºF in the winter to approximately 85ºF in the summer with August usually being the hottest month. Median temperatures range from approximately 55ºF in the winter to approximately 73ºF in the summer. Precipitation is generally about 12.9 inches per year (WRCC, 2016). Prevailing wind patterns for the area vary during any given month during the year and also vary depending on the time of day or night. The predominant pattern though throughout the year is usually from the west or westerly (WRCC, 2018).

2.3 Regulatory Standards

2.3.1 Federal Standards and Definitions

The Federal Air Quality Standards were developed per the requirements of The Federal Clean Air Act, which is a federal law that was passed in 1970 and further amended in 1990. This law provides the basis for the national air pollution control effort. An important element of

the act included the development of national ambient air quality standards (NAAQS) for major air pollutants.

The Clean Air Act established two types of air quality standards otherwise known as primary and secondary standards. ***Primary Standards*** set limits for the intention of protecting public health, which includes sensitive populations such as asthmatics, children and elderly. ***Secondary Standards*** set limits to protect public welfare to include the protection against decreased visibility, damage to animals, crops, vegetation and buildings.

The EPA Office of Air Quality Planning and Standards (OAQPS) has set NAAQS for principal pollutants, which are called "criteria" pollutants. These pollutants are defined below:

1. ***Carbon Monoxide (CO):*** *is a colorless, odorless, and tasteless gas and is produced from the partial combustion of carbon-containing compounds, notably in internal-combustion engines. Carbon monoxide usually forms when there is a reduced availability of oxygen present during the combustion process. Exposure to CO near the levels of the ambient air quality standards can lead to fatigue, headaches, confusion, and dizziness. CO interferes with the blood's ability to carry oxygen.*
2. ***Lead (Pb):*** *is a potent neurotoxin that accumulates in soft tissues and bone over time. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Because lead is only slowly excreted, exposures to small amounts of lead from a variety of sources can accumulate to harmful levels. Effects from inhalation of lead near the level of the ambient air quality standard include impaired blood formation and nerve conduction. Lead can adversely affect the nervous, reproductive, digestive, immune, and blood-forming systems. Symptoms can include fatigue, anxiety, short-term memory loss, depression, weakness in the extremities, and learning disabilities in children.*
3. ***Nitrogen Dioxide (NO_2):*** *is a reactive, oxidizing gas capable of damaging cells lining the respiratory tract and is one of the nitrogen oxides emitted from high-temperature combustion, such as those occurring in trucks, cars, power plants, home heaters, and gas stoves. In the presence of other air contaminants, NO_2 is usually visible as a reddish-brown air layer over urban areas. NO_2 along with other traffic-related pollutants is associated with respiratory symptoms, respiratory illness and respiratory impairment. Studies in animals have reported biochemical, structural, and cellular changes in the lung when exposed to NO_2 above the level of the current state air quality standard. Clinical studies of human subjects suggest that NO_2 exposure to levels near the current standard may worsen the effect of allergens in allergic asthmatics, especially in children.*
4. ***Particulate Matter (PM_{10} or $PM_{2.5}$):*** *is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary in shape, size and chemical composition, and can be made up of multiple materials such as metal, soot, soil, and dust. PM_{10} particles are 10 microns (µm) or less and $PM_{2.5}$ particles are 2.5 (µm) or less. These particles can contribute significantly to regional haze and reduction of visibility in California. Exposure to PM levels exceeding current air quality standards increases the risk of allergies such as asthma and respiratory illness.*
5. ***Ozone (O_3)****: is a highly oxidative unstable gas capable of damaging the linings of the respiratory tract. This pollutant forms in the atmosphere through reactions between chemicals directly emitted from vehicles, industrial plants, and many other sources. Exposure to ozone above ambient air quality standards can lead to human health effects such as lung inflammation, tissue damage and impaired lung functioning. Ozone can also damage materials such as rubber, fabrics and plastics.*

6. ***Sulfur Dioxide (SO_2)****: is a gaseous compound of sulfur and oxygen and is formed when sulfur-containing fuel is burned by mobile sources, such as locomotives, ships, and off-road diesel equipment. SO_2 is also emitted from several industrial processes, such as petroleum refining and metal processing. Effects from SO_2 exposures at levels near the one-hour standard include bronchoconstriction accompanied by symptoms, which may include wheezing, shortness of breath and chest tightness, especially during exercise or physical activity. Children, the elderly, and people with asthma, cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most susceptible to these symptoms. Continued exposure at elevated levels of SO_2 results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality.*

2.3.2 State Standards and Definitions

The State of California Air Resources Board (ARB) sets the laws and regulations for air quality on the state level. The California Ambient Air Quality Standards (CAAQS) are either the same as or more restrictive then the NAAQS and also restrict four additional contaminants. Table 2.1 on the following page identifies both the NAAQS and CAAQS. The additional contaminants as regulated by the CAAQS are defined below:

1. ***Visibility Reducing Particles****: Particles in the Air that obstruct the visibility.*
2. ***Sulfates****: are salts of Sulfuric Acid. Sulfates occur as microscopic particles (aerosols) resulting from fossil fuel and biomass combustion. They increase the acidity of the atmosphere and form acid rain.*
3. ***Hydrogen Sulfide (H_2S)****: is a colorless, toxic and flammable gas with a recognizable smell of rotten eggs or flatulence. H_2S occurs naturally in crude petroleum, natural gas, volcanic gases, and hot springs. Usually, H_2S is formed from bacterial breakdown of organic matter. Exposure to low concentrations of hydrogen sulfide may cause irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some asthmatics. Brief exposures to high concentrations of hydrogen sulfide (greater than 500 Parts per Million (ppm)) can cause a loss of consciousness and possibly death.*
4. ***Vinyl Chloride****: also known as chloroethene and is a toxic, carcinogenic, colorless gas with a sweet odor. It is an industrial chemical mainly used to produce its polymer, polyvinyl chloride (PVC).*

Table 2.1: Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	**Average Time**	**California Standards[1]**		**Federal 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/m3)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m3)		0.070 ppm (137 µg/m3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m3	Gravimetric or Beta Attenuation	150 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m3		-		
Fine Particulate Matter (PM2.5)[9]	24 Hour	No Separate State Standard		35 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m3	Gravimetric or Beta Attenuation	12.0 µg/m3	15 µg/m3	
Carbon Monoxide (CO)	8 hour	9.0 ppm (10mg/m3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m3)	-	Non-Dispersive Infrared Photometry
	1 hour	20 ppm (23 mg/m3)		35 ppm (40 mg/m3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m3)		-	-	-
Nitrogen Dioxide (NO_2)[10]	Annual Arithmetic Mean	0.030 ppm (57 µg/m3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m3)[8]	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m3)		0.100 ppm[8] (188/ µg/m3)	-	
Sulfur Dioxide (SO_2)[11]	Annual Arithmetic Mean	-	Ultraviolet Fluorescence	0.030 ppm[10] (for Certain Areas)	-	Ultraviolet Flourescence; Spectrophotometry (Pararoosaniline Method)[9]
	24 Hour	0.04 ppm (105 µg/m3)		0.14 ppm[10] (for Certain Areas) (See Footnote 9)	-	
	3 Hour	-		-	0.5 ppm (1300 µg/m3)	
	1 Hour	0.25 ppm (655 µg/m3)		75 ppb (196 µg/m3)	-	
Lead[12,13]	30 Day Average	1.5 µg/m3	Atomic Absorption	-		-
	Calendar Quarter	-		1.5 µg/m3	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average	-		0.15 µg/m3		
Visibility Reducing Particles	8 Hour	See footnote 14				
Sulfates	24 Hour	25 µg/m3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m3)	Gas Chromatography			

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m3 to 12.0 µg/m3 . The existing national 24- hour PM2.5 standards (primary and secondary) were retained at 35 µg/m3 , as was the annual secondary standard of 15 µg/m3 . The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: (California Air Resources Board, 5/4/2016)

2.3.3 Regional Standards

The State of California has 35 specific air districts, which are each responsible for ensuring that the criteria pollutants are below the NAAQS and CAAQS. California Air basins that exceed either the NAAQS or the CAAQS for any criteria pollutants are designated as "non-attainment areas" for that pollutant. Currently, there are 15 non-attainment areas for the federal ozone standard and two non-attainment areas for the $PM_{2.5}$ standard and many areas are in non-attainment for PM_{10} as well. The state therefore created the California State Implementation Plan (SIP), which is designed to provide control measures needed for California Air basins to attain ambient air quality standards.

The San Diego Air Pollution Control District (SDAPCD) is the government agency which regulates sources of air pollution within San Diego County. Therefore, the SDAPCD developed a Regional Air Quality Strategy (RAQS) to provide control measures to try to achieve attainment status. Currently, San Diego County Air Basin is in "non-attainment" status for federal O_3 and the State PM_{10} and $PM_{2.5}$ however, an attainment plan is only available of O_3. The RAQS was adopted in 1992 and has been updated as recently as 2016 which was the latest update incorporating minor changes to the prior 2009 update.

The 2016 update mostly summarizes how the 2009 update has lowered oxides of nitrogen [NOX] and Volatile Organic Compounds [VOCs] emissions and clarifies and enhances emission reductions by introducing for discussion three new VOC and four new NOX reduction measures. The criteria pollutant standards are generally attained when each monitor within the region has had no exceedances during the previous three calendar years. A complete listing of the current attainment status with respect to both federal and state nonattainment status by pollutants for San Diego County is shown in Table 2.2 on the following page.

The RAQS is largely based on population predictions by the San Diego Association of Governments (SANDAG). Projects that produce less growth than predicted by SANDAG would generally conform to the RAQS and projects create more growth than projected by SANDAG may create a significant impact assuming the Project either produces unmitigable emission generation in excess of the regional standards. Also, the Project would be considered a significant impact if the Project produces cumulative impacts.

Table 2.2: San Diego County Air Basin Attainment Status by Pollutant

San Diego County Air Basin Attainment Status by Pollutant			
Pollutant	Average Time	California Standards	Federal Standards
Ozone (O_3)	1 Hour	Non-attainment	No Federal Standard
	8 Hour	Moderate Non-attainment	Basic Non-attainment
Respirable Particulate Matter (PM10)	24 Hour	Non-attainment	Unclassified[1]
	Annual Arithmetic Mean	No State Standard	Unclassified[2]
Fine Particulate Matter PM2.5	24 Hour	No State Standard	Attainment
	Annual Arithmetic Mean	Non-attainment	Attainment
Carbon Monoxide (CO)	8 hour	Attainment	Maintenance Area[3]
	1 hour		
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	No State Standard	Attainment
	1 Hour	Attainment	No Federal Standard
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	No State Standard	Attainment
	24 Hour	Attainment	Attainment
	1 Hour	Attainment	No Federal Standard
Lead	30 Day Average	Attainment	No Federal Standard
	Calendar Quarter	No State Standard	Attainment
Visibility Reducing Particles	8 Hour (10AM to 6PM, PST)	Unclassified	No Federal Standard
Sulfates	24 Hour	Attainment	No Federal Standard
Hydrogen Sulfide	1 Hour	Unclassified	No Federal Standard

1. Data reflects status as of December 2017

2. Unclassified; indicates data are not sufficient for determining attainment or nonattainment.

3. Maintenance Area (defined by U.S. Department of Transportation) is any geographic region of the United States previously designated nonattainment pursuant to the CAA Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under section 175A of the CAA, as amended.

2.4 California Environmental Quality Act (CEQA) Significance Thresholds

The California Environmental Quality Act has provided a checklist to identify the significance of air quality impacts. These guidelines are found in Appendix G of the CEQA guidelines and are as follows:

AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:

A: Conflict with or obstruct implementation of the San Diego RAQS or applicable portions of the SIP?

B: Result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation?

C: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable Federal or State ambient air quality standard (PM10, PM2.5 or exceed quantitative thresholds for O3 precursors, NOX and VOCs)?

D: Expose sensitive receptors (including, but not limited to, schools, hospitals, resident care facilities, or day-care centers) to substantial pollutant concentrations?

E: Create objectionable odors affecting a substantial number of people?

2.5 SDAPCD Rule 20.2 – Air Quality Impact Assessment Screening Thresholds

The SDAPCD has established thresholds in Rule 20.2 for new or modified stationary sources. The County's Guidelines for Determining Significance and Report Format and Content Requirements incorporate screening level thresholds from Rule 20.2 for use in all County related Air Quality Impact Assessments (AQIA) and for determining CEQA air quality impacts. These screening criteria can be used to demonstrate that a Project's total emissions would not result in a significant impact as defined by CEQA. Also, since SDAPCD does not have AQI threshold for Volatile Organic Compounds (VOCs), it is acceptable to use the Coachella Valley VOC threshold from South Coast Air Quality Management District. Should emissions be found to exceed these thresholds, additional modeling is required to demonstrate that the Project's total air quality impacts are below the state and federal ambient air quality standards. These screening thresholds for construction and daily operations are shown in Table 2.3 on the following page.

Non Criteria pollutants such as Hazardous Air Pollutants (HAPs) or Toxic Air Contaminants (TACs) are also regulated by the SDAPCD. Rule 1200 (Toxic Air Contaminants - New Source Review) adopted on June 12, 1996, requires evaluation of potential health risks for any new, relocated, or modified emission unit which may increase emissions of one or more toxic air contaminants. The rule requires that projects that propose to increase cancer risk to between 1 and 10 in one million need to implement toxics best available control technology (T-BACT) or impose the most effective emission limitation, emission control device or control technique to reduce the cancer risk. At no time shall the Project increase the cancer risk to over 10 in one million or a health hazard index (chronic and acute) greater than one. Projects creating cancer risks less than one in one million are not required to implement T-BACT technology.

The U.S. Environmental Protection Agency (U.S. EPA) uses the term Volatile Organic Compounds (VOC) and the California Air Resources Board's (CARB's) Emission Inventory Branch (EIB) uses the term Reactive Organic Gases (ROG) to essentially define the same thing. There are minor deviations between compounds that define each term however for purposes of this study we will assume they are essentially the same due to the fact SCAQMD

interchanges these words and because Air Quality models directly calculates ROG in place of VOC.

Table 2.3: Screening Level Thresholds for Criteria Pollutants

Pollutant	Total Emissions (Pounds per Day)
Construction Emissions	
Respirable Particulate Matter (PM_{10} and $PM_{2.5}$)	100 and 55
Nitrogen Oxide (NO_x)	250
Sulfur Oxide (SO_x)	250
Carbon Monoxide (CO)	550
Volatile Organic Compounds (VOCs)	75
Reactive Organic Gases (ROG) SCAQMD	75
Operational Emissions	
Respirable Particulate Matter (PM_{10} and $PM_{2.5}$)	100 and 55
Nitrogen Oxide (NO_x)	250
Sulfur Oxide (SO_x)	250
Carbon Monoxide (CO)	550
Lead and Lead Compounds	3.2
Volatile Organic Compounds (VOCs)	75
Reactive Organic Gases (ROG) SCAQMD	75

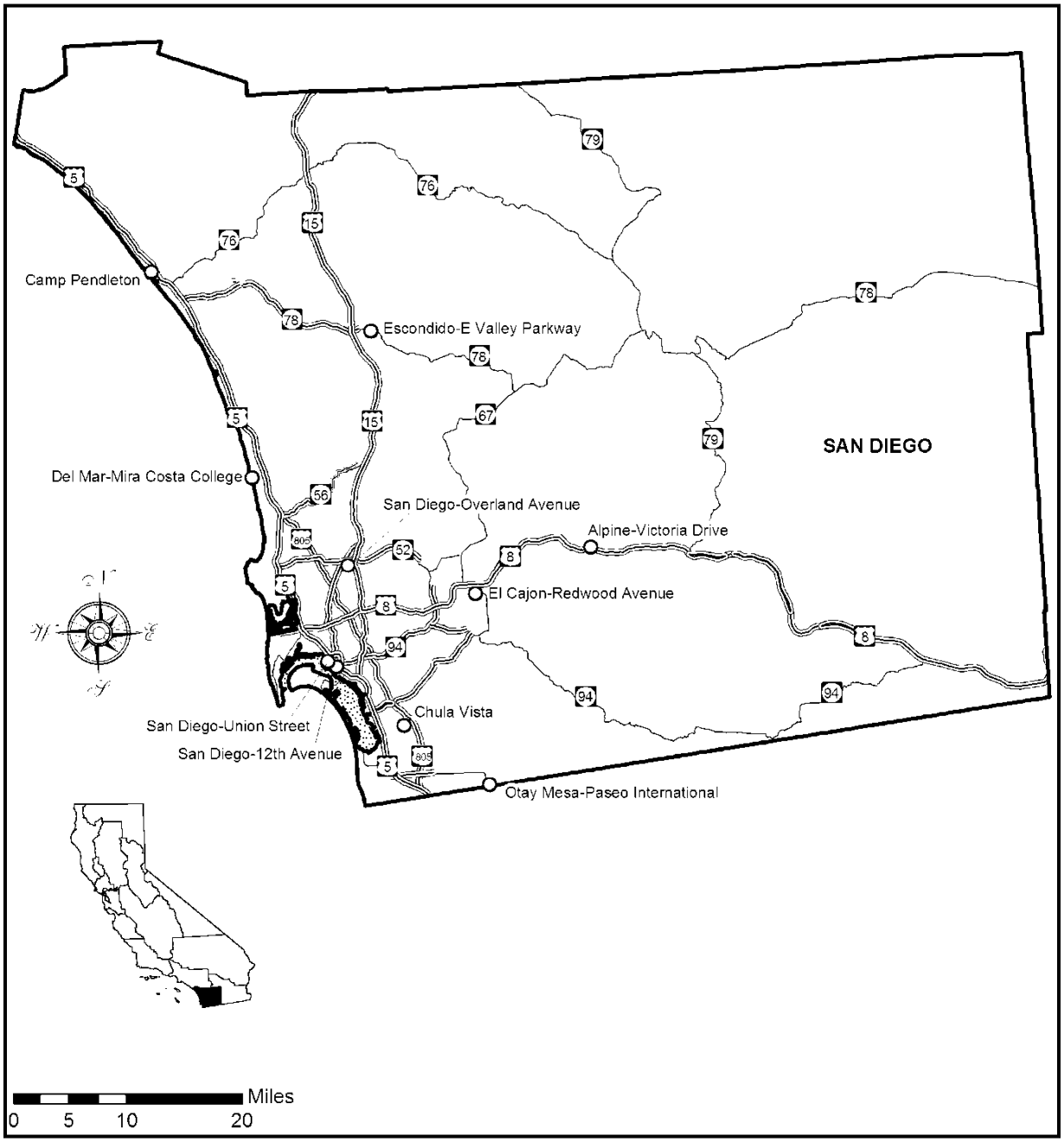
2.6 Local Air Quality

Criteria pollutants are measured continuously throughout the SDAB. This data is used to track ambient air quality patterns throughout the County. As mentioned earlier, this data is also used to determine attainment status when compared to the NAAQS and CAAQS. The SDAPCD is responsible for monitoring and reporting monitoring data (SDAPCD, 2018). The District operates monitoring sites, which collect data on criteria pollutants. The proposed Project is closest to the El Cajon monitoring location roughly 4.3 miles to the northeast. Table 2.4 on the following page identifies the criteria pollutants monitored at the aforementioned station.

Table 2.4: Three-Year Ambient Air Quality Summary near the Project Site

Pollutant	Closest Recorded Ambient Monitoring Site	Averaging Time	CAAQS	NAAQS	2014	2015	2016
O_3 (ppm)	El Cajon-Redwood Avenue	1 Hour	0.09 ppm	No Standard	0.08	0.08	0.10
		8 Hour	0.070 ppm	0.075 ppm	0.08	0.07	0.08
CO (ppm)		8 Hour	9 ppm	9 ppm	1.8	1.1	1.3
SO_2 (ppm)		24 Hour	0.04 ppm	0.14 ppm	0.000	0.000	0.000
PM_{10} ($\mu g/m^3$)		24 Hour	50 $\mu g/m^3$	150 µg/m3	48	48	43
$PM_{2.5}$ ($\mu g/m^3$)		24 Hour	No Standard	35 $\mu g/m^3$	35.7	24.7	23.9
		Annual Arithmetic Mean	12 $\mu g/m^3$	15 $\mu g/m^3$	10.3	8.2	9.3
NO_2 (ppm)		Annual Arithmetic Mean	0.030 ppm	0.053 ppm	0.016	0.016	0.014
		1 Hour	0.18 ppm	No Standard	0.065	0.063	0.054

Figure 2-A: Ambient Air Quality Monitoring Stations within SDAB – CARB



3.0 METHODOLOGY

3.1 Construction Emissions Calculations

Air Quality impacts related to construction and daily operations were calculated using the latest CalEEMod 2016.3.2 air quality model, which was developed by BREEZE Software for South Coast Air Quality Management District (SCAQMD) in 2017. The construction module in CalEEMod is used to calculate the emissions associated with the construction of the Project and uses methodologies presented in the US EPA AP-42 document with emphasis on Chapter 11.9. The CalEEMod input/output model is shown in ***Attachment A*** to this report.

The SCREEN3 dispersion model was used to determine the concentration for air pollutants at any location near the pollutant generator. Additionally, the model will predict the maximum exposure distance and concentrations. The SCREEN3 input/output file for the proposed Project is shown in Attachment B at the end of this report. The worst case exhaust emissions generated from the Project construction equipment was utilized and calculated within the CalEEMod model.

Once the dispersed concentrations of diesel particulates are estimated in the surrounding air, they are used to evaluate estimated exposure to people. Exposure is evaluated by calculating the dose in milligrams per kilogram body weight per day (mg/kg/d). For residential exposure, the breathing rates are determined for specific age groups, so inhalation dose (Dose-air) is calculated for each of these age groups, 3rd trimester, 0<2, 2<9, 2<16, 16<30 and 16-70 years. The following algorithms calculate this dose for exposure through the inhalation pathways. The worst case cancer risk dose calculation is defined in Equation 1 below (OEHHA, 2015):

Equation 1 $$Dose_{air} = C_{air} * (BR/BW) * A * EF * (1x10^{-6})$$

$Dose_{air}$	=	Dose through inhalation (mg/kg/d)
C_{air}	=	Concentration in air (µg/m3) Annual average DPM concentration in µg/m3 - SCREEN3 predicts a 1-hr concentration and is corrected to an annual average by multiplying the 1-hr average by 0.08 (US EPA, 1992)
BR/BW	=	Daily breathing rate normalized to body weight (L/kg BW-day). See Table I.2 for the daily breathing rate for each age range.
A	=	Inhalation absorption factor (assumed to be 1)
EF	=	Exposure frequency (unitless, days/365 days)
1x10-6	=	Milligrams to micrograms conversion (10^{-3} mg/ µg), cubic meters to liters conversion (10^{-3} m^3/l)

Once the dose is determined then you must calculate the cancer risk. The average daily inhalation dose (mg/kg-day) multiplied by the cancer potency factor $(mg/kg\text{-}day)^{-1}$ will give

the inhalation cancer risk (unitless), which is an expression of the chemical's cancer risk during a 70-year lifespan of exposure. For example, an inhalation cancer risk of 5 x 10-6 is the same as stating that an individual has an estimated probability of developing cancer from their exposure of 5 chances per million people exposed.

Cancer risk is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor, the frequency of time spent at home and the exposure duration divided by averaging time, to yield the excess cancer risk. As described below, the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk for any given location. Specific factors as modeled are shown within the Project models attached to this report. The worst case cancer risk calculation is defined by the Office of Environmental Health Hazard Assessment (OEHHA) in Equation 2 below (OEHHA, 2015):

Equation 2

$$RISK_{inh\text{-}res} = DOSE_{air} \times CPF \times ASF \times ED/AT \times FAH$$

$RISK_{inh\text{-}res}$	=	Residential inhalation cancer risk
$DOSE_{air}$	=	Daily inhalation dose (mg/kg-day)
CPF	=	Inhalation cancer potency factor ($mg/kg\text{-}day^{-1}$)
ASF	=	Age sensitivity factor for a specified age group (unitless)
ED	=	Exposure duration (in years) for a specified age group
AT	=	Averaging time for lifetime cancer risk (years)
FAH	=	Fraction of time spent at home (unitless)

OEHHA recommends that an exposure duration (residency time) of 30 years be used to estimate individual cancer risk for the Maximally Exposed Individual Resident (MEIR). OEHHA also recommends that the 30-year exposure duration be used as the basis for public notification and risk reduction audits and plans.

Exposure durations of 9-years and 70-years are also recommended to be evaluated for the MEIR to show the range of cancer risk based on residency periods. If a facility is notifying the public regarding cancer risk, the 9-and 70-year cancer risk estimates are useful for people who have resided in their current residence for periods shorter and longer than 30 years.

Non-Cancer risks or risks defined as chronic or acute are also known with respect to DPM and are determined by the hazard index. To calculate hazard index, DPM concentration is divided by its Reference Exposure Levels (REL). Where the total equals or exceeds one, a health hazard is presumed to exist. RELs are also published by the OEHHA (OEHHA, 2015). Diesel Exhaust has a REL of 5 $\mu g/m^3$ and targets the respiratory system.

3.2 Construction Assumptions

The Project construction dates were estimated based on a hypothetical construction kickoff starting midyear 2020 with construction ending sometime in 2022. The proposed Project site would demolish roughly 118,700 SF of existing buildings onsite, removing all current uses onsite. The Project would then grade the entire site to allow for 92 condominium units. After grading, trenching would be necessary to install new infrastructure and drainage. Once earthwork activities are completed, paving and building construction activities would follow.

CalEEMod 2016.3.2 was utilized for all calculations. Also, CalEEMod has been manually updated to reflect SDAPCD Rule 67 paint VOC limits and was also updated to include only Tier IV rated diesel equipment as the Project applicant is fully committed to using Tier IV equipment. Table 3.1 shows the expected timeframes for the construction processes for all the Project infrastructure, facilities, improvements and commercial structures at the proposed Project location, as well as the expected number of pieces of equipment.

Table 3.1: Expected Construction Equipment

Equipment Identification	Proposed Start	Proposed Complete	Quantity
Demolition	5/10/2020	7/31/2020	
Concrete/Industrial Saws			1
Excavators			3
Rubber Tired Dozers			2
Grading	8/1/2020	8/28/2020	
Graders			1
Rubber Tired Dozers			1
Scrapers			2
Tractors/Loaders/Backhoes			2
Trenching	8/29/2020	9/25/2020	
Excavators			1
Tractors/Loaders/Backhoes			2
Paving	9/26/2020	10/23/2020	
Pavers			2
Paving Equipment			2
Rollers			2

This equipment list is based upon equipment inventory within CalEEMod. The quantity and types are based upon assumptions from Projects of similar size and scope in the County of San Diego.

Table 3.1 Cont.: Expected Construction Equipment

Equipment Identification	Proposed Start	Proposed Complete	Quantity
Building Construction without Crane	10/24/2020	3/11/2022	
Forklifts			3
Generator Sets			1
Tractors/Loaders/Backhoes			3
Welders			1
Architectural Coating	1/1/2021	3/11/2022	
Air Compressors			1
Building Construction with Crane	12/21/2021	1/17/2022	
Crane			1
This equipment list is based upon equipment inventory within CalEEMod. The quantity and types are based upon assumptions from Projects of similar size and scope in the County of San Diego.			

3.3 Operational Emissions

Currently, the existing 118,700 SF commercial development is generating air quality emissions but would no longer once construction of the proposed Project begins. This report does not analyze the existing air quality emissions. For purposes of this report however, it should be noted that the existing operations can generate as much as 9,496 average daily trips (ADT) as identified within the Project traffic study (Linscott Law & Greenspan, 2018). It should be also noted though, that the existing commercial operations are underutilized with only 44,740 SF of the 118,700 SF being leased out. Based on the traffic study, the underutilized traffic generation is 1,790 ADT. The same traffic analysis indicated that the proposed Project action would generate 736 daily trips which is less intense from a regional perspective as compared to the existing use.

Once demolition of the existing uses is complete and construction is finalized the proposed Project would transition to an operational phase and begin generating air quality emissions from daily operations. Operational sources would include area, energy, mobile, solid waste and water uses, which are calculated within CalEEMod. Area Sources include landscaping and architectural coatings as part of regular maintenance. Energy sources would be from uses such as electricity and natural gas. Also, CalEEMod has been manually updated to reflect SDAPCD Rule 67 paint VOC limits for operational architectural coatings.

As a design feature, the project will exclusively utilize high-efficiency indoor and outdoor lighting in all buildings. One example of high-efficiency lighting is LED lighting. LED indoor lighting is 75-90% more efficient than standard lighting. For example: a 10-watt LED bulb replaces a 60-watt standard bulb, which would be 83% more efficient. A typical 15-watt LED bulb has an equivalent rating of a 100-watt standard bulb. High-efficiency lighting is

addressed by both the 2013 Title 24 standards (CEC, 2012) and the 2016 Title 24 standards (CEC, 2015); these standards specifically call out lighting power density requirements for non-residential land uses. However, the lighting power density requirements do not change across the two sets of Title 24 standards. Rather, as illustrated by Table 140.6-B within the 2013 and 2016 Title 24 standards, the applicable requirement is 0.60 watts per ft^2.

Of note, the default parameters of the version of CalEEMod used in this analysis (along with its predecessor versions) do not account for high-efficiency lighting technologies or the 2016 Title 24. For this reason, since the project is utilizing 100% high-efficiency lighting, the project would conservatively reduce energy usage from combined indoor and outdoor lighting by at least 65% since LED lighting reduces consumption by 75-90% as mentioned above.

Finally, the project would reduce outdoor water usage by 40% which was manually adjusted within CalEEMod. A Landscape Document Package will be submitted that is compliant with the County's Water Conservation in Landscaping Ordinance which demonstrates a 40% reduction in outdoor use.

3.4 Micro Scale Operational Emissions

Air pollutant emissions related to Project traffic have the potential to create new, or worsen existing localized air quality violations with respect to carbon monoxide (CO). These increased carbon monoxide "Hot Spots" are determined through the utilization of the Institute of Transportation Studies Transportation Project-Level Carbon Monoxide Protocol (University of California, Davis for California Department of Transportation, 1997).

In the event the proposed Project traffic adds vehicular trips to either an intersection that operates at LOS E or F or any intersection where the Project trips re-classify the intersection level of service to LOS E or F and when peak-hour trips exceed 3,000 the Project must quantify CO levels (County of San Diego, 2007)

3.5 Odor Impacts (Onsite)

Projects that involve offensive odors may be a nuisance to neighboring uses, including businesses, residences, sensitive receptors, and public areas. Odor impacts can be are most often the result of industrial type projects, livestock or farming operations, or can even be from restaurant or commercial baking operations. If a project has a potential to expose sensitive receptors to objectionable odors the Project could be deemed to have a significant odor impact.

4.0 FINDINGS

4.1 Construction Findings

Construction emissions in pounds per day from the construction operations and equipment identified in Section 3.2 above is shown in Table 4.1 below. Based on these numbers, the Project would not exceed SDAPCD standards significant construction related air quality impacts would not be expected. It should be noted that as a design feature, all diesel equipment used onsite, will be Tier IV as the applicant is fully committed to this design feature.

Table 4.1: Expected Construction Emissions Summary – Pounds per Day

Year	ROG	NO_x	CO	SO_2	PM_{10} (Dust)	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Dust)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
2020	0.690	3.257	25.588	0.053	6.676	0.014	6.689	3.400	0.014	3.414
2021	4.622	4.726	23.658	0.047	1.327	0.019	1.346	0.355	0.018	0.373
2022	4.590	4.585	23.361	0.047	1.327	0.018	1.345	0.355	0.018	0.373
Significance Threshold (lb/day)	75	250	550	250	-	-	100	-	-	55
SDAPCD Impact?	**No**	**No**	**No**	**No**	-	-	**No**	-	-	**No**

Potential onsite odor generators would include short term construction odors from activities such as paving and possibly painting. Odors created during short term construction activities would most likely be from placing asphalt which has a slight odor from the bitumen and solvents used within hot asphalt. Since odors generated onsite are short-term, they would not be considered a significant impact.

4.2 Health Risk

The proposed Project will utilize Tier IV construction equipment as a design feature and was modeled as such, given this, Tier IV equipment is a condition of approval to this Project as analyzed. Based upon the air quality modeling, worst-case PM10 from exhaust would produce 0.00148 tons over the construction duration 480-working days or an average of 9.70×10^{-5} grams/second. The average emission rate over the grading area is 2.79×10^{-9} g/m^2/s, which was calculated as follows:

$$\frac{9.7 * 10^{-5}\ \frac{grams}{second}}{10.48\ acres * 4{,}046\ \frac{meters^2}{acre}} = 2.79 * 10^{-9}\ \frac{\frac{grams}{meters^2}}{second}$$

Utilizing the SCREEN3 dispersion model, we find that the peak maximum 1-hr concentration is 0.0532 µg/m^3 during the worst-case construction period. Converting the peak 1-hr concentration to an annual concentration reduces the concentration to 0.004 µg/m^3. Therefore, utilizing the risk equation identified above in section 3.1, the inhalation cancer risk for the point of maximum exposure (153 meters from the Project centroid) is 0.99 per one million exposed which does not exceed 10 per one million exposed. Based on this, since the Project would include a design feature to utilize Tier IV equipment, all modeling assumes Tier IV equipment. Based upon this analysis, no health risks related to diesel equipment during construction would be expected. The calculations are shown in Attachment C to this report.

There are known acute and chronic health risks associated with diesel exhaust which are considered non-cancer risks as discussed in Section 2.3.1 of this report. These risks are calculated based on methods identified in Section 3.1 of this report. From this we find that the annual concentration of 0.004 µg/m3 divided by the REL of 5 µg/m^3 yields a Health Hazard Index of 0.0009, which is less than one. Therefore, no non-cancer risks are expected and all health risks are considered less than significant.

4.3 Operational Findings

Project Buildout and full operations are expected in 2022. The Project traffic generation estimates roughly 736 trips per day. The Project air quality model default values for operational trips was updated using these estimates. Additionally, the model was run for the winter and summer scenarios to determine operational impacts for the first year of operation.

The estimated daily pollutant generation can be calculated utilizing the product of the average daily miles traveled and the expected emissions inventory calculated by EMFAC2014; CALEEMOD 2016.3.2 performs this calculation. The daily pollutants calculated for summer and winter are shown in Tables 4.2 and 4.3, respectively. Furthermore, the SDAPCD significance criteria is also provided. Whenever calculated emissions are less than requisite screening thresholds a less than significant impact would be expected.

Based upon these calculations, the proposed Project would not exceed SDAPCD operational air quality significance thresholds. Given this, a less than Significant impact under CEQA would be expected.

It should be noted that the County Guidelines for Determining Significance for Air Quality (County of San Diego, 2007) includes a list of odor producing uses that are typically recognized. Residential uses are not listed and would therefore not be a significant odor causing source. Based on this, the Project would generate less than significant operational odor impacts under CEQA.

Table 4.2: Estimated Summer Daily Pollutant Generation

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area	2.672	0.088	7.598	0.000	0.042	0.042
Energy	0.039	0.334	0.142	0.002	0.027	0.027
Mobile	1.174	4.825	13.465	0.048	4.169	1.140
Total (Unmitigated)	**3.885**	**5.247**	**21.205**	**0.05**	**4.238**	**1.209**
SDAPCD Thresholds	75	250	550	250	100	55
Significant?	**No**	**No**	**No**	**No**	**No**	**No**
Daily pollutant generation assumes trip distances within CalEEMod The final numbers are all rounded within Excel and are reported as rounded numbers.						

Table 4.3: Estimated Winter Daily Pollutant Generation

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area	2.672	0.088	7.598	0.000	0.042	0.042
Energy	0.039	0.334	0.142	0.002	0.027	0.027
Mobile	1.139	4.949	13.247	0.045	4.169	1.140
Total (Unmitigated)	**3.850**	**5.371**	**20.987**	**0.047**	**4.238**	**1.209**
SDAPCD Thresholds	75	250	550	250	100	55
Significant?	**No**	**No**	**No**	**No**	**No**	**No**
Daily pollutant generation assumes trip distances within CalEEMod The final numbers are all rounded within Excel and are reported as rounded numbers.						

Conformance to the RAQS

The RAQS outlines SDAPCD's plans and control measures designed to attain the State air quality standards for ozone. The RAQS relies on SANDAG growth projections based on population, vehicle trends, and land use plans developed by the cities and by the County as part of the development of their general plans and specific plans. Projects that propose development that is consistent with the growth anticipated by the general plans would be consistent with the RAQS. Typically, a project is considered to be consistent if population

growth, traffic, and amount of development would be at a level equal to or less than what was assumed within the General Plan. If a project proposes development that is greater than that assumed in the County General Plan and SANDAG's growth projections, upon which the RAQS is based, the project would potentially be in conflict with the RAQS and SIP, and may have a cumulatively significant impact on air quality. The 2016 RAQS (SDAPCD 2016) include projections for residential, commercial, industrial and recreational land uses contained in the current County General Plan, adopted in 2011.

Based on the traffic study, the existing commercial use on-site would generate approximately 9,496 ADT when fully occupied. At its current occupancy of 44,470 SF, the existing commercial use generates approximately 1,790 ADT. The proposed residential Project would generate 736 ADT, or 1,054 fewer trips less existing, partially occupied development. The proposed residential development would require a general plan amendment, however, it is considered to be less of an intensive use than the existing commercial uses. Because the project would result in less intense development, and would generate fewer daily trips than the existing commercial uses, the Project would not interfere with the SDAPCD's goals for improving air quality in the SDAB. Therefore, the project would not conflict with the RAQS and SIP.

4.4 Cumulative Impact Findings

Based on the County Guidelines, a project that does not conform to the RAQS and/or has a significant direct impact on air quality with regard to operational emissions of non-attainment pollutants would also have a cumulatively considerable net increase. A project that has a significant impact on air quality with regard to emissions of PM10, PM2.5, NOX and/or VOCs, would have a significant cumulative effect. In the event direct impacts from the project are less than significant, a project still may have a cumulatively considerable impact on air quality if the emissions from the project, in combination with the emissions from other proposed, or reasonably foreseeable, future projects are in excess of the County's air pollutant screening levels. Also, projects that cause road intersections to operate at or below a LOS E and create a CO hot spot create a cumulatively considerable net increase of CO. The text below addresses each of the thresholds relative to cumulative contribution during the Project's construction and operational phases.

The Proposed Project would not exceed the County's screening-level thresholds described above. The Project would not cause any significant traffic impacts or contribute vehicular trips to any intersection with LOS E or F designations. As a result, the Project would not create a CO hotspot that would result in a cumulatively considerable net increase of CO. Also, based on the fact the proposed Project would reduce trips on nearby roads, the Project would not be a source of additional operational traffic emissions beyond those traffic emissions that

already exist. Therefore, the Project would not result in a cumulatively considerable net increase in criteria pollutants and cumulative impacts would be less than significant.

Based on the cumulative projects that have been identified, there are no known projects within 1,500 feet of the proposed Project where major construction would occur concurrently with the project. It should also be noted that the point of maximum exposure for construction emissions generated offsite would be 153 meters (approximately 502 feet) away. Given the highly dissipative nature of diesel exhaust, cumulative construction health risks or SDAPCD air quality impacts would not be expected. It is possible that future projects, currently unknown at the time this air quality analysis was conducted, could be approved and begin construction. These projects would also be required to comply with SDAPCD Rules for fugitive dust and construction equipment exhaust emissions. These projects would also be required to identify the proposed project as a cumulative project and incorporate measures that would reduce potential cumulative impacts to a less than significant level. Therefore, the project would not result in a cumulatively considerable contribution to an existing air quality impact related to particulate matter and ozone.

Finally, as discussed above, he Project is considered consistent with both the RAQS and SIP because it will be less intensive than the existing commercial uses on the site and would not interfere with the SDAPCD's goals for improving air quality in the SDAB. Therefore, the Project would not create a cumulatively considerable impact.

4.5 Conclusion of Findings

The Project will include design features that would result in emissions reductions during project construction and operations, though only some of these design features were included in the projects emissions modeling. The following project design features were included in emissions modeling and would be included as conditions of approval for the Project as it relates to Air Quality:

- Project-related construction activities would use Tier 4 United States (U.S.) Environmental Protection Agency (EPA)/ California Air Resources Board (CARB)-certified construction equipment with diesel particulate filters. The project developer has confirmed commitment to this feature.
- The project will utilize architectural coatings compliant with SDAPCD Rule 67 (SDAPCD, 2015).
- High-efficiency LED street and area lighting will be installed to achieve reduction in overall lighting energy.
- Areas for storage and collection of recyclables will be provide along with literature. This feature would promote recycling in support of the County's 25% waste diversion goal, consistent with AB 341.

- The project applicant will be required to comply with County's Water Conservation in Landscaping Ordinance and demonstrate a 40% reduction in outdoor water use, and will submit a Landscape Document Package to show such compliance.

Based on the emissions modeling, the project would not generate emissions of criteria pollutants in excess of the County's significant level thresholds. Therefore, the project's impact to air quality during construction and operations would be less than significant.

The project would not generate particulate matter and ozone emissions such that it would result in a cumulative contribution to an existing air quality violation. No additional cumulative projects exist in the project vicinity. Therefore, the proposed Project would generate cumulative construction impacts. During project operations, the Project would not generate any significant direct impacts and would generate fewer trips and be considered less intense than the existing uses on-site. Therefore, the proposed Project would be consistent with the RAQS and SIP.

5.0 REFERENCES

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6.0 CERTIFICATIONS

The contents of this report represent an accurate depiction of the air quality environment and impacts within and surrounding the proposed multi-family residential development. This report was prepared utilizing the latest emission rates and reduction methodologies. This report was prepared by Jeremy Louden; a County approved CEQA Consultant for Air Quality.

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Date March 4, 2019

ATTACHMENT A

CalEEMod

Sweetwater Springs Residential Development

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse	92.00	Dwelling Unit	10.00	92,000.00	263

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	511.99	**CH4 Intensity (lb/MWhr)**	0.0206	**N2O Intensity (lb/MWhr)**	0.0043

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Fully Operational 2022 RPS corrected (511.99,.0206,.0043

Land Use - Site is 10 acres

Construction Phase - Proposed CS

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Off-road Equipment - ce

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Trips and VMT -

Demolition -

Grading - 10 acres

Architectural Coating - Rule 67 Compliant

Vehicle Trips - 8 trips per du...trip distance default

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Natural Gas Hearths

Area Coating - rule 67 compliant paint

Energy Use - Lighting Intensity was reduced 65% for 100% LED

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Tier IV equipment

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstEquipMitigation	DPF	No Change	Level 3

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
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	20.00	311.00
tblConstructionPhase	NumDays	230.00	360.00
tblConstructionPhase	NumDays	230.00	20.00
tblConstructionPhase	NumDays	20.00	60.00
tblEnergyUse	LightingElect	1,001.10	350.38
tblFireplaces	NumberGas	50.60	0.00
tblFireplaces	NumberNoFireplace	9.20	92.00
tblFireplaces	NumberWood	32.20	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.60	0.60
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.02	0.01

tblFleetMix	LHD2	5.4790e-003	5.4350e-003
tblFleetMix	MCY	6.0160e-003	5.9380e-003
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MH	1.1220e-003	1.0560e-003
tblFleetMix	MHD	0.02	0.02
tblFleetMix	OBUS	1.9260e-003	1.9340e-003
tblFleetMix	SBUS	7.5300e-004	7.5700e-004
tblFleetMix	UBUS	1.9320e-003	1.8880e-003
tblGrading	AcresOfGrading	50.00	10.00
tblLandUse	LotAcreage	5.75	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.0206
tblProjectCharacteristics	CO2IntensityFactor	720.49	511.99
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.0043
tblSequestration	NumberOfNewTrees	0.00	184.00
tblVehicleTrips	ST_TR	5.67	8.00
tblVehicleTrips	SU_TR	4.84	8.00
tblVehicleTrips	WD_TR	5.81	8.00
tblWoodstoves	NumberCatalytic	4.60	0.00
tblWoodstoves	NumberNoncatalytic	4.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.0152	45.4093	25.8479	0.0529	6.6756	1.9410	8.6166	3.4002	1.7858	5.1859	0.0000	5,132.0405	5,132.0405	1.6227	0.0000	5,172.6079
2021	6.3839	21.3214	22.7577	0.0472	1.3265	1.0652	2.3918	0.3549	1.0070	1.3620	0.0000	4,598.4551	4,598.4551	0.7107	0.0000	4,616.2218
2022	6.1432	19.2459	22.2448	0.0467	1.3265	0.9025	2.2290	0.3549	0.8538	1.2087	0.0000	4,550.6208	4,550.6208	0.7015	0.0000	4,568.1590
Maximum	**6.3839**	**45.4093**	**25.8479**	**0.0529**	**6.6756**	**1.9410**	**8.6166**	**3.4002**	**1.7858**	**5.1859**	**0.0000**	**5,132.0405**	**5,132.0405**	**1.6227**	**0.0000**	**5,172.6079**

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	0.6895	3.2567	25.5883	0.0529	6.6756	0.0142	6.6891	3.4002	0.0137	3.4137	0.0000	5,132.0405	5,132.0405	1.6227	0.0000	5,172.6079
2021	4.6216	4.7259	23.6576	0.0472	1.3265	0.0192	1.3457	0.3549	0.0184	0.3733	0.0000	4,598.4551	4,598.4551	0.7107	0.0000	4,616.2218
2022	4.5900	4.5853	23.3605	0.0467	1.3265	0.0184	1.3450	0.3549	0.0176	0.3726	0.0000	4,550.6208	4,550.6208	0.7015	0.0000	4,568.1590
Maximum	**4.6216**	**4.7259**	**25.5883**	**0.0529**	**6.6756**	**0.0192**	**6.6891**	**3.4002**	**0.0184**	**3.4137**	**0.0000**	**5,132.0405**	**5,132.0405**	**1.6227**	**0.0000**	**5,172.6079**

Sweetwater Springs Residential Development - San Diego County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**40.15**	**85.38**	**-2.48**	**0.00**	**0.00**	**98.67**	**29.14**	**0.00**	**98.64**	**46.37**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.6715	0.0876	7.5983	4.0000e-004		0.0420	0.0420		0.0420	0.0420	0.0000	13.6668	13.6668	0.0132	0.0000	13.9965
Energy	0.0391	0.3341	0.1422	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.5019	426.5019	8.1700e-003	7.8200e-003	429.0364
Mobile	1.2109	5.0325	14.3174	0.0513	4.4559	0.0408	4.4967	1.1909	0.0381	1.2290		5,215.8415	5,215.8415	0.2604		5,222.3502
Total	**3.9215**	**5.4542**	**22.0579**	**0.0538**	**4.4559**	**0.1098**	**4.5657**	**1.1909**	**0.1071**	**1.2979**	**0.0000**	**5,656.0102**	**5,656.0102**	**0.2817**	**7.8200e-003**	**5,665.3831**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.6715	0.0876	7.5983	4.0000e-004		0.0420	0.0420		0.0420	0.0420	0.0000	13.6668	13.6668	0.0132	0.0000	13.9965
Energy	0.0391	0.3341	0.1422	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.5019	426.5019	8.1700e-003	7.8200e-003	429.0364
Mobile	1.1743	4.8250	13.4654	0.0478	4.1306	0.0381	4.1687	1.1039	0.0356	1.1395		4,857.4243	4,857.4243	0.2448		4,863.5443
Total	**3.8848**	**5.2467**	**21.2059**	**0.0503**	**4.1306**	**0.1071**	**4.2377**	**1.1039**	**0.1046**	**1.2085**	**0.0000**	**5,297.5930**	**5,297.5930**	**0.2662**	**7.8200e-003**	**5,306.5772**

	ROG	NOx	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	**0.94**	**3.81**	**3.86**	**6.56**	**7.30**	**2.42**	**7.18**	**7.30**	**2.33**	**6.89**	**0.00**	**6.34**	**6.34**	**5.52**	**0.00**	**6.33**

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	5/10/2020	7/31/2020	5	60	
2	Grading	Grading	8/1/2020	8/28/2020	5	20	
3	Trenching	Trenching	8/29/2020	9/25/2020	5	20	
4	Building Construction	Building Construction	10/24/2020	3/11/2022	5	360	
5	Building Construction Crane	Building Construction	12/21/2021	1/17/2022	5	20	
6	Paving	Paving	9/26/2020	10/23/2020	5	20	
7	Architectural Coating	Architectural Coating	1/1/2021	3/11/2022	5	311	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 186,300; Residential Outdoor: 62,100; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Sweetwater Springs Residential Development - San Diego County, Summer

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
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
Trenching	Excavators	1	6.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	2	6.00	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
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
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction Crane	Cranes	1	7.00	231	0.29

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	1.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	66.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Crane	1	66.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

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					1.9700e-003	0.0000	1.9700e-003	3.0000e-004	0.0000	3.0000e-004			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**	**1.9700e-003**	**1.6587**	**1.6607**	**3.0000e-004**	**1.5419**	**1.5422**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3000e-004	4.6500e-003	1.0600e-003	1.0000e-005	2.9000e-004	1.0000e-005	3.1000e-004	8.0000e-005	1.0000e-005	9.0000e-005		1.4272	1.4272	1.3000e-004		1.4304
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0550	0.0371	0.4252	1.2700e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		126.4121	126.4121	3.7700e-003		126.5064
Total	**0.0552**	**0.0417**	**0.4263**	**1.2800e-003**	**0.1235**	**8.7000e-004**	**0.1244**	**0.0328**	**8.1000e-004**	**0.0336**		**127.8393**	**127.8393**	**3.9000e-003**		**127.9368**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9700e-003	0.0000	1.9700e-003	3.0000e-004	0.0000	3.0000e-004			0.0000			0.0000
Off-Road	0.4623	2.0032	23.2798	0.0388		9.2500e-003	9.2500e-003		9.2500e-003	9.2500e-003	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**0.4623**	**2.0032**	**23.2798**	**0.0388**	**1.9700e-003**	**9.2500e-003**	**0.0112**	**3.0000e-004**	**9.2500e-003**	**9.5500e-003**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3000e-004	4.6500e-003	1.0600e-003	1.0000e-005	2.9000e-004	1.0000e-005	3.1000e-004	8.0000e-005	1.0000e-005	9.0000e-005		1.4272	1.4272	1.3000e-004		1.4304
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0550	0.0371	0.4252	1.2700e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		126.4121	126.4121	3.7700e-003		126.5064
Total	**0.0552**	**0.0417**	**0.4263**	**1.2800e-003**	**0.1235**	**8.7000e-004**	**0.1244**	**0.0328**	**8.1000e-004**	**0.0336**		**127.8393**	**127.8393**	**3.9000e-003**		**127.9368**

3.3 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.9601	45.3722	25.4227	0.0517		1.9402	1.9402		1.7850	1.7850		5,005.6284	5,005.6284	1.6189		5,046.1015
Total	**3.9601**	**45.3722**	**25.4227**	**0.0517**	**6.5523**	**1.9402**	**8.4925**	**3.3675**	**1.7850**	**5.1524**		**5,005.6284**	**5,005.6284**	**1.6189**		**5,046.1015**

3.3 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0550	0.0371	0.4252	1.2700e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		126.4121	126.4121	3.7700e-003		126.5064
Total	**0.0550**	**0.0371**	**0.4252**	**1.2700e-003**	**0.1232**	**8.6000e-004**	**0.1241**	**0.0327**	**8.0000e-004**	**0.0335**		**126.4121**	**126.4121**	**3.7700e-003**		**126.5064**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	0.6345	2.7494	25.1631	0.0517		0.0127	0.0127		0.0127	0.0127	0.0000	5,005.6284	5,005.6284	1.6189		5,046.1015
Total	**0.6345**	**2.7494**	**25.1631**	**0.0517**	**6.5523**	**0.0127**	**6.5650**	**3.3675**	**0.0127**	**3.3802**	**0.0000**	**5,005.6284**	**5,005.6284**	**1.6189**		**5,046.1015**

3.3 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0550	0.0371	0.4252	1.2700e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		126.4121	126.4121	3.7700e-003		126.5064
Total	**0.0550**	**0.0371**	**0.4252**	**1.2700e-003**	**0.1232**	**8.6000e-004**	**0.1241**	**0.0327**	**8.0000e-004**	**0.0335**		**126.4121**	**126.4121**	**3.7700e-003**		**126.5064**

3.4 Trenching - 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	0.4980	4.9672	5.8704	8.5300e-003		0.2873	0.2873		0.2643	0.2643		826.2416	826.2416	0.2672		832.9222
Total	**0.4980**	**4.9672**	**5.8704**	**8.5300e-003**		**0.2873**	**0.2873**		**0.2643**	**0.2643**		**826.2416**	**826.2416**	**0.2672**		**832.9222**

3.4 Trenching - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0294	0.0198	0.2268	6.8000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		67.4198	67.4198	2.0100e-003		67.4701
Total	**0.0294**	**0.0198**	**0.2268**	**6.8000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**67.4198**	**67.4198**	**2.0100e-003**		**67.4701**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1046	0.4534	6.4516	8.5300e-003		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	826.2416	826.2416	0.2672		832.9222
Total	**0.1046**	**0.4534**	**6.4516**	**8.5300e-003**		**2.0900e-003**	**2.0900e-003**		**2.0900e-003**	**2.0900e-003**	**0.0000**	**826.2416**	**826.2416**	**0.2672**		**832.9222**

3.4 Trenching - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0294	0.0198	0.2268	6.8000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		67.4198	67.4198	2.0100e-003		67.4701
Total	**0.0294**	**0.0198**	**0.2268**	**6.8000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**67.4198**	**67.4198**	**2.0100e-003**		**67.4701**

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	1.7231	14.4685	14.9976	0.0219		0.9226	0.9226		0.8714	0.8714		2,064.1221	2,064.1221	0.4647		2,075.7402
Total	**1.7231**	**14.4685**	**14.9976**	**0.0219**		**0.9226**	**0.9226**		**0.8714**	**0.8714**		**2,064.1221**	**2,064.1221**	**0.4647**		**2,075.7402**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0374	1.1276	0.2873	2.7400e-003	0.0677	5.5200e-003	0.0732	0.0195	5.2800e-003	0.0248		294.0401	294.0401	0.0217		294.5824
Worker	0.2422	0.1632	1.8708	5.5800e-003	0.5422	3.8000e-003	0.5460	0.1438	3.5100e-003	0.1473		556.2131	556.2131	0.0166		556.6283
Total	**0.2796**	**1.2908**	**2.1581**	**8.3200e-003**	**0.6099**	**9.3200e-003**	**0.6192**	**0.1633**	**8.7900e-003**	**0.1721**		**850.2531**	**850.2531**	**0.0383**		**851.2106**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2658	1.9659	15.1859	0.0219		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	2,064.1221	2,064.1221	0.4647		2,075.7402
Total	**0.2658**	**1.9659**	**15.1859**	**0.0219**		**4.8800e-003**	**4.8800e-003**		**4.8800e-003**	**4.8800e-003**	**0.0000**	**2,064.1221**	**2,064.1221**	**0.4647**		**2,075.7402**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0374	1.1276	0.2873	2.7400e-003	0.0677	5.5200e-003	0.0732	0.0195	5.2800e-003	0.0248		294.0401	294.0401	0.0217		294.5824
Worker	0.2422	0.1632	1.8708	5.5800e-003	0.5422	3.8000e-003	0.5460	0.1438	3.5100e-003	0.1473		556.2131	556.2131	0.0166		556.6283
Total	**0.2796**	**1.2908**	**2.1581**	**8.3200e-003**	**0.6099**	**9.3200e-003**	**0.6192**	**0.1633**	**8.7900e-003**	**0.1721**		**850.2531**	**850.2531**	**0.0383**		**851.2106**

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	1.5396	13.1889	14.8402	0.0219		0.7864	0.7864		0.7428	0.7428		2,064.4675	2,064.4675	0.4579		2,075.9149
Total	**1.5396**	**13.1889**	**14.8402**	**0.0219**		**0.7864**	**0.7864**		**0.7428**	**0.7428**		**2,064.4675**	**2,064.4675**	**0.4579**		**2,075.9149**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	1.0183	0.2595	2.7100e-003	0.0677	2.1400e-003	0.0698	0.0195	2.0500e-003	0.0215		291.3520	291.3520	0.0208		291.8724
Worker	0.2283	0.1483	1.7506	5.3900e-003	0.5422	3.7500e-003	0.5459	0.1438	3.4500e-003	0.1473		537.5310	537.5310	0.0153		537.9145
Total	**0.2585**	**1.1666**	**2.0101**	**8.1000e-003**	**0.6099**	**5.8900e-003**	**0.6158**	**0.1633**	**5.5000e-003**	**0.1688**		**828.8829**	**828.8829**	**0.0362**		**829.7869**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2658	1.9659	15.1859	0.0219		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	2,064.4675	2,064.4675	0.4579		2,075.9149
Total	**0.2658**	**1.9659**	**15.1859**	**0.0219**		**4.8800e-003**	**4.8800e-003**		**4.8800e-003**	**4.8800e-003**	**0.0000**	**2,064.4675**	**2,064.4675**	**0.4579**		**2,075.9149**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	1.0183	0.2595	2.7100e-003	0.0677	2.1400e-003	0.0698	0.0195	2.0500e-003	0.0215		291.3520	291.3520	0.0208		291.8724
Worker	0.2283	0.1483	1.7506	5.3900e-003	0.5422	3.7500e-003	0.5459	0.1438	3.4500e-003	0.1473		537.5310	537.5310	0.0153		537.9145
Total	**0.2585**	**1.1666**	**2.0101**	**8.1000e-003**	**0.6099**	**5.8900e-003**	**0.6158**	**0.1633**	**5.5000e-003**	**0.1688**		**828.8829**	**828.8829**	**0.0362**		**829.7869**

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	1.3799	11.9544	14.7076	0.0219		0.6570	0.6570		0.6213	0.6213		2,065.3570	2,065.3570	0.4538		2,076.7020
Total	**1.3799**	**11.9544**	**14.7076**	**0.0219**		**0.6570**	**0.6570**		**0.6213**	**0.6213**		**2,065.3570**	**2,065.3570**	**0.4538**		**2,076.7020**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0281	0.9623	0.2458	2.6800e-003	0.0677	1.8400e-003	0.0695	0.0195	1.7600e-003	0.0213		288.6138	288.6138	0.0202		289.1183
Worker	0.2158	0.1353	1.6278	5.1900e-003	0.5422	3.6600e-003	0.5458	0.1438	3.3700e-003	0.1472		517.8094	517.8094	0.0141		518.1610
Total	**0.2439**	**1.0976**	**1.8736**	**7.8700e-003**	**0.6099**	**5.5000e-003**	**0.6154**	**0.1633**	**5.1300e-003**	**0.1684**		**806.4232**	**806.4232**	**0.0342**		**807.2793**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2658	1.9659	15.1859	0.0219		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	2,065.3570	2,065.3570	0.4538		2,076.7020
Total	**0.2658**	**1.9659**	**15.1859**	**0.0219**		**4.8800e-003**	**4.8800e-003**		**4.8800e-003**	**4.8800e-003**	**0.0000**	**2,065.3570**	**2,065.3570**	**0.4538**		**2,076.7020**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0281	0.9623	0.2458	2.6800e-003	0.0677	1.8400e-003	0.0695	0.0195	1.7600e-003	0.0213		288.6138	288.6138	0.0202		289.1183
Worker	0.2158	0.1353	1.6278	5.1900e-003	0.5422	3.6600e-003	0.5458	0.1438	3.3700e-003	0.1472		517.8094	517.8094	0.0141		518.1610
Total	**0.2439**	**1.0976**	**1.8736**	**7.8700e-003**	**0.6099**	**5.5000e-003**	**0.6154**	**0.1633**	**5.1300e-003**	**0.1684**		**806.4232**	**806.4232**	**0.0342**		**807.2793**

3.6 Building Construction Crane - 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	0.3613	4.2432	1.7350	5.0500e-003		0.1723	0.1723		0.1585	0.1585		488.8964	488.8964	0.1581		492.8494
Total	**0.3613**	**4.2432**	**1.7350**	**5.0500e-003**		**0.1723**	**0.1723**		**0.1585**	**0.1585**		**488.8964**	**488.8964**	**0.1581**		**492.8494**

3.6 Building Construction Crane - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	1.0183	0.2595	2.7100e-003	0.0677	2.1400e-003	0.0698	0.0195	2.0500e-003	0.0215		291.3520	291.3520	0.0208		291.8724
Worker	0.2283	0.1483	1.7506	5.3900e-003	0.5422	3.7500e-003	0.5459	0.1438	3.4500e-003	0.1473		537.5310	537.5310	0.0153		537.9145
Total	**0.2585**	**1.1666**	**2.0101**	**8.1000e-003**	**0.6099**	**5.8900e-003**	**0.6158**	**0.1633**	**5.5000e-003**	**0.1688**		**828.8829**	**828.8829**	**0.0362**		**829.7869**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0620	0.2688	2.2744	5.0500e-003		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	488.8964	488.8964	0.1581		492.8494
Total	**0.0620**	**0.2688**	**2.2744**	**5.0500e-003**		**1.2400e-003**	**1.2400e-003**		**1.2400e-003**	**1.2400e-003**	**0.0000**	**488.8964**	**488.8964**	**0.1581**		**492.8494**

3.6 Building Construction Crane - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	1.0183	0.2595	2.7100e-003	0.0677	2.1400e-003	0.0698	0.0195	2.0500e-003	0.0215		291.3520	291.3520	0.0208		291.8724
Worker	0.2283	0.1483	1.7506	5.3900e-003	0.5422	3.7500e-003	0.5459	0.1438	3.4500e-003	0.1473		537.5310	537.5310	0.0153		537.9145
Total	**0.2585**	**1.1666**	**2.0101**	**8.1000e-003**	**0.6099**	**5.8900e-003**	**0.6158**	**0.1633**	**5.5000e-003**	**0.1688**		**828.8829**	**828.8829**	**0.0362**		**829.7869**

3.6 Building Construction Crane - 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	0.3264	3.6612	1.6558	5.0500e-003		0.1520	0.1520		0.1399	0.1399		488.9766	488.9766	0.1581		492.9302
Total	**0.3264**	**3.6612**	**1.6558**	**5.0500e-003**		**0.1520**	**0.1520**		**0.1399**	**0.1399**		**488.9766**	**488.9766**	**0.1581**		**492.9302**

3.6 Building Construction Crane - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0281	0.9623	0.2458	2.6800e-003	0.0677	1.8400e-003	0.0695	0.0195	1.7600e-003	0.0213		288.6138	288.6138	0.0202		289.1183
Worker	0.2158	0.1353	1.6278	5.1900e-003	0.5422	3.6600e-003	0.5458	0.1438	3.3700e-003	0.1472		517.8094	517.8094	0.0141		518.1610
Total	**0.2439**	**1.0976**	**1.8736**	**7.8700e-003**	**0.6099**	**5.5000e-003**	**0.6154**	**0.1633**	**5.1300e-003**	**0.1684**		**806.4232**	**806.4232**	**0.0342**		**807.2793**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0620	0.2688	2.2744	5.0500e-003		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	488.9766	488.9766	0.1581		492.9302
Total	**0.0620**	**0.2688**	**2.2744**	**5.0500e-003**		**1.2400e-003**	**1.2400e-003**		**1.2400e-003**	**1.2400e-003**	**0.0000**	**488.9766**	**488.9766**	**0.1581**		**492.9302**

3.6 Building Construction Crane - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0281	0.9623	0.2458	2.6800e-003	0.0677	1.8400e-003	0.0695	0.0195	1.7600e-003	0.0213		288.6138	288.6138	0.0202		289.1183
Worker	0.2158	0.1353	1.6278	5.1900e-003	0.5422	3.6600e-003	0.5458	0.1438	3.3700e-003	0.1472		517.8094	517.8094	0.0141		518.1610
Total	**0.2439**	**1.0976**	**1.8736**	**7.8700e-003**	**0.6099**	**5.5000e-003**	**0.6154**	**0.1633**	**5.1300e-003**	**0.1684**		**806.4232**	**806.4232**	**0.0342**		**807.2793**

3.7 Paving - 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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3566**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**		**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

3.7 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0550	0.0371	0.4252	1.2700e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		126.4121	126.4121	3.7700e-003		126.5064
Total	**0.0550**	**0.0371**	**0.4252**	**1.2700e-003**	**0.1232**	**8.6000e-004**	**0.1241**	**0.0327**	**8.0000e-004**	**0.0335**		**126.4121**	**126.4121**	**3.7700e-003**		**126.5064**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2805**	**1.2154**	**17.2957**	**0.0228**		**5.6100e-003**	**5.6100e-003**		**5.6100e-003**	**5.6100e-003**	**0.0000**	**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

3.7 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0550	0.0371	0.4252	1.2700e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		126.4121	126.4121	3.7700e-003		126.5064
Total	**0.0550**	**0.0371**	**0.4252**	**1.2700e-003**	**0.1232**	**8.6000e-004**	**0.1241**	**0.0327**	**8.0000e-004**	**0.0335**		**126.4121**	**126.4121**	**3.7700e-003**		**126.5064**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.7020					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**3.9209**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0450	0.0292	0.3448	1.0600e-003	0.1068	7.4000e-004	0.1075	0.0283	6.8000e-004	0.0290		105.8773	105.8773	3.0200e-003		105.9529
Total	**0.0450**	**0.0292**	**0.3448**	**1.0600e-003**	**0.1068**	**7.4000e-004**	**0.1075**	**0.0283**	**6.8000e-004**	**0.0290**		**105.8773**	**105.8773**	**3.0200e-003**		**105.9529**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.7020					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**3.7318**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0450	0.0292	0.3448	1.0600e-003	0.1068	7.4000e-004	0.1075	0.0283	6.8000e-004	0.0290		105.8773	105.8773	3.0200e-003		105.9529
Total	**0.0450**	**0.0292**	**0.3448**	**1.0600e-003**	**0.1068**	**7.4000e-004**	**0.1075**	**0.0283**	**6.8000e-004**	**0.0290**		**105.8773**	**105.8773**	**3.0200e-003**		**105.9529**

3.8 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	3.7020					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	**3.9066**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.8 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0425	0.0266	0.3206	1.0200e-003	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		101.9928	101.9928	2.7700e-003		102.0620
Total	**0.0425**	**0.0266**	**0.3206**	**1.0200e-003**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**		**101.9928**	**101.9928**	**2.7700e-003**		**102.0620**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.7020					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**3.7318**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.8 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0425	0.0266	0.3206	1.0200e-003	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		101.9928	101.9928	2.7700e-003		102.0620
Total	**0.0425**	**0.0266**	**0.3206**	**1.0200e-003**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**		**101.9928**	**101.9928**	**2.7700e-003**		**102.0620**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1743	4.8250	13.4654	0.0478	4.1306	0.0381	4.1687	1.1039	0.0356	1.1395		4,857.4243	4,857.4243	0.2448		4,863.5443
Unmitigated	1.2109	5.0325	14.3174	0.0513	4.4559	0.0408	4.4967	1.1909	0.0381	1.2290		5,215.8415	5,215.8415	0.2604		5,222.3502

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	736.00	736.00	736.00	2,101,503	1,948,065
Total	736.00	736.00	736.00	2,101,503	1,948,065

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
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0391	0.3341	0.1422	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.5019	426.5019	8.1700e-003	7.8200e-003	429.0364
NaturalGas Unmitigated	0.0391	0.3341	0.1422	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.5019	426.5019	8.1700e-003	7.8200e-003	429.0364

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					
Condo/Townhouse	3625.27	0.0391	0.3341	0.1422	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.5019	426.5019	8.1700e-003	7.8200e-003	429.0364
Total		**0.0391**	**0.3341**	**0.1422**	**2.1300e-003**		**0.0270**	**0.0270**		**0.0270**	**0.0270**		**426.5019**	**426.5019**	**8.1700e-003**	**7.8200e-003**	**429.0364**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	3.62527	0.0391	0.3341	0.1422	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.5019	426.5019	8.1700e-003	7.8200e-003	429.0364
Total		**0.0391**	**0.3341**	**0.1422**	**2.1300e-003**		**0.0270**	**0.0270**		**0.0270**	**0.0270**		**426.5019**	**426.5019**	**8.1700e-003**	**7.8200e-003**	**429.0364**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.6715	0.0876	7.5983	4.0000e-004		0.0420	0.0420		0.0420	0.0420	0.0000	13.6668	13.6668	0.0132	0.0000	13.9965
Unmitigated	2.6715	0.0876	7.5983	4.0000e-004		0.0420	0.0420		0.0420	0.0420	0.0000	13.6668	13.6668	0.0132	0.0000	13.9965

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4732					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9688					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2295	0.0876	7.5983	4.0000e-004		0.0420	0.0420		0.0420	0.0420		13.6668	13.6668	0.0132		13.9965
Total	**2.6715**	**0.0876**	**7.5983**	**4.0000e-004**		**0.0420**	**0.0420**		**0.0420**	**0.0420**	**0.0000**	**13.6668**	**13.6668**	**0.0132**	**0.0000**	**13.9965**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4732					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9688					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2295	0.0876	7.5983	4.0000e-004		0.0420	0.0420		0.0420	0.0420		13.6668	13.6668	0.0132		13.9965
Total	**2.6715**	**0.0876**	**7.5983**	**4.0000e-004**		**0.0420**	**0.0420**		**0.0420**	**0.0420**	**0.0000**	**13.6668**	**13.6668**	**0.0132**	**0.0000**	**13.9965**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Sweetwater Springs Residential Development

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse	92.00	Dwelling Unit	10.00	92,000.00	263

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	511.99	**CH4 Intensity (lb/MWhr)**	0.0206	**N2O Intensity (lb/MWhr)**	0.0043

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Fully Operational 2022 RPS corrected (511.99,.0206,.0043

Land Use - Site is 10 acres

Construction Phase - Proposed CS

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Off-road Equipment - ce

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Trips and VMT -

Demolition -

Grading - 10 acres

Architectural Coating - Rule 67 Compliant

Vehicle Trips - 8 trips per du...trip distance default

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Natural Gas Hearths

Area Coating - rule 67 compliant paint

Energy Use - Lighting Intensity was reduced 65% for 100% LED

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Tier IV equipment

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstEquipMitigation	DPF	No Change	Level 3

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	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	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
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	20.00	311.00
tblConstructionPhase	NumDays	230.00	360.00
tblConstructionPhase	NumDays	230.00	20.00
tblConstructionPhase	NumDays	20.00	60.00
tblEnergyUse	LightingElect	1,001.10	350.38
tblFireplaces	NumberGas	50.60	0.00
tblFireplaces	NumberNoFireplace	9.20	92.00
tblFireplaces	NumberWood	32.20	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.60	0.60
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.02	0.01

tblFleetMix	LHD2	5.4790e-003	5.4350e-003
tblFleetMix	MCY	6.0160e-003	5.9380e-003
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MH	1.1220e-003	1.0560e-003
tblFleetMix	MHD	0.02	0.02
tblFleetMix	OBUS	1.9260e-003	1.9340e-003
tblFleetMix	SBUS	7.5300e-004	7.5700e-004
tblFleetMix	UBUS	1.9320e-003	1.8880e-003
tblGrading	AcresOfGrading	50.00	10.00
tblLandUse	LotAcreage	5.75	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.0206
tblProjectCharacteristics	CO2IntensityFactor	720.49	511.99
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.0043
tblSequestration	NumberOfNewTrees	0.00	184.00
tblVehicleTrips	ST_TR	5.67	8.00
tblVehicleTrips	SU_TR	4.84	8.00
tblVehicleTrips	WD_TR	5.81	8.00
tblWoodstoves	NumberCatalytic	4.60	0.00
tblWoodstoves	NumberNoncatalytic	4.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.0225	45.4139	25.8235	0.0529	6.6756	1.9410	8.6166	3.4002	1.7858	5.1859	0.0000	5,124.2982	5,124.2982	1.6225	0.0000	5,164.8606
2021	6.4544	21.3559	22.5858	0.0463	1.3265	1.0654	2.3919	0.3549	1.0072	1.3622	0.0000	4,511.0445	4,511.0445	0.7114	0.0000	4,528.8295
2022	6.2111	19.2757	22.0787	0.0458	1.3265	0.9026	2.2292	0.3549	0.8540	1.2089	0.0000	4,465.9490	4,465.9490	0.7022	0.0000	4,483.5049
Maximum	**6.4544**	**45.4139**	**25.8235**	**0.0529**	**6.6756**	**1.9410**	**8.6166**	**3.4002**	**1.7858**	**5.1859**	**0.0000**	**5,124.2982**	**5,124.2982**	**1.6225**	**0.0000**	**5,164.8606**

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	0.6968	3.2758	25.5640	0.0529	6.6756	0.0143	6.6891	3.4002	0.0138	3.4137	0.0000	5,124.2982	5,124.2982	1.6225	0.0000	5,164.8606
2021	4.6921	4.7604	23.4858	0.0463	1.3265	0.0194	1.3459	0.3549	0.0186	0.3735	0.0000	4,511.0445	4,511.0445	0.7114	0.0000	4,528.8295
2022	4.6579	4.6150	23.1944	0.0458	1.3265	0.0186	1.3451	0.3549	0.0178	0.3727	0.0000	4,465.9490	4,465.9490	0.7022	0.0000	4,483.5049
Maximum	**4.6921**	**4.7604**	**25.5640**	**0.0529**	**6.6756**	**0.0194**	**6.6891**	**3.4002**	**0.0186**	**3.4137**	**0.0000**	**5,124.2982**	**5,124.2982**	**1.6225**	**0.0000**	**5,164.8606**

Sweetwater Springs Residential Development - San Diego County, Winter

	ROG	NOx	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	**39.80**	**85.30**	**-2.49**	**0.00**	**0.00**	**98.66**	**29.14**	**0.00**	**98.63**	**46.37**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.6715	0.0876	7.5983	4.0000e-004		0.0420	0.0420		0.0420	0.0420	0.0000	13.6668	13.6668	0.0132	0.0000	13.9965
Energy	0.0391	0.3341	0.1422	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.5019	426.5019	8.1700e-003	7.8200e-003	429.0364
Mobile	1.1744	5.1696	14.0231	0.0487	4.4559	0.0411	4.4970	1.1909	0.0384	1.2292		4,948.1317	4,948.1317	0.2613		4,954.6637
Total	**3.8850**	**5.5913**	**21.7636**	**0.0512**	**4.4559**	**0.1101**	**4.5660**	**1.1909**	**0.1074**	**1.2982**	**0.0000**	**5,388.3004**	**5,388.3004**	**0.2826**	**7.8200e-003**	**5,397.6965**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.6715	0.0876	7.5983	4.0000e-004		0.0420	0.0420		0.0420	0.0420	0.0000	13.6668	13.6668	0.0132	0.0000	13.9965
Energy	0.0391	0.3341	0.1422	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.5019	426.5019	8.1700e-003	7.8200e-003	429.0364
Mobile	1.1385	4.9492	13.2468	0.0453	4.1306	0.0384	4.1690	1.1039	0.0359	1.1398		4,607.2984	4,607.2984	0.2462		4,613.4531
Total	**3.8490**	**5.3709**	**20.9873**	**0.0478**	**4.1306**	**0.1074**	**4.2380**	**1.1039**	**0.1049**	**1.2088**	**0.0000**	**5,047.4671**	**5,047.4671**	**0.2676**	**7.8200e-003**	**5,056.4859**

	ROG	NOx	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	**0.93**	**3.94**	**3.57**	**6.57**	**7.30**	**2.42**	**7.18**	**7.30**	**2.33**	**6.89**	**0.00**	**6.33**	**6.33**	**5.34**	**0.00**	**6.32**

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	5/10/2020	7/31/2020	5	60	
2	Grading	Grading	8/1/2020	8/28/2020	5	20	
3	Trenching	Trenching	8/29/2020	9/25/2020	5	20	
4	Building Construction	Building Construction	10/24/2020	3/11/2022	5	360	
5	Building Construction Crane	Building Construction	12/21/2021	1/17/2022	5	20	
6	Paving	Paving	9/26/2020	10/23/2020	5	20	
7	Architectural Coating	Architectural Coating	1/1/2021	3/11/2022	5	311	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 186,300; Residential Outdoor: 62,100; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Sweetwater Springs Residential Development - San Diego County, Winter

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
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
Trenching	Excavators	1	6.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	2	6.00	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
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
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction Crane	Cranes	1	7.00	231	0.29

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	1.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	66.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Crane	1	66.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

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					1.9700e-003	0.0000	1.9700e-003	3.0000e-004	0.0000	3.0000e-004			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**	**1.9700e-003**	**1.6587**	**1.6607**	**3.0000e-004**	**1.5419**	**1.5422**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4000e-004	4.6900e-003	1.1300e-003	1.0000e-005	2.9000e-004	2.0000e-005	3.1000e-004	8.0000e-005	1.0000e-005	9.0000e-005		1.4027	1.4027	1.3000e-004		1.4060
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0416	0.4009	1.1900e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		118.6698	118.6698	3.5700e-003		118.7591
Total	**0.0625**	**0.0463**	**0.4020**	**1.2000e-003**	**0.1235**	**8.8000e-004**	**0.1244**	**0.0328**	**8.1000e-004**	**0.0336**		**120.0725**	**120.0725**	**3.7000e-003**		**120.1651**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9700e-003	0.0000	1.9700e-003	3.0000e-004	0.0000	3.0000e-004			0.0000			0.0000
Off-Road	0.4623	2.0032	23.2798	0.0388		9.2500e-003	9.2500e-003		9.2500e-003	9.2500e-003	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**0.4623**	**2.0032**	**23.2798**	**0.0388**	**1.9700e-003**	**9.2500e-003**	**0.0112**	**3.0000e-004**	**9.2500e-003**	**9.5500e-003**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4000e-004	4.6900e-003	1.1300e-003	1.0000e-005	2.9000e-004	2.0000e-005	3.1000e-004	8.0000e-005	1.0000e-005	9.0000e-005		1.4027	1.4027	1.3000e-004		1.4060
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0416	0.4009	1.1900e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		118.6698	118.6698	3.5700e-003		118.7591
Total	**0.0625**	**0.0463**	**0.4020**	**1.2000e-003**	**0.1235**	**8.8000e-004**	**0.1244**	**0.0328**	**8.1000e-004**	**0.0336**		**120.0725**	**120.0725**	**3.7000e-003**		**120.1651**

3.3 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.9601	45.3722	25.4227	0.0517		1.9402	1.9402		1.7850	1.7850		5,005.6284	5,005.6284	1.6189		5,046.1015
Total	**3.9601**	**45.3722**	**25.4227**	**0.0517**	**6.5523**	**1.9402**	**8.4925**	**3.3675**	**1.7850**	**5.1524**		**5,005.6284**	**5,005.6284**	**1.6189**		**5,046.1015**

3.3 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0416	0.4009	1.1900e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		118.6698	118.6698	3.5700e-003		118.7591
Total	**0.0623**	**0.0416**	**0.4009**	**1.1900e-003**	**0.1232**	**8.6000e-004**	**0.1241**	**0.0327**	**8.0000e-004**	**0.0335**		**118.6698**	**118.6698**	**3.5700e-003**		**118.7591**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	0.6345	2.7494	25.1631	0.0517		0.0127	0.0127		0.0127	0.0127	0.0000	5,005.6284	5,005.6284	1.6189		5,046.1015
Total	**0.6345**	**2.7494**	**25.1631**	**0.0517**	**6.5523**	**0.0127**	**6.5650**	**3.3675**	**0.0127**	**3.3802**	**0.0000**	**5,005.6284**	**5,005.6284**	**1.6189**		**5,046.1015**

3.3 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0416	0.4009	1.1900e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		118.6698	118.6698	3.5700e-003		118.7591
Total	**0.0623**	**0.0416**	**0.4009**	**1.1900e-003**	**0.1232**	**8.6000e-004**	**0.1241**	**0.0327**	**8.0000e-004**	**0.0335**		**118.6698**	**118.6698**	**3.5700e-003**		**118.7591**

3.4 Trenching - 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	0.4980	4.9672	5.8704	8.5300e-003		0.2873	0.2873		0.2643	0.2643		826.2416	826.2416	0.2672		832.9222
Total	**0.4980**	**4.9672**	**5.8704**	**8.5300e-003**		**0.2873**	**0.2873**		**0.2643**	**0.2643**		**826.2416**	**826.2416**	**0.2672**		**832.9222**

3.4 Trenching - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0333	0.0222	0.2138	6.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		63.2906	63.2906	1.9100e-003		63.3382
Total	**0.0333**	**0.0222**	**0.2138**	**6.4000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**63.2906**	**63.2906**	**1.9100e-003**		**63.3382**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1046	0.4534	6.4516	8.5300e-003		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	826.2416	826.2416	0.2672		832.9222
Total	**0.1046**	**0.4534**	**6.4516**	**8.5300e-003**		**2.0900e-003**	**2.0900e-003**		**2.0900e-003**	**2.0900e-003**	**0.0000**	**826.2416**	**826.2416**	**0.2672**		**832.9222**

3.4 Trenching - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0333	0.0222	0.2138	6.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		63.2906	63.2906	1.9100e-003		63.3382
Total	**0.0333**	**0.0222**	**0.2138**	**6.4000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**63.2906**	**63.2906**	**1.9100e-003**		**63.3382**

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	1.7231	14.4685	14.9976	0.0219		0.9226	0.9226		0.8714	0.8714		2,064.1221	2,064.1221	0.4647		2,075.7402
Total	**1.7231**	**14.4685**	**14.9976**	**0.0219**		**0.9226**	**0.9226**		**0.8714**	**0.8714**		**2,064.1221**	**2,064.1221**	**0.4647**		**2,075.7402**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0391	1.1267	0.3188	2.6700e-003	0.0677	5.6200e-003	0.0733	0.0195	5.3800e-003	0.0249		286.4622	286.4622	0.0231		287.0385
Worker	0.2743	0.1832	1.7638	5.2400e-003	0.5422	3.8000e-003	0.5460	0.1438	3.5100e-003	0.1473		522.1471	522.1471	0.0157		522.5401
Total	**0.3134**	**1.3099**	**2.0826**	**7.9100e-003**	**0.6099**	**9.4200e-003**	**0.6193**	**0.1633**	**8.8900e-003**	**0.1722**		**808.6093**	**808.6093**	**0.0388**		**809.5786**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2658	1.9659	15.1859	0.0219		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	2,064.1221	2,064.1221	0.4647		2,075.7402
Total	**0.2658**	**1.9659**	**15.1859**	**0.0219**		**4.8800e-003**	**4.8800e-003**		**4.8800e-003**	**4.8800e-003**	**0.0000**	**2,064.1221**	**2,064.1221**	**0.4647**		**2,075.7402**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0391	1.1267	0.3188	2.6700e-003	0.0677	5.6200e-003	0.0733	0.0195	5.3800e-003	0.0249		286.4622	286.4622	0.0231		287.0385
Worker	0.2743	0.1832	1.7638	5.2400e-003	0.5422	3.8000e-003	0.5460	0.1438	3.5100e-003	0.1473		522.1471	522.1471	0.0157		522.5401
Total	**0.3134**	**1.3099**	**2.0826**	**7.9100e-003**	**0.6099**	**9.4200e-003**	**0.6193**	**0.1633**	**8.8900e-003**	**0.1722**		**808.6093**	**808.6093**	**0.0388**		**809.5786**

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	1.5396	13.1889	14.8402	0.0219		0.7864	0.7864		0.7428	0.7428		2,064.4675	2,064.4675	0.4579		2,075.9149
Total	**1.5396**	**13.1889**	**14.8402**	**0.0219**		**0.7864**	**0.7864**		**0.7428**	**0.7428**		**2,064.4675**	**2,064.4675**	**0.4579**		**2,075.9149**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0319	1.0156	0.2890	2.6400e-003	0.0677	2.2300e-003	0.0699	0.0195	2.1300e-003	0.0216		283.8193	283.8193	0.0221		284.3721
Worker	0.2589	0.1665	1.6455	5.0600e-003	0.5422	3.7500e-003	0.5459	0.1438	3.4500e-003	0.1473		504.6014	504.6014	0.0145		504.9638
Total	**0.2908**	**1.1821**	**1.9345**	**7.7000e-003**	**0.6099**	**5.9800e-003**	**0.6158**	**0.1633**	**5.5800e-003**	**0.1689**		**788.4207**	**788.4207**	**0.0366**		**789.3359**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2658	1.9659	15.1859	0.0219		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	2,064.4675	2,064.4675	0.4579		2,075.9149
Total	**0.2658**	**1.9659**	**15.1859**	**0.0219**		**4.8800e-003**	**4.8800e-003**		**4.8800e-003**	**4.8800e-003**	**0.0000**	**2,064.4675**	**2,064.4675**	**0.4579**		**2,075.9149**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0319	1.0156	0.2890	2.6400e-003	0.0677	2.2300e-003	0.0699	0.0195	2.1300e-003	0.0216		283.8193	283.8193	0.0221		284.3721
Worker	0.2589	0.1665	1.6455	5.0600e-003	0.5422	3.7500e-003	0.5459	0.1438	3.4500e-003	0.1473		504.6014	504.6014	0.0145		504.9638
Total	**0.2908**	**1.1821**	**1.9345**	**7.7000e-003**	**0.6099**	**5.9800e-003**	**0.6158**	**0.1633**	**5.5800e-003**	**0.1689**		**788.4207**	**788.4207**	**0.0366**		**789.3359**

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	1.3799	11.9544	14.7076	0.0219		0.6570	0.6570		0.6213	0.6213		2,065.3570	2,065.3570	0.4538		2,076.7020
Total	**1.3799**	**11.9544**	**14.7076**	**0.0219**		**0.6570**	**0.6570**		**0.6213**	**0.6213**		**2,065.3570**	**2,065.3570**	**0.4538**		**2,076.7020**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0297	0.9591	0.2736	2.6100e-003	0.0677	1.9200e-003	0.0696	0.0195	1.8300e-003	0.0213		281.1026	281.1026	0.0214		281.6377
Worker	0.2453	0.1518	1.5269	4.8800e-003	0.5422	3.6600e-003	0.5458	0.1438	3.3700e-003	0.1472		486.1069	486.1069	0.0133		486.4387
Total	**0.2750**	**1.1108**	**1.8005**	**7.4900e-003**	**0.6099**	**5.5800e-003**	**0.6155**	**0.1633**	**5.2000e-003**	**0.1685**		**767.2095**	**767.2095**	**0.0347**		**768.0764**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2658	1.9659	15.1859	0.0219		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	2,065.3570	2,065.3570	0.4538		2,076.7020
Total	**0.2658**	**1.9659**	**15.1859**	**0.0219**		**4.8800e-003**	**4.8800e-003**		**4.8800e-003**	**4.8800e-003**	**0.0000**	**2,065.3570**	**2,065.3570**	**0.4538**		**2,076.7020**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0297	0.9591	0.2736	2.6100e-003	0.0677	1.9200e-003	0.0696	0.0195	1.8300e-003	0.0213		281.1026	281.1026	0.0214		281.6377
Worker	0.2453	0.1518	1.5269	4.8800e-003	0.5422	3.6600e-003	0.5458	0.1438	3.3700e-003	0.1472		486.1069	486.1069	0.0133		486.4387
Total	**0.2750**	**1.1108**	**1.8005**	**7.4900e-003**	**0.6099**	**5.5800e-003**	**0.6155**	**0.1633**	**5.2000e-003**	**0.1685**		**767.2095**	**767.2095**	**0.0347**		**768.0764**

3.6 Building Construction Crane - 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	0.3613	4.2432	1.7350	5.0500e-003		0.1723	0.1723		0.1585	0.1585		488.8964	488.8964	0.1581		492.8494
Total	**0.3613**	**4.2432**	**1.7350**	**5.0500e-003**		**0.1723**	**0.1723**		**0.1585**	**0.1585**		**488.8964**	**488.8964**	**0.1581**		**492.8494**

3.6 Building Construction Crane - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0319	1.0156	0.2890	2.6400e-003	0.0677	2.2300e-003	0.0699	0.0195	2.1300e-003	0.0216		283.8193	283.8193	0.0221		284.3721
Worker	0.2589	0.1665	1.6455	5.0600e-003	0.5422	3.7500e-003	0.5459	0.1438	3.4500e-003	0.1473		504.6014	504.6014	0.0145		504.9638
Total	**0.2908**	**1.1821**	**1.9345**	**7.7000e-003**	**0.6099**	**5.9800e-003**	**0.6158**	**0.1633**	**5.5800e-003**	**0.1689**		**788.4207**	**788.4207**	**0.0366**		**789.3359**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0620	0.2688	2.2744	5.0500e-003		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	488.8964	488.8964	0.1581		492.8494
Total	**0.0620**	**0.2688**	**2.2744**	**5.0500e-003**		**1.2400e-003**	**1.2400e-003**		**1.2400e-003**	**1.2400e-003**	**0.0000**	**488.8964**	**488.8964**	**0.1581**		**492.8494**

3.6 Building Construction Crane - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0319	1.0156	0.2890	2.6400e-003	0.0677	2.2300e-003	0.0699	0.0195	2.1300e-003	0.0216		283.8193	283.8193	0.0221		284.3721
Worker	0.2589	0.1665	1.6455	5.0600e-003	0.5422	3.7500e-003	0.5459	0.1438	3.4500e-003	0.1473		504.6014	504.6014	0.0145		504.9638
Total	**0.2908**	**1.1821**	**1.9345**	**7.7000e-003**	**0.6099**	**5.9800e-003**	**0.6158**	**0.1633**	**5.5800e-003**	**0.1689**		**788.4207**	**788.4207**	**0.0366**		**789.3359**

3.6 Building Construction Crane - 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	0.3264	3.6612	1.6558	5.0500e-003		0.1520	0.1520		0.1399	0.1399		488.9766	488.9766	0.1581		492.9302
Total	**0.3264**	**3.6612**	**1.6558**	**5.0500e-003**		**0.1520**	**0.1520**		**0.1399**	**0.1399**		**488.9766**	**488.9766**	**0.1581**		**492.9302**

3.6 Building Construction Crane - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0297	0.9591	0.2736	2.6100e-003	0.0677	1.9200e-003	0.0696	0.0195	1.8300e-003	0.0213		281.1026	281.1026	0.0214		281.6377
Worker	0.2453	0.1518	1.5269	4.8800e-003	0.5422	3.6600e-003	0.5458	0.1438	3.3700e-003	0.1472		486.1069	486.1069	0.0133		486.4387
Total	**0.2750**	**1.1108**	**1.8005**	**7.4900e-003**	**0.6099**	**5.5800e-003**	**0.6155**	**0.1633**	**5.2000e-003**	**0.1685**		**767.2095**	**767.2095**	**0.0347**		**768.0764**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0620	0.2688	2.2744	5.0500e-003		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	488.9766	488.9766	0.1581		492.9302
Total	**0.0620**	**0.2688**	**2.2744**	**5.0500e-003**		**1.2400e-003**	**1.2400e-003**		**1.2400e-003**	**1.2400e-003**	**0.0000**	**488.9766**	**488.9766**	**0.1581**		**492.9302**

3.6 Building Construction Crane - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0297	0.9591	0.2736	2.6100e-003	0.0677	1.9200e-003	0.0696	0.0195	1.8300e-003	0.0213		281.1026	281.1026	0.0214		281.6377
Worker	0.2453	0.1518	1.5269	4.8800e-003	0.5422	3.6600e-003	0.5458	0.1438	3.3700e-003	0.1472		486.1069	486.1069	0.0133		486.4387
Total	**0.2750**	**1.1108**	**1.8005**	**7.4900e-003**	**0.6099**	**5.5800e-003**	**0.6155**	**0.1633**	**5.2000e-003**	**0.1685**		**767.2095**	**767.2095**	**0.0347**		**768.0764**

3.7 Paving - 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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3566**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**		**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

3.7 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0416	0.4009	1.1900e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		118.6698	118.6698	3.5700e-003		118.7591
Total	**0.0623**	**0.0416**	**0.4009**	**1.1900e-003**	**0.1232**	**8.6000e-004**	**0.1241**	**0.0327**	**8.0000e-004**	**0.0335**		**118.6698**	**118.6698**	**3.5700e-003**		**118.7591**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2805**	**1.2154**	**17.2957**	**0.0228**		**5.6100e-003**	**5.6100e-003**		**5.6100e-003**	**5.6100e-003**	**0.0000**	**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

3.7 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0416	0.4009	1.1900e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		118.6698	118.6698	3.5700e-003		118.7591
Total	**0.0623**	**0.0416**	**0.4009**	**1.1900e-003**	**0.1232**	**8.6000e-004**	**0.1241**	**0.0327**	**8.0000e-004**	**0.0335**		**118.6698**	**118.6698**	**3.5700e-003**		**118.7591**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.7020					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**3.9209**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0510	0.0328	0.3241	1.0000e-003	0.1068	7.4000e-004	0.1075	0.0283	6.8000e-004	0.0290		99.3912	99.3912	2.8600e-003		99.4626
Total	**0.0510**	**0.0328**	**0.3241**	**1.0000e-003**	**0.1068**	**7.4000e-004**	**0.1075**	**0.0283**	**6.8000e-004**	**0.0290**		**99.3912**	**99.3912**	**2.8600e-003**		**99.4626**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.7020					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**3.7318**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0510	0.0328	0.3241	1.0000e-003	0.1068	7.4000e-004	0.1075	0.0283	6.8000e-004	0.0290		99.3912	99.3912	2.8600e-003		99.4626
Total	**0.0510**	**0.0328**	**0.3241**	**1.0000e-003**	**0.1068**	**7.4000e-004**	**0.1075**	**0.0283**	**6.8000e-004**	**0.0290**		**99.3912**	**99.3912**	**2.8600e-003**		**99.4626**

3.8 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	3.7020					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	**3.9066**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.8 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0483	0.0299	0.3008	9.6000e-004	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		95.7483	95.7483	2.6100e-003		95.8137
Total	**0.0483**	**0.0299**	**0.3008**	**9.6000e-004**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**		**95.7483**	**95.7483**	**2.6100e-003**		**95.8137**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.7020					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**3.7318**	**0.1288**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.8 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0483	0.0299	0.3008	9.6000e-004	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		95.7483	95.7483	2.6100e-003		95.8137
Total	**0.0483**	**0.0299**	**0.3008**	**9.6000e-004**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**		**95.7483**	**95.7483**	**2.6100e-003**		**95.8137**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1385	4.9492	13.2468	0.0453	4.1306	0.0384	4.1690	1.1039	0.0359	1.1398		4,607.2984	4,607.2984	0.2462		4,613.4531
Unmitigated	1.1744	5.1696	14.0231	0.0487	4.4559	0.0411	4.4970	1.1909	0.0384	1.2292		4,948.1317	4,948.1317	0.2613		4,954.6637

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	736.00	736.00	736.00	2,101,503	1,948,065
Total	736.00	736.00	736.00	2,101,503	1,948,065

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
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0391	0.3341	0.1422	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.5019	426.5019	8.1700e-003	7.8200e-003	429.0364
NaturalGas Unmitigated	0.0391	0.3341	0.1422	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.5019	426.5019	8.1700e-003	7.8200e-003	429.0364

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					
Condo/Townhouse	3625.27	0.0391	0.3341	0.1422	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.5019	426.5019	8.1700e-003	7.8200e-003	429.0364
Total		**0.0391**	**0.3341**	**0.1422**	**2.1300e-003**		**0.0270**	**0.0270**		**0.0270**	**0.0270**		**426.5019**	**426.5019**	**8.1700e-003**	**7.8200e-003**	**429.0364**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	3.62527	0.0391	0.3341	0.1422	2.1300e-003		0.0270	0.0270		0.0270	0.0270		426.5019	426.5019	8.1700e-003	7.8200e-003	429.0364
Total		**0.0391**	**0.3341**	**0.1422**	**2.1300e-003**		**0.0270**	**0.0270**		**0.0270**	**0.0270**		**426.5019**	**426.5019**	**8.1700e-003**	**7.8200e-003**	**429.0364**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.6715	0.0876	7.5983	4.0000e-004		0.0420	0.0420		0.0420	0.0420	0.0000	13.6668	13.6668	0.0132	0.0000	13.9965
Unmitigated	2.6715	0.0876	7.5983	4.0000e-004		0.0420	0.0420		0.0420	0.0420	0.0000	13.6668	13.6668	0.0132	0.0000	13.9965

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4732					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9688					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2295	0.0876	7.5983	4.0000e-004		0.0420	0.0420		0.0420	0.0420		13.6668	13.6668	0.0132		13.9965
Total	**2.6715**	**0.0876**	**7.5983**	**4.0000e-004**		**0.0420**	**0.0420**		**0.0420**	**0.0420**	**0.0000**	**13.6668**	**13.6668**	**0.0132**	**0.0000**	**13.9965**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4732					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9688					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2295	0.0876	7.5983	4.0000e-004		0.0420	0.0420		0.0420	0.0420		13.6668	13.6668	0.0132		13.9965
Total	**2.6715**	**0.0876**	**7.5983**	**4.0000e-004**		**0.0420**	**0.0420**		**0.0420**	**0.0420**	**0.0000**	**13.6668**	**13.6668**	**0.0132**	**0.0000**	**13.9965**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Sweetwater Springs Residential Development

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse	92.00	Dwelling Unit	10.00	92,000.00	263

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	511.99	**CH4 Intensity (lb/MWhr)**	0.0206	**N2O Intensity (lb/MWhr)**	0.0043

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Fully Operational 2022 RPS corrected (511.99,.0206,.0043

Land Use - Site is 10 acres

Construction Phase - Proposed CS

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Off-road Equipment - ce

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Trips and VMT -

Demolition -

Grading - 10 acres

Architectural Coating - Rule 67 Compliant

Vehicle Trips - 8 trips per du...trip distance default

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Natural Gas Hearths

Area Coating - rule 67 compliant paint

Energy Use - Lighting Intensity was reduced 65% for 100% LED

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Tier IV equipment

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstEquipMitigation	DPF	No Change	Level 3

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	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	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
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	20.00	311.00
tblConstructionPhase	NumDays	230.00	360.00
tblConstructionPhase	NumDays	230.00	20.00
tblConstructionPhase	NumDays	20.00	60.00
tblEnergyUse	LightingElect	1,001.10	350.38
tblFireplaces	NumberGas	50.60	0.00
tblFireplaces	NumberNoFireplace	9.20	92.00
tblFireplaces	NumberWood	32.20	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.60	0.60
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.02	0.01

tblFleetMix	LHD2	5.4790e-003	5.4350e-003
tblFleetMix	MCY	6.0160e-003	5.9380e-003
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MH	1.1220e-003	1.0560e-003
tblFleetMix	MHD	0.02	0.02
tblFleetMix	OBUS	1.9260e-003	1.9340e-003
tblFleetMix	SBUS	7.5300e-004	7.5700e-004
tblFleetMix	UBUS	1.9320e-003	1.8880e-003
tblGrading	AcresOfGrading	50.00	10.00
tblLandUse	LotAcreage	5.75	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.0206
tblProjectCharacteristics	CO2IntensityFactor	720.49	511.99
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.0043
tblSequestration	NumberOfNewTrees	0.00	184.00
tblVehicleTrips	ST_TR	5.67	8.00
tblVehicleTrips	SU_TR	4.84	8.00
tblVehicleTrips	WD_TR	5.81	8.00
tblWoodstoves	NumberCatalytic	4.60	0.00
tblWoodstoves	NumberNoncatalytic	4.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.2097	2.0293	1.5524	2.7900e-003	0.0868	0.1024	0.1893	0.0394	0.0953	0.1347	0.0000	245.0480	245.0480	0.0637	0.0000	246.6415
2021	0.7553	2.1045	2.4836	4.4500e-003	0.0940	0.1166	0.2106	0.0252	0.1108	0.1360	0.0000	389.3185	389.3185	0.0619	0.0000	390.8658
2022	0.1425	0.3891	0.4843	9.0000e-004	0.0208	0.0195	0.0403	5.5700e-003	0.0185	0.0241	0.0000	79.3406	79.3406	0.0125	0.0000	79.6531
Maximum	**0.7553**	**2.1045**	**2.4836**	**4.4500e-003**	**0.0940**	**0.1166**	**0.2106**	**0.0394**	**0.1108**	**0.1360**	**0.0000**	**389.3185**	**389.3185**	**0.0637**	**0.0000**	**390.8658**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0405	0.1872	1.6325	2.7900e-003	0.0868	8.8000e-004	0.0877	0.0394	8.6000e-004	0.0402	0.0000	245.0477	245.0477	0.0637	0.0000	246.6413
2021	0.5630	0.4396	2.5331	4.4500e-003	0.0940	1.6200e-003	0.0956	0.0252	1.5500e-003	0.0267	0.0000	389.3182	389.3182	0.0619	0.0000	390.8654
2022	0.1089	0.0887	0.5001	9.0000e-004	0.0208	3.3000e-004	0.0211	5.5700e-003	3.2000e-004	5.8800e-003	0.0000	79.3406	79.3406	0.0125	0.0000	79.6531
Maximum	**0.5630**	**0.4396**	**2.5331**	**4.4500e-003**	**0.0940**	**1.6200e-003**	**0.0956**	**0.0394**	**1.5500e-003**	**0.0402**	**0.0000**	**389.3182**	**389.3182**	**0.0637**	**0.0000**	**390.8654**

Sweetwater Springs Residential Development - San Diego County, Annual

	ROG	NOx	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	**35.68**	**84.18**	**-3.22**	**0.00**	**0.00**	**98.81**	**53.55**	**0.00**	**98.78**	**75.28**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
9	**4-29-2020**	**7-28-2020**	1.0460	0.0732
10	**7-29-2020**	**10-28-2020**	0.7757	0.0664
11	**10-29-2020**	**1-28-2021**	0.6853	0.1826
12	**1-29-2021**	**4-28-2021**	0.8929	0.3028
13	**4-29-2021**	**7-28-2021**	0.9004	0.3038
14	**7-29-2021**	**10-28-2021**	0.9114	0.3082
15	**10-29-2021**	**1-28-2022**	0.9470	0.3263
16	**1-29-2022**	**4-28-2022**	0.3823	0.1391
		Highest	1.0460	0.3263

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4663	7.8900e-003	0.6839	4.0000e-005		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	1.1159	1.1159	1.0800e-003	0.0000	1.1428
Energy	7.1400e-003	0.0610	0.0260	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	164.0356	164.0356	5.1100e-003	2.0800e-003	164.7830
Mobile	0.2087	0.9439	2.5264	8.9400e-003	0.7919	7.4400e-003	0.7994	0.2121	6.9500e-003	0.2190	0.0000	824.6600	824.6600	0.0427	0.0000	825.7273
Waste						0.0000	0.0000		0.0000	0.0000	8.5906	0.0000	8.5906	0.5077	0.0000	21.2828
Water						0.0000	0.0000		0.0000	0.0000	1.9017	27.8761	29.7778	0.1964	4.8500e-003	36.1329
Total	**0.6822**	**1.0128**	**3.2362**	**9.3700e-003**	**0.7919**	**0.0162**	**0.8081**	**0.2121**	**0.0157**	**0.2277**	**10.4923**	**1,017.6876**	**1,028.1798**	**0.7530**	**6.9300e-003**	**1,049.0688**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4663	7.8900e-003	0.6839	4.0000e-005		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	1.1159	1.1159	1.0800e-003	0.0000	1.1428
Energy	7.1400e-003	0.0610	0.0260	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	161.2236	161.2236	5.0000e-003	2.0600e-003	161.9611
Mobile	0.2022	0.9040	2.3837	8.3200e-003	0.7341	6.9500e-003	0.7411	0.1966	6.4900e-003	0.2031	0.0000	768.0084	768.0084	0.0402	0.0000	769.0132
Waste						0.0000	0.0000		0.0000	0.0000	6.0134	0.0000	6.0134	0.3554	0.0000	14.8980
Water						0.0000	0.0000		0.0000	0.0000	1.9017	25.9261	27.8277	0.1964	4.8300e-003	34.1761
Total	**0.6756**	**0.9728**	**3.0935**	**8.7500e-003**	**0.7341**	**0.0157**	**0.7498**	**0.1966**	**0.0152**	**0.2118**	**7.9151**	**956.2739**	**964.1889**	**0.5980**	**6.8900e-003**	**981.1910**

	ROG	NOx	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	**0.96**	**3.95**	**4.41**	**6.62**	**7.30**	**3.03**	**7.22**	**7.30**	**2.94**	**7.00**	**24.56**	**6.03**	**6.22**	**20.58**	**0.58**	**6.47**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	135.0560
Vegetation Land Change	0.0000
Total	**135.0560**

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	5/10/2020	7/31/2020	5	60	
2	Grading	Grading	8/1/2020	8/28/2020	5	20	
3	Trenching	Trenching	8/29/2020	9/25/2020	5	20	
4	Building Construction	Building Construction	10/24/2020	3/11/2022	5	360	
5	Building Construction Crane	Building Construction	12/21/2021	1/17/2022	5	20	
6	Paving	Paving	9/26/2020	10/23/2020	5	20	
7	Architectural Coating	Architectural Coating	1/1/2021	3/11/2022	5	311	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 186,300; Residential Outdoor: 62,100; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
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
Trenching	Excavators	1	6.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	2	6.00	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
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
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction Crane	Cranes	1	7.00	231	0.29

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	1.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	66.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Crane	1	66.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

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	tons/yr										MT/yr					
Fugitive Dust					6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0994	0.9960	0.6526	1.1600e-003		0.0498	0.0498		0.0463	0.0463	0.0000	101.9958	101.9958	0.0288	0.0000	102.7156
Total	**0.0994**	**0.9960**	**0.6526**	**1.1600e-003**	**6.0000e-005**	**0.0498**	**0.0498**	**1.0000e-005**	**0.0463**	**0.0463**	**0.0000**	**101.9958**	**101.9958**	**0.0288**	**0.0000**	**102.7156**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.4000e-004	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0386	0.0386	0.0000	0.0000	0.0387
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6600e-003	1.2300e-003	0.0120	4.0000e-005	3.6100e-003	3.0000e-005	3.6300e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.2619	3.2619	1.0000e-004	0.0000	3.2644
Total	**1.6600e-003**	**1.3700e-003**	**0.0121**	**4.0000e-005**	**3.6200e-003**	**3.0000e-005**	**3.6400e-003**	**9.6000e-004**	**2.0000e-005**	**9.8000e-004**	**0.0000**	**3.3005**	**3.3005**	**1.0000e-004**	**0.0000**	**3.3030**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0139	0.0601	0.6984	1.1600e-003		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	101.9957	101.9957	0.0288	0.0000	102.7155
Total	**0.0139**	**0.0601**	**0.6984**	**1.1600e-003**	**6.0000e-005**	**2.8000e-004**	**3.4000e-004**	**1.0000e-005**	**2.8000e-004**	**2.9000e-004**	**0.0000**	**101.9957**	**101.9957**	**0.0288**	**0.0000**	**102.7155**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.4000e-004	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0386	0.0386	0.0000	0.0000	0.0387
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6600e-003	1.2300e-003	0.0120	4.0000e-005	3.6100e-003	3.0000e-005	3.6300e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.2619	3.2619	1.0000e-004	0.0000	3.2644
Total	**1.6600e-003**	**1.3700e-003**	**0.0121**	**4.0000e-005**	**3.6200e-003**	**3.0000e-005**	**3.6400e-003**	**9.6000e-004**	**2.0000e-005**	**9.8000e-004**	**0.0000**	**3.3005**	**3.3005**	**1.0000e-004**	**0.0000**	**3.3030**

3.3 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	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0396	0.4537	0.2542	5.2000e-004		0.0194	0.0194		0.0179	0.0179	0.0000	45.4103	45.4103	0.0147	0.0000	45.7775
Total	**0.0396**	**0.4537**	**0.2542**	**5.2000e-004**	**0.0655**	**0.0194**	**0.0849**	**0.0337**	**0.0179**	**0.0515**	**0.0000**	**45.4103**	**45.4103**	**0.0147**	**0.0000**	**45.7775**

3.3 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	4.1000e-004	4.0100e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0873	1.0873	3.0000e-005	0.0000	1.0881
Total	**5.5000e-004**	**4.1000e-004**	**4.0100e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0873**	**1.0873**	**3.0000e-005**	**0.0000**	**1.0881**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3400e-003	0.0275	0.2516	5.2000e-004		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	45.4102	45.4102	0.0147	0.0000	45.7774
Total	**6.3400e-003**	**0.0275**	**0.2516**	**5.2000e-004**	**0.0655**	**1.3000e-004**	**0.0657**	**0.0337**	**1.3000e-004**	**0.0338**	**0.0000**	**45.4102**	**45.4102**	**0.0147**	**0.0000**	**45.7774**

3.3 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	4.1000e-004	4.0100e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0873	1.0873	3.0000e-005	0.0000	1.0881
Total	**5.5000e-004**	**4.1000e-004**	**4.0100e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0873**	**1.0873**	**3.0000e-005**	**0.0000**	**1.0881**

3.4 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.9800e-003	0.0497	0.0587	9.0000e-005		2.8700e-003	2.8700e-003		2.6400e-003	2.6400e-003	0.0000	7.4955	7.4955	2.4200e-003	0.0000	7.5561
Total	**4.9800e-003**	**0.0497**	**0.0587**	**9.0000e-005**		**2.8700e-003**	**2.8700e-003**		**2.6400e-003**	**2.6400e-003**	**0.0000**	**7.4955**	**7.4955**	**2.4200e-003**	**0.0000**	**7.5561**

3.4 Trenching - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.2000e-004	2.1400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5799	0.5799	2.0000e-005	0.0000	0.5803
Total	**2.9000e-004**	**2.2000e-004**	**2.1400e-003**	**1.0000e-005**	**6.4000e-004**	**0.0000**	**6.5000e-004**	**1.7000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.5799**	**0.5799**	**2.0000e-005**	**0.0000**	**0.5803**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.0500e-003	4.5300e-003	0.0645	9.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	7.4955	7.4955	2.4200e-003	0.0000	7.5561
Total	**1.0500e-003**	**4.5300e-003**	**0.0645**	**9.0000e-005**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**7.4955**	**7.4955**	**2.4200e-003**	**0.0000**	**7.5561**

3.4 Trenching - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.2000e-004	2.1400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5799	0.5799	2.0000e-005	0.0000	0.5803
Total	**2.9000e-004**	**2.2000e-004**	**2.1400e-003**	**1.0000e-005**	**6.4000e-004**	**0.0000**	**6.5000e-004**	**1.7000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.5799**	**0.5799**	**2.0000e-005**	**0.0000**	**0.5803**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0422	0.3545	0.3674	5.4000e-004		0.0226	0.0226		0.0214	0.0214	0.0000	45.8772	45.8772	0.0103	0.0000	46.1355
Total	**0.0422**	**0.3545**	**0.3674**	**5.4000e-004**		**0.0226**	**0.0226**		**0.0214**	**0.0214**	**0.0000**	**45.8772**	**45.8772**	**0.0103**	**0.0000**	**46.1355**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.3000e-004	0.0279	7.4200e-003	7.0000e-005	1.6300e-003	1.4000e-004	1.7600e-003	4.7000e-004	1.3000e-004	6.0000e-004	0.0000	6.4646	6.4646	5.0000e-004	0.0000	6.4770
Worker	5.9600e-003	4.4100e-003	0.0433	1.3000e-004	0.0130	9.0000e-005	0.0131	3.4500e-003	9.0000e-005	3.5300e-003	0.0000	11.7212	11.7212	3.5000e-004	0.0000	11.7300
Total	**6.8900e-003**	**0.0323**	**0.0507**	**2.0000e-004**	**0.0146**	**2.3000e-004**	**0.0148**	**3.9200e-003**	**2.2000e-004**	**4.1300e-003**	**0.0000**	**18.1859**	**18.1859**	**8.5000e-004**	**0.0000**	**18.2070**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.5100e-003	0.0482	0.3721	5.4000e-004		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	45.8772	45.8772	0.0103	0.0000	46.1354
Total	**6.5100e-003**	**0.0482**	**0.3721**	**5.4000e-004**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**45.8772**	**45.8772**	**0.0103**	**0.0000**	**46.1354**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.3000e-004	0.0279	7.4200e-003	7.0000e-005	1.6300e-003	1.4000e-004	1.7600e-003	4.7000e-004	1.3000e-004	6.0000e-004	0.0000	6.4646	6.4646	5.0000e-004	0.0000	6.4770
Worker	5.9600e-003	4.4100e-003	0.0433	1.3000e-004	0.0130	9.0000e-005	0.0131	3.4500e-003	9.0000e-005	3.5300e-003	0.0000	11.7212	11.7212	3.5000e-004	0.0000	11.7300
Total	**6.8900e-003**	**0.0323**	**0.0507**	**2.0000e-004**	**0.0146**	**2.3000e-004**	**0.0148**	**3.9200e-003**	**2.2000e-004**	**4.1300e-003**	**0.0000**	**18.1859**	**18.1859**	**8.5000e-004**	**0.0000**	**18.2070**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2009	1.7212	1.9367	2.8500e-003		0.1026	0.1026		0.0969	0.0969	0.0000	244.4074	244.4074	0.0542	0.0000	245.7626
Total	**0.2009**	**1.7212**	**1.9367**	**2.8500e-003**		**0.1026**	**0.1026**		**0.0969**	**0.0969**	**0.0000**	**244.4074**	**244.4074**	**0.0542**	**0.0000**	**245.7626**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0400e-003	0.1341	0.0358	3.5000e-004	8.6600e-003	2.8000e-004	8.9500e-003	2.5000e-003	2.7000e-004	2.7700e-003	0.0000	34.1179	34.1179	2.5300e-003	0.0000	34.1812
Worker	0.0299	0.0214	0.2152	6.7000e-004	0.0691	4.9000e-004	0.0696	0.0184	4.5000e-004	0.0188	0.0000	60.3360	60.3360	1.7300e-003	0.0000	60.3793
Total	**0.0340**	**0.1555**	**0.2509**	**1.0200e-003**	**0.0777**	**7.7000e-004**	**0.0785**	**0.0209**	**7.2000e-004**	**0.0216**	**0.0000**	**94.4539**	**94.4539**	**4.2600e-003**	**0.0000**	**94.5605**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0347	0.2566	1.9818	2.8500e-003		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	244.4071	244.4071	0.0542	0.0000	245.7623
Total	**0.0347**	**0.2566**	**1.9818**	**2.8500e-003**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**244.4071**	**244.4071**	**0.0542**	**0.0000**	**245.7623**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0400e-003	0.1341	0.0358	3.5000e-004	8.6600e-003	2.8000e-004	8.9500e-003	2.5000e-003	2.7000e-004	2.7700e-003	0.0000	34.1179	34.1179	2.5300e-003	0.0000	34.1812
Worker	0.0299	0.0214	0.2152	6.7000e-004	0.0691	4.9000e-004	0.0696	0.0184	4.5000e-004	0.0188	0.0000	60.3360	60.3360	1.7300e-003	0.0000	60.3793
Total	**0.0340**	**0.1555**	**0.2509**	**1.0200e-003**	**0.0777**	**7.7000e-004**	**0.0785**	**0.0209**	**7.2000e-004**	**0.0216**	**0.0000**	**94.4539**	**94.4539**	**4.2600e-003**	**0.0000**	**94.5605**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0345	0.2989	0.3677	5.5000e-004		0.0164	0.0164		0.0155	0.0155	0.0000	46.8415	46.8415	0.0103	0.0000	47.0988
Total	**0.0345**	**0.2989**	**0.3677**	**5.5000e-004**		**0.0164**	**0.0164**		**0.0155**	**0.0155**	**0.0000**	**46.8415**	**46.8415**	**0.0103**	**0.0000**	**47.0988**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.2000e-004	0.0243	6.4900e-003	7.0000e-005	1.6600e-003	5.0000e-005	1.7100e-003	4.8000e-004	4.0000e-005	5.2000e-004	0.0000	6.4741	6.4741	4.7000e-004	0.0000	6.4859
Worker	5.4300e-003	3.7300e-003	0.0383	1.2000e-004	0.0132	9.0000e-005	0.0133	3.5200e-003	8.0000e-005	3.6000e-003	0.0000	11.1349	11.1349	3.0000e-004	0.0000	11.1425
Total	**6.1500e-003**	**0.0280**	**0.0448**	**1.9000e-004**	**0.0149**	**1.4000e-004**	**0.0150**	**4.0000e-003**	**1.2000e-004**	**4.1200e-003**	**0.0000**	**17.6090**	**17.6090**	**7.7000e-004**	**0.0000**	**17.6284**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.6400e-003	0.0492	0.3797	5.5000e-004		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	46.8415	46.8415	0.0103	0.0000	47.0988
Total	**6.6400e-003**	**0.0492**	**0.3797**	**5.5000e-004**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**46.8415**	**46.8415**	**0.0103**	**0.0000**	**47.0988**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.2000e-004	0.0243	6.4900e-003	7.0000e-005	1.6600e-003	5.0000e-005	1.7100e-003	4.8000e-004	4.0000e-005	5.2000e-004	0.0000	6.4741	6.4741	4.7000e-004	0.0000	6.4859
Worker	5.4300e-003	3.7300e-003	0.0383	1.2000e-004	0.0132	9.0000e-005	0.0133	3.5200e-003	8.0000e-005	3.6000e-003	0.0000	11.1349	11.1349	3.0000e-004	0.0000	11.1425
Total	**6.1500e-003**	**0.0280**	**0.0448**	**1.9000e-004**	**0.0149**	**1.4000e-004**	**0.0150**	**4.0000e-003**	**1.2000e-004**	**4.1200e-003**	**0.0000**	**17.6090**	**17.6090**	**7.7000e-004**	**0.0000**	**17.6284**

3.6 Building Construction Crane - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6300e-003	0.0191	7.8100e-003	2.0000e-005		7.8000e-004	7.8000e-004		7.1000e-004	7.1000e-004	0.0000	1.9958	1.9958	6.5000e-004	0.0000	2.0120
Total	**1.6300e-003**	**0.0191**	**7.8100e-003**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.1000e-004**	**7.1000e-004**	**0.0000**	**1.9958**	**1.9958**	**6.5000e-004**	**0.0000**	**2.0120**

3.6 Building Construction Crane - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.6200e-003	1.2300e-003	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.1765	1.1765	9.0000e-005	0.0000	1.1787
Worker	1.0300e-003	7.4000e-004	7.4200e-003	2.0000e-005	2.3800e-003	2.0000e-005	2.4000e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.0806	2.0806	6.0000e-005	0.0000	2.0820
Total	**1.1700e-003**	**5.3600e-003**	**8.6500e-003**	**3.0000e-005**	**2.6800e-003**	**3.0000e-005**	**2.7100e-003**	**7.2000e-004**	**3.0000e-005**	**7.5000e-004**	**0.0000**	**3.2570**	**3.2570**	**1.5000e-004**	**0.0000**	**3.2607**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.8000e-004	1.2100e-003	0.0102	2.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	1.9958	1.9958	6.5000e-004	0.0000	2.0120
Total	**2.8000e-004**	**1.2100e-003**	**0.0102**	**2.0000e-005**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.9958**	**1.9958**	**6.5000e-004**	**0.0000**	**2.0120**

3.6 Building Construction Crane - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.6200e-003	1.2300e-003	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.1765	1.1765	9.0000e-005	0.0000	1.1787
Worker	1.0300e-003	7.4000e-004	7.4200e-003	2.0000e-005	2.3800e-003	2.0000e-005	2.4000e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.0806	2.0806	6.0000e-005	0.0000	2.0820
Total	**1.1700e-003**	**5.3600e-003**	**8.6500e-003**	**3.0000e-005**	**2.6800e-003**	**3.0000e-005**	**2.7100e-003**	**7.2000e-004**	**3.0000e-005**	**7.5000e-004**	**0.0000**	**3.2570**	**3.2570**	**1.5000e-004**	**0.0000**	**3.2607**

3.6 Building Construction Crane - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7900e-003	0.0201	9.1100e-003	3.0000e-005		8.4000e-004	8.4000e-004		7.7000e-004	7.7000e-004	0.0000	2.4398	2.4398	7.9000e-004	0.0000	2.4595
Total	**1.7900e-003**	**0.0201**	**9.1100e-003**	**3.0000e-005**		**8.4000e-004**	**8.4000e-004**		**7.7000e-004**	**7.7000e-004**	**0.0000**	**2.4398**	**2.4398**	**7.9000e-004**	**0.0000**	**2.4595**

3.6 Building Construction Crane - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.3400e-003	1.4300e-003	1.0000e-005	3.7000e-004	1.0000e-005	3.8000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4243	1.4243	1.0000e-004	0.0000	1.4269
Worker	1.1900e-003	8.2000e-004	8.4200e-003	3.0000e-005	2.9100e-003	2.0000e-005	2.9300e-003	7.7000e-004	2.0000e-005	7.9000e-004	0.0000	2.4497	2.4497	7.0000e-005	0.0000	2.4514
Total	**1.3500e-003**	**6.1600e-003**	**9.8500e-003**	**4.0000e-005**	**3.2800e-003**	**3.0000e-005**	**3.3100e-003**	**8.8000e-004**	**3.0000e-005**	**9.1000e-004**	**0.0000**	**3.8740**	**3.8740**	**1.7000e-004**	**0.0000**	**3.8782**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4000e-004	1.4800e-003	0.0125	3.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.4398	2.4398	7.9000e-004	0.0000	2.4595
Total	**3.4000e-004**	**1.4800e-003**	**0.0125**	**3.0000e-005**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.4398**	**2.4398**	**7.9000e-004**	**0.0000**	**2.4595**

3.6 Building Construction Crane - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.3400e-003	1.4300e-003	1.0000e-005	3.7000e-004	1.0000e-005	3.8000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4243	1.4243	1.0000e-004	0.0000	1.4269
Worker	1.1900e-003	8.2000e-004	8.4200e-003	3.0000e-005	2.9100e-003	2.0000e-005	2.9300e-003	7.7000e-004	2.0000e-005	7.9000e-004	0.0000	2.4497	2.4497	7.0000e-005	0.0000	2.4514
Total	**1.3500e-003**	**6.1600e-003**	**9.8500e-003**	**4.0000e-005**	**3.2800e-003**	**3.0000e-005**	**3.3100e-003**	**8.8000e-004**	**3.0000e-005**	**9.1000e-004**	**0.0000**	**3.8740**	**3.8740**	**1.7000e-004**	**0.0000**	**3.8782**

3.7 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0136**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1902**

3.7 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	4.1000e-004	4.0100e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0873	1.0873	3.0000e-005	0.0000	1.0881
Total	**5.5000e-004**	**4.1000e-004**	**4.0100e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0873**	**1.0873**	**3.0000e-005**	**0.0000**	**1.0881**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.8000e-003	0.0122	0.1730	2.3000e-004		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.8000e-003**	**0.0122**	**0.1730**	**2.3000e-004**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1901**

3.7 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	4.1000e-004	4.0100e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0873	1.0873	3.0000e-005	0.0000	1.0881
Total	**5.5000e-004**	**4.1000e-004**	**4.0100e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0873**	**1.0873**	**3.0000e-005**	**0.0000**	**1.0881**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4831					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0286	0.1993	0.2372	3.9000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	33.3200	33.3200	2.2900e-003	0.0000	33.3771
Total	**0.5117**	**0.1993**	**0.2372**	**3.9000e-004**		**0.0123**	**0.0123**		**0.0123**	**0.0123**	**0.0000**	**33.3200**	**33.3200**	**2.2900e-003**	**0.0000**	**33.3771**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-003	4.2100e-003	0.0424	1.3000e-004	0.0136	1.0000e-004	0.0137	3.6200e-003	9.0000e-005	3.7000e-003	0.0000	11.8844	11.8844	3.4000e-004	0.0000	11.8929
Total	**5.9000e-003**	**4.2100e-003**	**0.0424**	**1.3000e-004**	**0.0136**	**1.0000e-004**	**0.0137**	**3.6200e-003**	**9.0000e-005**	**3.7000e-003**	**0.0000**	**11.8844**	**11.8844**	**3.4000e-004**	**0.0000**	**11.8929**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4831					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8800e-003	0.0168	0.2391	3.9000e-004		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	33.3199	33.3199	2.2900e-003	0.0000	33.3771
Total	**0.4870**	**0.0168**	**0.2391**	**3.9000e-004**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**	**0.0000**	**33.3199**	**33.3199**	**2.2900e-003**	**0.0000**	**33.3771**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-003	4.2100e-003	0.0424	1.3000e-004	0.0136	1.0000e-004	0.0137	3.6200e-003	9.0000e-005	3.7000e-003	0.0000	11.8844	11.8844	3.4000e-004	0.0000	11.8929
Total	**5.9000e-003**	**4.2100e-003**	**0.0424**	**1.3000e-004**	**0.0136**	**1.0000e-004**	**0.0137**	**3.6200e-003**	**9.0000e-005**	**3.7000e-003**	**0.0000**	**11.8844**	**11.8844**	**3.4000e-004**	**0.0000**	**11.8929**

3.8 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0926					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1100e-003	0.0352	0.0453	7.0000e-005		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003	0.0000	6.3831	6.3831	4.2000e-004	0.0000	6.3935
Total	**0.0977**	**0.0352**	**0.0453**	**7.0000e-005**		**2.0400e-003**	**2.0400e-003**		**2.0400e-003**	**2.0400e-003**	**0.0000**	**6.3831**	**6.3831**	**4.2000e-004**	**0.0000**	**6.3935**

3.8 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0700e-003	7.3000e-004	7.5400e-003	2.0000e-005	2.6100e-003	2.0000e-005	2.6200e-003	6.9000e-004	2.0000e-005	7.1000e-004	0.0000	2.1932	2.1932	6.0000e-005	0.0000	2.1947
Total	**1.0700e-003**	**7.3000e-004**	**7.5400e-003**	**2.0000e-005**	**2.6100e-003**	**2.0000e-005**	**2.6200e-003**	**6.9000e-004**	**2.0000e-005**	**7.1000e-004**	**0.0000**	**2.1932**	**2.1932**	**6.0000e-005**	**0.0000**	**2.1947**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0926					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.4000e-004	3.2200e-003	0.0458	7.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3831	6.3831	4.2000e-004	0.0000	6.3935
Total	**0.0933**	**3.2200e-003**	**0.0458**	**7.0000e-005**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.3831**	**6.3831**	**4.2000e-004**	**0.0000**	**6.3935**

3.8 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0700e-003	7.3000e-004	7.5400e-003	2.0000e-005	2.6100e-003	2.0000e-005	2.6200e-003	6.9000e-004	2.0000e-005	7.1000e-004	0.0000	2.1932	2.1932	6.0000e-005	0.0000	2.1947
Total	**1.0700e-003**	**7.3000e-004**	**7.5400e-003**	**2.0000e-005**	**2.6100e-003**	**2.0000e-005**	**2.6200e-003**	**6.9000e-004**	**2.0000e-005**	**7.1000e-004**	**0.0000**	**2.1932**	**2.1932**	**6.0000e-005**	**0.0000**	**2.1947**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2022	0.9040	2.3837	8.3200e-003	0.7341	6.9500e-003	0.7411	0.1966	6.4900e-003	0.2031	0.0000	768.0084	768.0084	0.0402	0.0000	769.0132
Unmitigated	0.2087	0.9439	2.5264	8.9400e-003	0.7919	7.4400e-003	0.7994	0.2121	6.9500e-003	0.2190	0.0000	824.6600	824.6600	0.0427	0.0000	825.7273

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	736.00	736.00	736.00	2,101,503	1,948,065
Total	736.00	736.00	736.00	2,101,503	1,948,065

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
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	90.6114	90.6114	3.6500e-003	7.6000e-004	90.9293
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	93.4234	93.4234	3.7600e-003	7.8000e-004	93.7512
NaturalGas Mitigated	7.1400e-003	0.0610	0.0260	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	70.6122	70.6122	1.3500e-003	1.2900e-003	71.0318
NaturalGas Unmitigated	7.1400e-003	0.0610	0.0260	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	70.6122	70.6122	1.3500e-003	1.2900e-003	71.0318

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	1.32322e+006	7.1400e-003	0.0610	0.0260	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	70.6122	70.6122	1.3500e-003	1.2900e-003	71.0318
Total		**7.1400e-003**	**0.0610**	**0.0260**	**3.9000e-004**		**4.9300e-003**	**4.9300e-003**		**4.9300e-003**	**4.9300e-003**	**0.0000**	**70.6122**	**70.6122**	**1.3500e-003**	**1.2900e-003**	**71.0318**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	1.32322e+006	7.1400e-003	0.0610	0.0260	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	70.6122	70.6122	1.3500e-003	1.2900e-003	71.0318
Total		**7.1400e-003**	**0.0610**	**0.0260**	**3.9000e-004**		**4.9300e-003**	**4.9300e-003**		**4.9300e-003**	**4.9300e-003**	**0.0000**	**70.6122**	**70.6122**	**1.3500e-003**	**1.2900e-003**	**71.0318**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	402280	93.4234	3.7600e-003	7.8000e-004	93.7512
Total		**93.4234**	**3.7600e-003**	**7.8000e-004**	**93.7512**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	390171	90.6114	3.6500e-003	7.6000e-004	90.9293
Total		**90.6114**	**3.6500e-003**	**7.6000e-004**	**90.9293**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4663	7.8900e-003	0.6839	4.0000e-005		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	1.1159	1.1159	1.0800e-003	0.0000	1.1428
Unmitigated	0.4663	7.8900e-003	0.6839	4.0000e-005		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	1.1159	1.1159	1.0800e-003	0.0000	1.1428

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0864					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3593					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0207	7.8900e-003	0.6839	4.0000e-005		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	1.1159	1.1159	1.0800e-003	0.0000	1.1428
Total	**0.4663**	**7.8900e-003**	**0.6839**	**4.0000e-005**		**3.7800e-003**	**3.7800e-003**		**3.7800e-003**	**3.7800e-003**	**0.0000**	**1.1159**	**1.1159**	**1.0800e-003**	**0.0000**	**1.1428**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0864					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3593					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0207	7.8900e-003	0.6839	4.0000e-005		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	1.1159	1.1159	1.0800e-003	0.0000	1.1428
Total	**0.4663**	**7.8900e-003**	**0.6839**	**4.0000e-005**		**3.7800e-003**	**3.7800e-003**		**3.7800e-003**	**3.7800e-003**	**0.0000**	**1.1159**	**1.1159**	**1.0800e-003**	**0.0000**	**1.1428**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	27.8277	0.1964	4.8300e-003	34.1761
Unmitigated	29.7778	0.1964	4.8500e-003	36.1329

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	5.99417 / 3.77893	29.7778	0.1964	4.8500e-003	36.1329
Total		**29.7778**	**0.1964**	**4.8500e-003**	**36.1329**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	5.99417 / 3.02315	27.8277	0.1964	4.8300e-003	34.1761
Total		**27.8277**	**0.1964**	**4.8300e-003**	**34.1761**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.0134	0.3554	0.0000	14.8980
Unmitigated	8.5906	0.5077	0.0000	21.2828

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	42.32	8.5906	0.5077	0.0000	21.2828
Total		**8.5906**	**0.5077**	**0.0000**	**21.2828**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	29.624	6.0134	0.3554	0.0000	14.8980
Total		**6.0134**	**0.3554**	**0.0000**	**14.8980**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	135.0560	0.0000	0.0000	135.0560

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Cropland	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Mixed Hardwood	184	135.0560	0.0000	0.0000	135.0560
Total		**135.0560**	**0.0000**	**0.0000**	**135.0560**

ATTACHMENT B

SCREEN3 for PM_{10}

```
 ***  SCREEN3 MODEL RUN  ***
 *** VERSION DATED 13043 ***

Aventine Construction HR

SIMPLE TERRAIN INPUTS:
   SOURCE TYPE                =         AREA
   EMISSION RATE (G/(S-M**2))  =     0.229000E-08
   SOURCE HEIGHT (M)          =       3.0000
   LENGTH OF LARGER SIDE (M)   =     206.0000
   LENGTH OF SMALLER SIDE (M)  =     206.0000
   RECEPTOR HEIGHT (M)        =       1.5000
   URBAN/RURAL OPTION         =        URBAN
THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

   MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION


BUOY. FLUX =    0.000 M**4/S**3;  MOM. FLUX =    0.000 M**4/S**2.

*** FULL METEOROLOGY ***

**********************************
*** SCREEN AUTOMATED DISTANCES ***
**********************************

*** TERRAIN HEIGHT OF    0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***
```

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
10.	0.3690E-01	5	1.0	1.0	10000.0	3.00	45.
100.	0.4883E-01	5	1.0	1.0	10000.0	3.00	45.
200.	0.3949E-01	5	1.0	1.0	10000.0	3.00	45.
300.	0.2373E-01	5	1.0	1.0	10000.0	3.00	45.
400.	0.1695E-01	5	1.0	1.0	10000.0	3.00	45.
500.	0.1306E-01	5	1.0	1.0	10000.0	3.00	45.
600.	0.1051E-01	5	1.0	1.0	10000.0	3.00	45.
700.	0.8701E-02	5	1.0	1.0	10000.0	3.00	45.
800.	0.7360E-02	5	1.0	1.0	10000.0	3.00	45.
900.	0.6332E-02	5	1.0	1.0	10000.0	3.00	45.
1000.	0.5523E-02	5	1.0	1.0	10000.0	3.00	42.
1100.	0.4876E-02	5	1.0	1.0	10000.0	3.00	45.
1200.	0.4349E-02	5	1.0	1.0	10000.0	3.00	44.
1300.	0.3913E-02	5	1.0	1.0	10000.0	3.00	45.
1400.	0.3547E-02	5	1.0	1.0	10000.0	3.00	43.
1500.	0.3237E-02	5	1.0	1.0	10000.0	3.00	42.
1600.	0.2972E-02	5	1.0	1.0	10000.0	3.00	43.
1700.	0.2743E-02	5	1.0	1.0	10000.0	3.00	45.
1800.	0.2543E-02	5	1.0	1.0	10000.0	3.00	43.
1900.	0.2369E-02	5	1.0	1.0	10000.0	3.00	41.
2000.	0.2215E-02	5	1.0	1.0	10000.0	3.00	39.
2100.	0.2077E-02	5	1.0	1.0	10000.0	3.00	37.
2200.	0.1955E-02	5	1.0	1.0	10000.0	3.00	45.
2300.	0.1846E-02	5	1.0	1.0	10000.0	3.00	45.
2400.	0.1746E-02	5	1.0	1.0	10000.0	3.00	45.
2500.	0.1656E-02	5	1.0	1.0	10000.0	3.00	35.
2600.	0.1575E-02	5	1.0	1.0	10000.0	3.00	35.
2700.	0.1500E-02	5	1.0	1.0	10000.0	3.00	36.
2800.	0.1432E-02	5	1.0	1.0	10000.0	3.00	38.
2900.	0.1369E-02	5	1.0	1.0	10000.0	3.00	39.
3000.	0.1311E-02	5	1.0	1.0	10000.0	3.00	44.
3500.	0.1080E-02	5	1.0	1.0	10000.0	3.00	1.
4000.	0.9151E-03	5	1.0	1.0	10000.0	3.00	4.

4500.	0.7922E-03	5	1.0	1.0	10000.0	3.00	42.
5000.	0.6975E-03	5	1.0	1.0	10000.0	3.00	40.
5500.	0.6223E-03	5	1.0	1.0	10000.0	3.00	1.
6000.	0.5612E-03	5	1.0	1.0	10000.0	3.00	2.
6500.	0.5108E-03	5	1.0	1.0	10000.0	3.00	31.
7000.	0.4686E-03	5	1.0	1.0	10000.0	3.00	15.
7500.	0.4326E-03	5	1.0	1.0	10000.0	3.00	37.
8000.	0.4017E-03	5	1.0	1.0	10000.0	3.00	40.
8500.	0.3748E-03	5	1.0	1.0	10000.0	3.00	10.
9000.	0.3513E-03	5	1.0	1.0	10000.0	3.00	7.
9500.	0.3305E-03	5	1.0	1.0	10000.0	3.00	5.
10000.	0.3121E-03	5	1.0	1.0	10000.0	3.00	3.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 10. M:

153.	0.5317E-01	5	1.0	1.0	10000.0	3.00	45.

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.5317E-01	153.	0.

****
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
****

ATTACHMENT C

Health Risk Calculations

Air Quality Health Risk Calculations (Worst-Case)
Aventine Residential (Tier IV)

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	**0.00148**
	Number of Workdays	**480**
	Emission per day (lb/day)	**0.006166667**
	Construction day (Hours)	**8**
	Emission Rate (Grams/Second)	**9.69965E-05**
	Project Site Size (Acres)	**10.48**
	Project Site Size (meters	**42411.05531**
	Length of Smalles Side (meters)	**205.9394457**
Used as an input to Screen3	Emission Rate over Grading Area	**2.28706E-09**
From Screen3	1-hr Emission Levles (Ug/M^3)	**0.0532**
Multiply by 0.08 for annual conversion	Concentration Annual (Ug/M^3)	**0.004256**

	Construction Days	Construction Days converted to years				
Duration	480	1.315068493				
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.004256	0.004256	0.004256	0.004256	0.004256	0.004256
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	0.00000147	0.00000445	0.00000352	0.00000304	0.00000137	0.00000118
Construction Days	480	1.315068493				
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	1	1
ED	0.25	1.315068493	1.315068493	1.315068493	1.315068493	1.315068493
AT	70	70	70	70	70	70
FAH	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	4.92531E-08	7.82278E-07	1.57026E-07	1.35871E-07	2.06483E-08	1.78746E-08
	0.049253107	0.782278319	0.157026436	0.135870725	0.020648264	0.017874616
Cancer Risk Per Million 9-years	0.99					
Cancer Risk Per Million 30-years	0.99					
Cancer Risk Per Million 70-years	0.99					