AIR QUALITY AND GREENHOUSE GAS ASSESSMENT
FOR
RIVERSIDE MOTORCYCLE PARK
RIVERSIDE COUNTY, CALIFORNIA

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INTRODUCTION

The Project Proponent has submitted an application to the County of Riverside for the development of an approximate 92.7 gross acre site with a motorcycle park and associated facilities. The site is located immediately north of the Read Street and Ethanac Road intersection, approximately 0.25-mile west of Highway 74 (APN 345-020-011 and -016). APN 345-020-016 is currently vacant and undeveloped, while APN 345-020-011 is partially developed, and the existing buildings are anticipated to be utilized with the Proposed Project. Refer to Figures 1, 2, and 3 for a regional location map, project vicinity map, and site plan, respectively.

This report is a study of the potential impacts the Proposed Project may have on the local and regional air quality in the vicinity during construction and ultimate operational use. This assessment discusses the existing air quality in the vicinity/region and the potential air quality impacts associated with the Proposed Project. Background material, including air quality emissions data output, is included in the Appendix.

2.0 GENERAL SETTING

2.1 CLIMATE

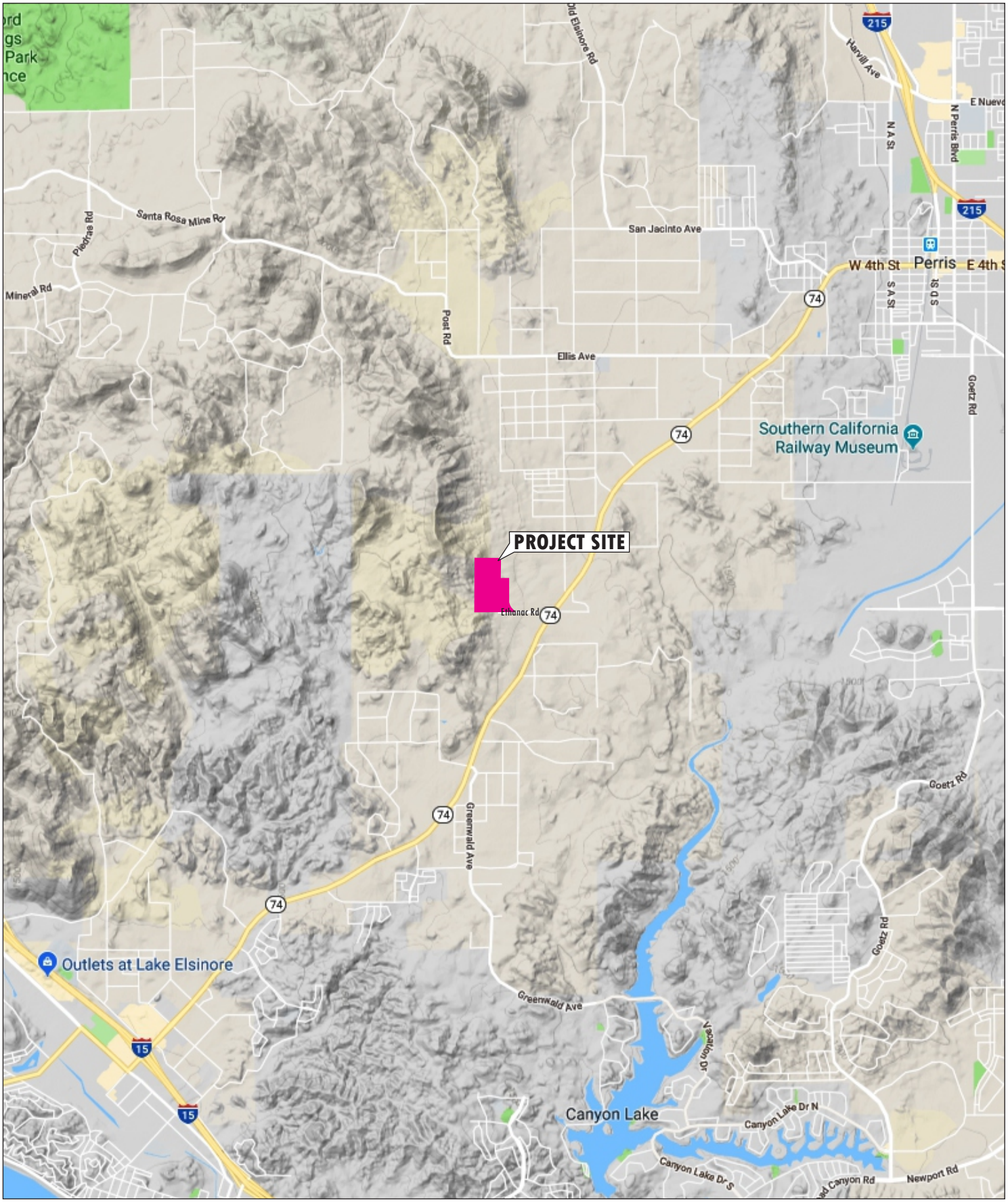
The Proposed Project is located in western Riverside County. The study area has a Mediterranean climate with warm dry summers, mild winters with moderate rainfall. The climate is modified by the cold California Current in the Pacific Ocean, the mountain ranges that outline the Los Angeles Basin and San Bernardino Valley, and the deserts to the north and east.

The California Current causes a cold layer of air to form close to the surface. As the air above this layer is warm, air within it cannot rise normally, a phenomenon known as an inversion. The inversion traps pollutants close to the surface, causing higher than usual concentrations of ozone, suspended particles and other ingredients of smog. The mountains prevent cooler marine air from traveling very far inland, making the deserts drier and hotter than the coastal regions. The hot desert air rises, and cooler marine air from the west moves in the form of a sea breeze. A sea breeze is normal in all coastal regions, but in southern California it is exceptionally strong due to the great contrasts in temperature and the funneling effects of the mountains. In this region, the sea breeze brings higher quantities of pollutants from the Los Angeles metropolitan area to the inland valleys, exacerbating problems caused by local pollution sources.

The topographic and climatologic regional effects summarized above cause numerous days when air pollutants exceed federal and/or State air quality standards. This has led to aggressive air quality management measures being required by the federal, State, and local governments.

2.2 APPLICABLE POLICES, PLANS, AND REGULATIONS

A combination of climatic and geographic factors, and urbanization cause the interior valleys of Southern California to have higher air pollution levels than the coastal areas. The South Coast Air Quality Management District (SCAQMD) monitors and enforces the federal and state air quality standards in association with federal, state, local, and regional governmental agencies.



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Source: Lilburn Corp., March, 2020.

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REGIONAL LOCATION

Motorcycle Park

Riverside County, California

FIGURE 1

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Feet

Source: Lilburn Corp., March, 2020.

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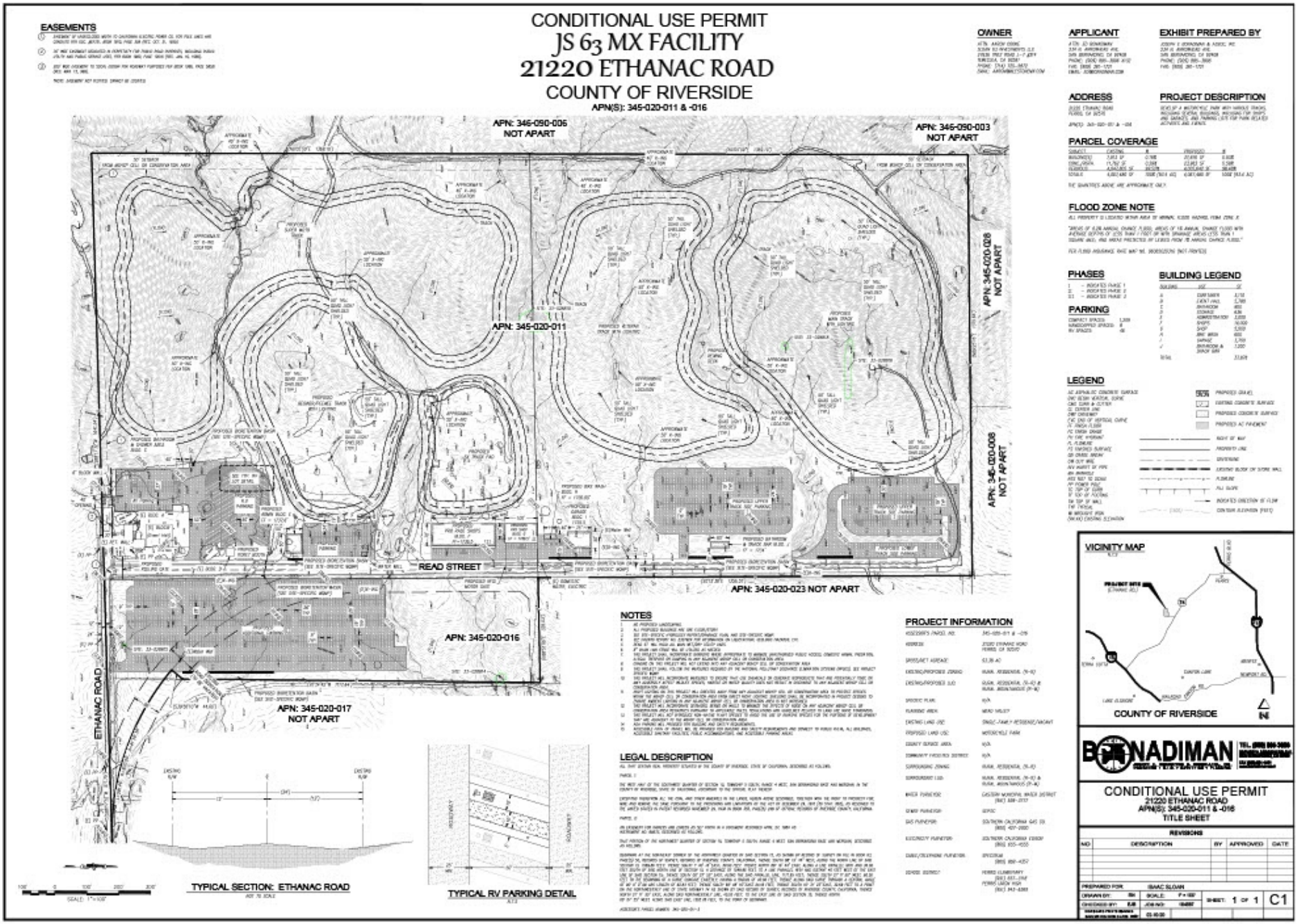
PROJECT VICINITY

Motorcycle Park

Riverside County, California

FIGURE 2



SITE PLAN

Motorcycle Park

Riverside County, California

FIGURE 3

LILBURN CORPORATION

These agencies work jointly as well as individually to reduce air pollution through legislation, regulation, policy making, education, and a variety of programs. These agencies include:

Environmental Protection Agency (EPA) - Responsible for setting and enforcing the national standards for atmospheric pollutants, including the Clean Air Act (CAA), as amended.

California Air Resources Board (CARB) - Part of the California Environmental Protection Agency (Cal-EPA) and responsible for assuring implementation of the California Clean Air Act (CCAA), responding to federal regulations, and regulating emission standards.

SCAQMD - Primarily responsible for comprehensive air pollution control in the South Coast Air Basin (SCAB), and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). SCAQMD implements the CAA and CCAA and works directly with federal, state, and local agencies.

Local Governments - Have the authority and responsibility to reduce air pollution through their local land use decision-making authority and the California Environmental Quality Act.

Air emissions from the Proposed Project are subject to federal, state, and local rules and regulations as implemented through provisions of the federal Clean Air Act, California Clean Air Act, and the 2016 Air Quality Management Plan (AQMP) adopted and updated regularly by SCAQMD. The following is an overview of current rules and regulations.

Federal Clean Air Act. The federal Clean Air Act was established in an effort to assure that acceptable levels of air quality are maintained in all areas of the United States. These levels are based upon health-related exposure limits and are referred to as National Ambient Air Quality Standards (NAAQS). The NAAQS establish maximum allowable concentrations of specific pollutants in the atmosphere and characterize the amount of exposure deemed safe of the public. The NAAQS set standards for the following pollutants:

Nitrogen dioxide (NO_2)
Sulfur dioxide (SO_2)
Particulate matter less than 10 microns, aerodynamic diameter (PM_{10})
Particulate matter less than 2.5 microns, aerodynamic diameter ($PM_{2.5}$)
Ozone (O_3)
Lead (Pb)
Carbon Monoxide (CO)

Primary and secondary NAAQS have been established and are shown in Table 1. Primary standards reflect levels of air quality deemed necessary by the EPA to provide an adequate margin of safety to protect public health. Areas found to be in violation of primary standards are termed “nonattainment areas”. Secondary standards reflect levels of air quality necessary to protect public welfare from the known or anticipated adverse effects of a pollutant.

Table 1
State and Federal
Ambient Air Quality Standards

Pollutant	Averaging 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/m^3)	Ultraviolet Photometry	---	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.07 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM_{10})[9]	24-Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetic Analysis
	Annual Arithmetic Mean	20 µg/m^3		---		
Fine Particulate Matter ($PM_{2.5}$)[9]	24-Hour	---		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetic Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1-Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	---	Non-Dispersive Infrared Photometry (NDIR)
	8-Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		–		
Nitrogen Dioxide (NO_2)[10]	1-Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	---	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppb (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1-Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppd (196 µg/m^3)	–	Ultraviolet Flourescence, Spectrophotometry (Pararosaniline Method)
	3-Hour	---		--	0.5 ppm (1300 µg/m^3)	
	24-Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[10]	---	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[10]	–	
Lead[12,13]	30-day average	1.5 µg/m^3	Atomic Absorption	–	–	High Volume Sampler and Atomic Absorption
	Calendar Quarter	--		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	–		0.15 µg/m^3		
Visibility-Reducing Particles[14]	8-Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No Federal Standards**		
Sulfates	24-Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24-Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: ARB, May 4, 2016.

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, $PM_{2.5}$, 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 PM_{10}, 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 $PM_{2.5}$, 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 measurement method 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 U.S. 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 U.S. 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 $PM_{2.5}$ primary standard was lowered from 15 µg/m3 to 12.0 µg/m3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m3, as was the annual secondary standard of 15 µg/m3. The existing 24-hour PM_{10} 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.
    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
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.

California Clean Air Act. Under the federal Clean Air Act, state and local authorities have primary responsibility for assuring that their respective regions are in attainment of, or have a verifiable plan to attain, the NAAQS. The federal Clean Air Act also provides state and local agencies authority to promulgate more stringent ambient air quality standards. The California Ambient Air Quality Standards (CAAQS) for the following pollutants are also included in Table 1.

Hydrogen sulfide (H_2S)
Vinyl chloride
Sulfates (SO_4)
Visibility-reducing particles

Under the provisions of the federal and California Clean Air Acts, air quality districts in areas not in attainment of the NAAQS or CAAQS are required to prepare an AQMP. An AQMP

establishes an area-specific program to control existing and proposed sources of air emissions so that the NAAQS or CAAQS may be attained by the applicable target date. CARB and EPA are required to designate areas of the state as “attainment”, “nonattainment”, or "unclassified" for state and federal ambient air quality standards. An attainment designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant. A nonattainment designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an extraordinary event. An unclassified designation indicates a lack of adequate air quality data or other information on which to base an attainment or nonattainment designation.

2.3 EXISTING AIR QUALITY

Air quality is determined primarily by the types and amounts of contaminants emitted into the atmosphere, the size and topography of the local air basin, and the pollutant-dispersing properties of local weather patterns. When airborne pollutants are produced in such volume that they are not dispersed by local meteorological conditions, air quality problems result. Dispersion of pollutants in the SCAB is influenced by periodic temperature inversions, persistent meteorological conditions and the local topography. As pollutants become more concentrated in the atmosphere, photochemical reactions occur, producing ozone and other oxidants. The following is a brief description of health effects and whether the SCAB is or is not in attainment for these pollutants:

Ozone (O_3) Ozone, a colorless gas with a sharp odor, is a highly reactive form of oxygen. High ozone concentrations exist naturally in the stratosphere. However, it is also formed in the atmosphere when VOCs and nitrogen oxides (NOX) react in the presence of ultraviolet sunlight (also known as smog). The primary sources of VOC and NOX, the components of ozone, are automobile exhaust and industrial sources. Some mixing of stratospheric ozone downward through the troposphere to the earth’s surface does occur; however, the extent of ozone transport is limited.

The propensity of ozone for reacting with organic materials causes it to be damaging to living cells and cause health effects. Short-term exposures (lasting for a few hours) to ozone at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Individuals exercising outdoors, children and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible subgroups for ozone effects. An increased risk for asthma has been found in children who participate in multiple sports and live in communities with high ozone.

Data summarized in Table 2 shows that the 1-hour State ozone standard was exceeded between 16 and 33 days per year between 2014 and 2018 at the Perris air monitoring station, the closest monitoring station to the Project Site. The SCAB is designated as a nonattainment basin for ozone. The 8-hour Ozone standard has been exceeded between 50 to 86 days per year between 2014 and 2018.

Table 2
Ozone Data: Perris Air Monitoring Site
2014 – 2018

Year	Days Exceeding 1-Hour State Standard	Days Exceeding 8-Hour State Standard	Maximum 1-Hour Reading (ppm)	Maximum 8-Hour Reading (ppm)
2014	16	63	0.117	0.094
2015	25	50	0.124	0.103
2016	23	56	0.131	0.099
2017	33	86	0.120	0.106
2018	31	68	0.117	0.103

Source: CARB, 2019; South Coast Air Quality Management Data (SCAQMD) website at: https://www.aqmd.gov/home/airquality/historical-air-quality-data/historical-data-by-year.

Carbon Monoxide (CO) is a gas produced almost entirely from automobiles that interferes with the transfer of oxygen to the brain. Peak levels of CO occur in winter and are highest where there is very heavy and concentrated traffic (major cities and transportation congestion). CO levels are not a concern in the project area due to the low traffic volumes and are therefore not monitored.

Nitrogen dioxide (NO_2) Nitric oxide (NO) is a colorless gas, formed from nitrogen (N_2) and oxygen (O_2) under conditions of high temperature and pressure, which are generally present during combustion of fuels (e.g., motor vehicles). NO reacts rapidly with the oxygen in air to form NO_2, which is responsible for the brownish tinge of polluted air. The two gases, NO and NO_2, are referred to collectively as NO_X. In the presence of sunlight, atmospheric NO_2 reacts and splits to form an NO molecule and an oxygen atom. The oxygen atom can react further to form ozone, via a complex series of chemical reactions involving hydrocarbons.

Particulate Matter

Particulate Matter (PM_{10}) PM is a complex mixture of extremely small particles and liquid droplets. PM is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. Natural sources of particulate matter include windblown dust and ocean spray. The size of PM is directly linked to the potential for causing health problems. Particles small enough to be inhaled into the deepest parts of the lung are of great concern to public health. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood burning stoves and fireplaces; dust from construction, landfills and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions

Data summarized in Table 3 shows that PM_{10} levels at the Perris air monitoring site (Station nearest to the project Site) exceeded the Federal Standard an average of less than one day per year between 2014 and 2018, while the State Standard was exceeded between two and eleven days per year during the same time period.

Table 3
PM_{10} Data: Perris Air Monitoring Site
2014 – 2018

Year	Days Exceeding State Standard	Days Exceeding Federal Standard	Maximum 24-Hour Reading ($\mu g/m^3$)
2014	6	0	82
2015	4	1	178
2016	5	0	76
2017	11	0	75
2018	2	0	64

Source: CARB, 2019; South Coast Air Quality Management Data (SCAQMD) website at: https://www.aqmd.gov/home/airquality/historical-air-quality-data/historical-data-by-year.
State Standard – 50 $\mu g/m^3$ based on 24-hour average
Federal Standard – 150 $\mu g/m^3$ based on 24-hour average
$\mu g/m^3$ = micrograms per cubic meter
Measurements usually taken every 6 days.

Fine Particulate Matter ($PM_{2.5}$) consists of extremely small suspended particles 2.5 microns in diameter and arise primarily from combustion sources. Emissions of $PM_{2.5}$ result from fuel combustion (e.g., motor vehicles, power generation and industrial facilities), residential fireplaces and wood stoves. The data summarized in Table 4 shows that $PM_{2.5}$ levels at the Riverside – Rubidoux air monitoring station (Station nearest to the project Site) exceeded the Federal Standard between three and nine days per year between 2014 and 2018.

Table 4
$PM_{2.5}$ Data: Riverside – Rubidoux Air Monitoring Site
2014 – 2018

Year	Days Exceeding Federal Standard	Maximum 24-Hour Reading ($\mu g/m^3$)
2014	5	51
2015	9	61
2016	5	61
2017	7	50
2018	3	68

Source: CARB, 2019; South Coast Air Quality Management Data (SCAQMD) website at: https://www.aqmd.gov/home/airquality/historical-air-quality-data/historical-data-by-year.
Federal Standard – lowered to 35 $\mu g/m^3$ in 2006; based on 24 hour average.
$\mu g/m^3$ = micrograms per cubic meter

Respirable particles (PM_{10}) can accumulate in the respiratory system and aggravate health problems such as asthma, bronchitis and other lung diseases. Children, the elderly, exercising adults, and those suffering from asthma are especially vulnerable to adverse health effects of PM. A consistent correlation between elevated ambient fine particulate matter ($PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. Studies have reported an association between long-term exposure to air pollution dominated by $PM_{2.5}$ and increased mortality, reduction in life-span, and an increased mortality from lung cancer.

Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions, to school and kindergarten absences, to a decrease in respiratory function in normal children and to increased medication use in children and adults with asthma. Studies have also shown lung function growth in children is reduced with long-term exposure to PM. In addition to children, the elderly, and people with pre-existing respiratory and/or cardiovascular disease appear to be more susceptible to the effects of PM_{10} and $PM_{2.5}$.

Areas are classified under the Federal Clean Air Act and California Clean Air Act as attainment, nonattainment, or maintenance (previously non-attainment and currently attainment) for each criteria pollutant based on whether the federal and state air quality standards have been achieved. With respect to NAAQS, the SCAB is designated nonattainment area for ozone and $PM_{2.5}$, and as an attainment or unclassified area for all other pollutants. With respect to the California Ambient Air Quality Standards (CAAQS), the SCAB is designated as a nonattainment area for ozone, PM_{10}, and $PM_{2.5}$, and as an attainment area for all other pollutants (SCAQMD 2016).

Sulfur dioxide (SO_2) is a colorless gas with a sharp odor. It reacts in air to form sulfuric acid, which contributes to acid precipitation, and sulfates, which are components of particulate matter. Main sources of SO_2 include coal and oil used in power plants and industries. Exposure of a few minutes to low levels of SO_2 can result in airway constriction in some asthmatics. All asthmatics are sensitive to the effects of SO_2. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, is observed after acute higher exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses, even after exposure to higher concentrations of SO_2.

Lead (Pb) in the atmosphere is present as a mixture of a number of lead compounds. Leaded gasoline and lead smelters have been the main sources of lead emitted into the air. Due to the phasing out of leaded gasoline, there was a dramatic reduction in atmospheric Pb over the past three decades. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. In adults, increased Pb levels are associated with increased blood pressure. Pb poisoning can cause anemia, lethargy, seizures, and death. There is no evidence to suggest that there are direct effects of Pb on the respiratory system.

Air Quality Attainment Plans

The project area is under the jurisdiction of the SCAQMD, which implements and enforces the applicable AQMP. The 2016 AQMP was adopted by the SCAQMD on March 3, 2017. The Plan recognized the critical importance of working with other agencies to develop new regulations, as well as secure funding and other incentives that encourage the accelerated transition of vehicles, buildings, and industrial facilities to cleaner technologies in a manner that benefits not only air quality, but also local businesses and the regional economy. The 2016 AQMP also includes transportation control measures developed by the Southern California Association of Governments (SCAG) from the 2016 Regional Transportation Plan/ Sustainable Communities Strategy. The 2016 AQMP includes the integrated strategies and measures needed to meet the

NAAQS. The 2016 AQMP demonstrates attainment of the 1-hour and 8-hour ozone NAAQS as well as the latest 24-hour and annual $PM_{2.5}$ standards.

The 2016 AQMP is a comprehensive and integrated Plan primarily focused on addressing the ozone standards. The Plan is a regional and multi-agency effort (AQMD, California Air Resources Board, Southern California Association of Governments (SCAG) and U.S. EPA). State and federal planning requirements include developing control strategies, attainment demonstrations, reasonable further progress, and maintenance plans. The 2016 AQMP incorporate the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions, Regional Transportation Plan/Sustainable Communities Strategy, and updated emission inventory methodologies for various source categories. Air quality plans also describe air pollution control strategies to be implemented by a city, county, or regional air district. The primary purpose of an air quality plan is to bring an area that does not attain NAAQS and CAAQS into compliance with those standards pursuant to the requirements of the Clean Air Act and California Clean Air Act. The applicable AQMP for the project site was prepared by SCAQMD in partnership with the ARB, EPA, and the Southern SCAG. Consistency with the AQMP is also determined through evaluation of whether the project would exceed the estimated emissions used as the basis of the AQMP, which are based, in part, on population projections developed by the SCAG. The SCAG forecasts are based on local general plans and other related documents, such as housing elements, that are used to develop population projections and traffic projections.

The primary guidance for implementing the air quality standards in relation to the California Environmental Quality Act (CEQA) is the 1993 SCAQMD CEQA Air Quality Handbook. This handbook is being revised and updated, but until the new edition is published, the 1993 version as updated, is still the current reference and directive.

Climate Change and Greenhouse Gases

Gases that trap heat in the atmosphere are often called Greenhouse Gases (GHG), analogous to a greenhouse. GHGs are emitted by natural processes and human activities. The accumulation of GHGs in the atmosphere helps regulate the earth's temperature. Without these natural GHGs, the Earth's surface would be approximately 60°F cooler (EPA 2017). Emissions from human activities such as electricity production and vehicles have elevated the concentration of these gases in the atmosphere.

GHGs have varying global warming potential (GWP). A GWP is a "quantified measure of the globally averaged relative radiative forcing impacts of a particular GHG, defined as the accumulated radiative forcing within a specific time horizon caused by emitting one kilogram of the gas, relative to that of the reference gas" (EPA 2017). The reference gas for GWP is carbon dioxide; carbon dioxide has a GWP of one. For example, methane has a GWP of 28, which means that it has a greater global warming effect than carbon dioxide on a molecule per molecule basis. One teragram of carbon dioxide equivalent (Tg CO2 Eq.) is the emissions of the gas multiplied by the GWP. One teragram is equal to one million metric tons. The carbon dioxide equivalent is a good way to assess emissions because it gives weight to the GWP of the gas. The

lifetime and GWP of selected GHG are summarized in Table 5. As shown in the table, GWP for a 100-year time horizon ranges from one (carbon dioxide) to 23,500 (sulfur hexafluoride).

Table 5
Global Warming Potentials and Atmospheric Lifetimes of Select Greenhouse Gases

Gas	Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide	*	1
Methane	12.4†	28
Nitrous Oxide	121†	265
HFC-23	222	12,400
HFC-134a	13.4	1,300
HFC-152a	1.5	138
PFC-14: Tetrafluoromethane (CF4)	50,000	6,630
PFC-116: Hexafluoroethane (C2F6)	10,000	11,100
Sulfur Hexafluoride (SF6)	3,200	23,500

Source: IPCC 2014
* No single lifetime can be given.
† Perturbation lifetime is used in calculation of metrics, not the lifetime of the atmospheric burden.

Water vapor is the most abundant, important, and variable GHG in the atmosphere. It is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. The main source of water vapor is evaporation from the oceans (approximately 85 percent). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from ice and snow, and transpiration from plant leaves.

Carbon dioxide (CO_2) is an odorless, colorless natural GHG. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Carbon dioxide is the primary GHG emitted through human activities and anthropogenic sources of carbon dioxide are from burning coal, oil, natural gas, and wood. Concentrations are currently around 400 ppm; some say that concentrations may increase to 540 ppm by 2100 as a direct result of anthropogenic sources (IPCC 2001). Some predict that this will result in an average global temperature rise of at least 2° Celsius (IPCC 2001).

Methane is a flammable gas and is the main component of natural gas. When one molecule of methane is burned in the presence of oxygen, one molecule of carbon dioxide and two molecules of water are released. There are no health effects from methane. A natural source of methane is from the anaerobic decay of organic matter. Geological deposits known as natural gas fields contain methane, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and cattle.

Nitrous oxide (N_2O), also known as laughing gas, is a colorless GHG. Higher concentrations can cause dizziness, euphoria, and sometimes slight hallucinations. Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used in rocket engines, as an aerosol spray propellant, and in race cars.

Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol.

Hydrofluorocarbons (HFCs) are synthetic man-made chemicals that are used as a substitute for CFCs for automobile air conditioners and refrigerants.

Perfluorocarbons (PFCs) have stable molecular structures and do not break down though the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane and hexafluoroethane. Concentrations of tetrafluoromethane in the atmosphere are over 79 ppt (IPCC 2013). The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur hexafluoride (SF6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated, 23,500. Concentrations in the 2011 were about 7.3 ppt, while concentrations in 2005 were about 5.6 ppt (EPA 2013). Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Ozone found in the troposphere is considered a GHG; however, unlike the other GHG, ozone in the troposphere is relatively short-lived and therefore is not global in nature. Ozone is not directly emitted into the air but is formed through chemical reactions between precursor emissions of reactive organic gases (ROG) and nitrogen oxides (NO_X) in the presence of sunlight. It is difficult to make an accurate determination of the contribution of ozone precursors (nitrogen oxides and volatile organic compounds) to climate change (CARB 2004).

Aerosols are particles emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light. Cloud formation can also be affected by aerosols. Sulfate aerosols are emitted when fuel with sulfur in it is burned. Black carbon (or soot) is emitted during biomass burning incomplete combustion of fossil fuels. Particulate matter regulation has been lowering aerosol concentrations in the United States; however, global concentrations are likely increasing.

Assembly Bill 32

In September 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32; California Health and Safety Code Division 25.5, Sections 38500, et seq.). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. It requires that statewide GHG emissions be reduced to 1990 levels by 2020. In 2016, the state legislature passed Senate Bill SB 32, which established a 2030 GHG emissions reduction target of 40 percent below 1990 levels.

In 2008 and 2014, ARB approved the Scoping Plan and the first update to the Scoping Plan, respectively (ARB 2008, 2014). ARB's Scoping Plan is the state's plan to achieve the GHG reductions in California required by AB 32 and also reiterates the state's role in the long-term goal established in Executive Order S-3-05, which is to reduce GHG emissions to 80% below 1990 levels by 2050. In response to SB 32 and the companion legislation of AB 197, ARB approved the Final Proposed 2017 Scoping Plan Update: The Strategy for Achieving California's 2030 GHG Target In November 2017 (ARB 2017). The 2017 Scoping Plan draws from the previous plans to present strategies to reaching California's 2030 GHG reduction target. None of these statewide plans or policies constitutes a regulation to adopt or implement a regional or local plan for reduction or mitigation of GHG emissions. In addition, it is assumed that any requirements formulated under the mandate of AB 32 and SB 32 would be implemented consistent with statewide policies and laws.

Riverside County General Plan

The Riverside County General Plan, revised July 2018 serves as the blueprint for future growth in Riverside County. As such, the following policies, presented within the Air Quality Element of the General Plan, provide additional guidance in review and discretionary approval of private land use projects:

- Policy AQ 19.1: Continue to coordinate with CARB, SCAQMD, and the State Attorney General's office to ensure that the milestones and reduction strategies presented in the General Plan and the CAP adequately address the county's GHG emissions.

- Policy AQ 19.2: Utilize County's CAP as the guiding document for determining County's GHG reduction thresholds. and implementation programs. Implementation of the CAP and its monitoring program shall include the ability to expand upon, or where appropriate, update or replace the Implementation Measures established herein such that the implementation of the CAP accomplishes the GHG reduction targets

- Policy AQ 21.1: The County shall require new development projects subject to County discretionary approval to incorporate measures to achieve 100 points through incorporation of the Implementation Measures (IMs) found in the Screening Tables within the Riverside County Climate Action Plan.

One hundred points represent a project's fare-share of reduction in operational emissions associated with the developed use needed to reduce emissions down to the CAP Reduction Target.

County of Riverside Climate Action Plan

The County of Riverside CAP originally adopted in 2015 and revised in December 2019 contains further guidance on Riverside County's GHG Inventory reduction goals, thresholds, policies, guidelines, and implementation programs. In particular, the CAP elaborates on the General Plan goals and policies relative to the GHG emissions and provides a specific implementation tool to guide future decisions of the County of Riverside.

The CAP was designed under the premise that the County of Riverside, and the community it represents, is uniquely capable of addressing emissions associated with sources under Riverside County's jurisdiction, and that Riverside County's emission reduction efforts should coordinate with the state strategies of reducing emissions in order to accomplish these reductions in an efficient and cost-effective manner. The County of Riverside developed the CAP with the following purposes in mind:

- Create a GHG emissions baseline from which to benchmark GHG reductions.

- Provide a plan that is consistent with and complementary to: the GHG emissions reduction efforts being conducted by the State of California through the Global Warming Solutions Act (AB32), federal government through the actions of the Environmental Protection Agency (EPA), and the global community through the Kyoto Protocol.

- Guide the development, enhancement, and implementation of actions that reduce GHG emissions.

- Provide a policy document with specific implementation measures meant to be considered as part of the planning process for future development projects.

Health and Other Effects

The potential health effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems (i.e., heat rash and heat stroke). In addition, climate sensitive diseases may increase, such as those spread by mosquitoes and other disease carrying insects. Those diseases include malaria, dengue fever, yellow fever, and encephalitis. Extreme events such as flooding and hurricanes can displace people and agriculture, which would have negative consequences. Drought in some areas may increase, which would decrease water and food availability. Global climate change may also contribute to air quality problems from increased frequency of smog and particulate air pollution (EPA 2006).

3.0 AIR QUALITY IMPACT EVALUATION

3.1 STANDARDS OF SIGNIFICANCE

Air quality analyses for the Proposed Project have been conducted in accordance with the CEQA Air Quality Handbook prepared by the SCAQMD (1993 as updated). SCAQMD has established the following emissions criteria for determining whether the impacts from a project would be considered significant under CEQA (http://www.aqmd.gov/ceqa/hdbk.html):

Thresholds of Significance for Construction:

- 75 pounds per day of ROG
- 100 pounds per day of NO_x
- 550 pounds per day of CO
- 150 pounds per day of SO_X
- 150 pounds per day of PM_{10}
- 55 pounds per day of $PM_{2.5}$

Thresholds of Significance for Operations:

- 55 pounds per day of ROG
- 55 pounds per day of NO_x
- 550 pounds per day of CO
- 150 pounds per day of SO_X
- 150 pounds per day of PM_{10}
- 55 pounds per day of $PM_{2.5}$

Greenhouse Gas Emissions

- 3,000 metric tons of CO_2 equivalent (MTCO2e) (Riverside County Screening Threshold)

3.2 CONSTRUCTION AIR QUALITY EVALUATION

The proposed development would occur on approximately 92.7 gross acres of land. Construction-related emissions generated by the Proposed Project would be from short-term construction activities. The Proposed Project was screened using CalEEMod version 2016.3.2. The criteria pollutants and GHGs analyzed include reactive organic gases (ROG), nitrous oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO_2), particulates (PM_{10} and $PM_{2.5}$), carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Construction emissions are screened and quantified to document the effectiveness of control measures.

The CalEEMod model allows the user to set certain defaults and run the model to incorporate SCAQMD required rules and regulations. Therefore, per SCAQMD Rules 403, the mitigation requiring that exposed surfaces during construction be watered twice per day was "turned on". The developer and its contractor will be required to comply with mandated SCAQMD rules and regulations, including but not limited to Rule 403. Therefore, the following dust control

conditions applicable to the site activities as recommended by Rule 403 shall also be implemented:

1. The Project Proponent shall ensure that any portion of the site to be graded shall be pre-watered prior to the onset of grading activities.

   (a) The Project Proponent shall ensure that watering of the site or other soil stabilization method shall be employed on an on-going basis after the initiation of any grading activity on the site at least twice daily. Portions of the site that are actively being graded shall be watered regularly to ensure that a crust is formed on the ground surface and shall be watered at the end of each workday.

   (b) The Project Proponent shall ensure that all disturbed areas are treated to prevent erosion until the site is constructed upon.

   (c) The Project Proponent shall ensure that landscaped areas are installed as soon as possible to reduce the potential for wind erosion.

   (d) The Project Proponent shall ensure that all grading activities are suspended during first and second stage ozone episodes or when winds exceed 25 miles per hour.

During construction, exhaust emissions from construction vehicles and equipment and fugitive dust generated by equipment traveling over exposed surfaces, would increase NO_X and PM_{10} levels in the area. The following Best Management Practices shall be implemented to reduce emissions.

2. To reduce emissions, all equipment used in grading and construction must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel. Site development will be limited to one acre disturbed per day.
3. The contractor shall utilize (as much as possible) pre-coated building materials and coating transfer or spray equipment with high transfer efficiency, such as high volume, low pressure (HVLP) spray method, or manual coatings application such as paint brush, hand roller, trowel, dauber, rag, or sponge.
4. The contractor shall utilize water-based or low VOC coating per SCAQMD Rule 1113. The following measures shall also be implemented:
   - Use Super-Compliant VOC paints whenever possible.
   - If feasible, avoid painting during peak smog season: July, August, and September.
   - Recycle leftover paint. Take any left-over paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.
   - Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.
   - For water-based paints, clean up with water only. Whenever possible, do not rinse the clean-up water down the drain or pour it directly into the ground or the storm drain. Set aside the can of clean-up water and take it to a hazardous waste center (www.cleanup.org).

- Recycle the empty paint can.
- Look for non-solvent containing stripping products.
- Use Compliant Low-VOC cleaning solvents to clean paint application equipment.
- Keep all paint and solvent laden rags in sealed containers to prevent VOC emissions.

5. The Project Proponent shall ensure that existing power sources are utilized where feasible via temporary power poles to avoid on-site diesel power generation.
6. The Project Proponent shall ensure that construction personnel are informed of ride sharing and transit opportunities.
7. All buildings on the project site shall conform to energy use guidelines in Title 24 of the California Administrative Code as updated to reduce energy consumption and reduce GHG emissions.
8. The operator shall maintain and effectively utilize and schedule on site equipment and delivery trucks in order to minimize exhaust emissions from truck idling.

Modeled Analysis

The emissions calculations for the construction phase of the Proposed Project includes fugitive dust from grading and exhaust emissions from on-site equipment and worker travel and are summarized in Table 6 and Table 7, which represent summer and winter construction emissions, respectively. The fugitive dust emissions are based on earthwork activities per day. Material will be balance onsite, therefore no import or export of material is anticipated. The proposed construction activities will include implementation of the "best available fugitive dust control requirements" listed above and the developer will comply with SCAQMD rules and regulations (particularly Rule 403) that require controls for fugitive dust. These standard conditions will reduce emissions to the lowest amounts feasible. Construction emissions were screened and quantified to document the effectiveness of control measures. For additional information, refer to Appendix A for emissions data outputs.

Table 6
Summer Construction Emissions
(Pounds Per Day)

Source/Phase	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Site Preparation	4.2	42.5	22.5	0.04	10.6	6.6
Grading	4.6	50.3	33.0	0.06	6.4	3.7
Building Construction	14.8	97.3	119.4	0.47	32.0	9.8
Paving	1.4	13.0	15.4	0.02	0.9	0.7
Architectural Coating	17.2	2.7	18.2	0.05	5.2	1.5
Highest Value (lbs/day)	**17.2**	**97.3**	**119.4**	**0.47**	**32.0**	**9.8**
SCAQMD Threshold	75	100	550	150	150	55
Significant	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod 2016.3.2, Summer Emissions
Phases don't overlap and represent the highest concentration.

Table 7
Winter Construction Emissions
(Pounds Per Day)

Source/Phase	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Site Preparation	4.2	42.5	22.3	0.04	10.6	6.6
Grading	4.6	50.3	32.8	0.06	6.4	3.7
Building Construction	14.9	97.3	103.7	0.44	32.0	9.8
Paving	1.4	13.0	15.2	0.02	0.9	0.7
Architectural Coating	17.3	2.8	14.9	0.05	5.2	1.5
Highest Value (lbs/day)	**17.3**	**97.3**	**103.7**	**0.44**	**32.0**	**9.8**
SCAQMD Threshold	75	100	550	150	150	55
Significant	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod 2016.3.2, Winter Emissions
Phases don't overlap and represent the highest concentration.

As shown in Table 6 and Table 7, construction emissions during either summer or winter seasonal conditions would not exceed SCAQMD thresholds with compliance with SCAQMD Rule 403 that would include but not limited to the use of a water truck. Impacts would be less than significant, and no mitigation measures would be required. However, to ensure impacts would not exceed the following measures is recommended:

> **AQ-1: To ensure impacts from NOx would not occur, construction activities and/or phases shall not overlap.**

Greenhouse Gas Emissions

GHG emissions are cumulative in nature, in that, no one single project can measurably contribute to climate change and its affects (global average change in temperature, rising sea levels etc.). The direct or indirect GHG impacts are therefore not evaluated on a local level, but whether or not the GHG emissions resulting from the project are cumulative; that is, they add considerably to an increase in GHGs as compared to the existing environmental setting based on The County of Riverside CAP, December 2019. The County of Riverside developed the CAP with the following purposes in mind: (1) Create a GHG emissions baseline from which to benchmark GHG reductions, (2) Provide a plan that is consistent with and complementary to: the GHG emissions reduction efforts being conducted by the State of California through the Global Warming Solutions Act (AB32), federal government through the actions of the Environmental Protection Agency (EPA), and the global community through the Kyoto Protocol, (3) Guide the development, enhancement, and implementation of actions that reduce GHG emissions, and (4) Provide a policy document with specific implementation measures meant to be considered as part of the planning process for future development projects.

AB 32 defines seven (7) major GHGs that are emitted into the atmosphere, the first three are both biogenic (occur naturally in the environment) and anthropogenic (are man-made), through the burning of fossil fuels, the decay of organic waste in landfills etc. and they include carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O). The other four, known as Fluorinated gases (Hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride) are synthetic (made artificially by chemical processes). The Proposed Project would not generate

Fluorinated gases as defined by AB 32, only the GHGs (CO_2, CH_4, and N_2O) that are emitted by construction equipment. Therefore, GHG emissions from CO_2, CH_4, and N_2O are modeled. Results for GHG emissions related to construction of the Proposed Project are shown in Table 8.

Table 8
Greenhouse Gas Construction Emissions
(Metric Tons Per Year)

Year	CO_2	CH_4	N_20
Construction 2020	1452.8	0.22	0.00
Construction 2021	1,450.9	0.10	0.00
Total, Maximum (MTCO2e)	**1,458.5**		
Amortized over 30-years	48.7		
Riverside County Screening Threshold	**3,000**		
Significant	No		

Source: CalEEMod 2016.3.2, Annual Emissions

Model results for GHG emissions related to construction of the Proposed Project as shown in Table 8 does not exceed the Riverside County Screening threshold of 3,000 $MTCO_2e$ and therefore would not result in a significant impact. No mitigation measures are required.

3.3 OPERATIONAL AIR QUALITY EVALUATION

Operational emissions are categorized as energy (generation and distribution of energy to the end use), area (operational use of the project), mobile (vehicle trips), water (generation and distribution of water to the land use), and waste (collecting and hauling waste to the landfill). The operational mobile source emissions were calculated in accordance with the Traffic Impact Analysis prepared for the Proposed Project by Urban Crossroads in August 2019. The Proposed Project is anticipated to generate approximately 410 total daily trips (from street legal automobiles). The anticipated total daily trips were input into the CalEEMod Version 2016.3.2 model to estimate the operational mobile source emissions. In addition to the operational emissions sources analyzed with CalEEMod, the Proposed Project was screened for emissions associated with the use of motorcycles and off-road track maintenance equipment.

Motorcycle Emissions include the daily operation of a Motorcycle Park/Racetrack. The Project Proponent has disclosed that the Proposed Project is anticipated to host up to 100 riders for daily use, while events are anticipated to be hosted approximately 20 times per year, exclusively on Sunday, and could host up to 400 riders. The Project Site will include racetracks of varying length; however, for purposes of this analysis, it was assumed that all riders would ride exclusively on the longest proposed racetrack which is approximately 1.2 kilometers (0.75-mile) long. Refer to Site Plan.

The Project Proponent has stated that on average a rider completes approximately 24 laps during an Event Day. To perform a worst-case scenario analysis, it was assumed that each day would be an event day (400 riders, 24 laps, 1.2km per lap). As such, on any given day, it can be assumed on a worst-case scenario basis, that riders could collectively complete a total of up to 9,600 laps, resulting in a total distance traveled of approximately 11,520 km (6,990 miles). Emissions were analyzed using EMFAC2017 emissions factors. Off-road track maintenance equipment includes

a dozer and tractor operating up to 4 hours per day. The water truck is anticipated to operate up to 6 hours per day as riders cannot ride if the track is dusty. Therefore, PM emissions are anticipated to be negligible, as the track is routinely watered throughout the day. Emission Factors are from SCAQMD Offroad Mobile Source Emissions Factors 2020. Emissions associated with the operational activities are listed in Tables 9 through 11.

Table 9
Summer Operational Emissions
(Pounds Per Day)

Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	2.7	0.0	0.4	0.0	0.0	0.0
Energy	0.0	0.0	0.0	0.0	0.0	0.0
Mobile	0.4	0.9	5.4	0.0	2.2	0.6
On-Site Motorcycles[1]	35.7	14.7	25.2	0.0	0.4	0.4
Track maintenance equipment[2]	1.6	11.1	7.4	0.0	0.5	0.4
Total Value (lbs/day)	**40.4**	**26.7**	**38.4**	**0.0**	**3.1**	**1.4**
SCAQMD Threshold	55	55	550	150	150	55
Significant	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod 2016.3.2, Summer Emissions
[1] EMFAC Emission Factors
[2] SCAQMD Offroad Mobile Source Emissions Factors, 2020

Table 10
Winter Operational Emissions
(Pounds Per Day)

Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	2.7	0.0	0.4	0.0	0.0	0.0
Energy	0.0	0.0	0.0	0.0	0.0	0.0
Mobile	0.3	0.9	4.6	0.0	2.2	0.6
On-Site Motorcycles[1]	35.7	14.7	25.2	0.0	0.4	0.4
Track maintenance equipment[3]	1.6	11.1	7.4	0.0	0.5	0.4
Total Value (lbs/day)	**40.3**	**26.7**	**37.6**	**0.0**	**3.1**	**1.4**
SCAQMD Threshold	55	55	550	150	150	55
Significant	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod 2016.3.2, Summer Emissions
[1] EMFAC Emission Factors
[2] SCAQMD Offroad Mobile Source Emissions Factors, 2020

Table 11
Greenhouse Gas Operational Emissions
(Metric Tons Per Year)

Source	CO_2	CH_4	N_2O
Area	0.1	0.0	0.0
Energy	177.6	0.0	0.0
Mobile	303.7	0.0	0.0
Waste	9.0	0.5	0.0
Water	20.8	0.1	0.0
On-Site Motorcycles[1]	556.7	22.3	0.0
Track maintenance equipment[2]	355.7	57.3	0.0
Total (MTCO2e)	**1,503.8**		
Riverside County Screening Threshold	3,000		
Significant	**No**		

Source: CalEEMod 2016.3.2, Annual Emissions
[1] EMFAC Emission Factors
[2] SCAQMD Offroad Mobile Source Emissions Factors, 2020

As shown in Tables 9 through 11, operational emissions from the Proposed Project would not exceed SCAQMD and County of Riverside CAP/Screening thresholds and therefore less than significant impact is anticipated.

3.4 LOCALIZED SIGNIFICANCE THRESHOLD

SCAQMD has developed a methodology to assess the localized impacts of emissions from a proposed project as outlined within the Final Localized Significance Threshold (LST) Methodology report; completed in June 2003 and revised in July 2008. The use of LSTs is voluntary, to be implemented at the discretion of local public agencies acting as a lead agency pursuant to CEQA. LSTs apply to projects that must undergo CEQA or the National Environmental Policy Act (NEPA) and are five acres or less. LST methodology is incorporated to represent worst-case scenario emissions thresholds. CalEEMod version 2016.3.2 was used to estimate the on-site and off-site construction emissions. The LSTs were developed to analyze the significance of potential local air quality impacts of proposed projects to sensitive receptors and provide screening tables for small projects (one, two, or five acres). Projects are evaluated based on geographic location and distance from the sensitive receptor (25, 50, 100, 200, or 500 meters from the site).

For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, convalescent facility or anywhere that it is possible for an individual to remain for 24 hours. Additionally, schools, playgrounds, childcare centers, and athletic facilities can also be considered as sensitive receptors. Commercial and industrial facilities are not included in the definition of a sensitive receptor because employees do not typically remain on-site for a full 24 hours, but are usually present for shorter periods of time, such as eight hours.

The Project Site is approximately 92.7 gross acres and therefore the “five-acre” LSTs were utilized for analysis. Note that larger projects are typically permitted to produce a proportionately

larger quantity of emissions, therefore, analysis under the "five-acre" LSTs is considered to be conservative. The nearest sensitive receptor land uses are the residential developments located approximately 0.12-mile north and east of the Project Site and therefore LSTs are based on a 0.12-mile (200-meter) distance. The Proposed Project's construction and operational emissions with the appropriate LST are presented in Table 12.

Table 12
Localized Construction and Operational Emissions
(Pounds Per Day)

Source	NO_x	CO	PM_{10}		$PM_{2.5}$	
Construction Emissions (Max. from Table 6 and Table 7)	97.3	119.4	32.0		9.8	
Operational Emissions (Max. Total from Table 9 and Table 10)	26.7	38.4	3.1		1.4	
Highest Value (lbs/day)	**97.3**	**119.4**	**32.0**	**3.1**	**9.8**	**1.4**
LST	488	6,860	96*	23†	31*	8†
Greater Than Threshold	**No**	**No**	**No**	**No**	**No**	**No**

Sources: CalEEMod.2016.3.2 Summer and Winter Emissions; SCAQMD Final Localized Significance Threshold Methodology; SCAQMD Mass Rate Look-up Tables for a 5-acre site in SRA No. 24, distance of 200 meters.
Note: PM_{10} and $PM_{2.5}$ emissions are separated into construction and operational thresholds in accordance with the SCAQMD Mass Rate LST Look-up Tables.
* Construction emissions LST
† Operational emissions LST

As shown in Table 12, the Proposed Project's emissions are not anticipated to exceed the LSTs. Therefore, the Proposed Project is not anticipated to expose sensitive receptors to substantial pollutant concentrations. No mitigation measures are required.

Toxic Air Contaminants

Construction

The Project includes an anticipated construction time of approximately 19 months, which is only approximately 5.3 percent of 30-year exposure duration recommended for health risk analyses by the Office of Environmental Health Hazard Assessment (OEHHA). The comment misrepresents the guidance from the California Office of Health Hazard Assessment (OEHHA). OEHHA does not require a construction toxic analysis or health risk assessment (HRA) in this situation. The OEHHA guidance cited in the comment provides technical perspective on how construction activities could be evaluated if they would last for more than two months in terms of exposure assumptions. While the guidance recommends to not perform a cancer risk assessment for construction lasting less than two months, it is not stating that all other longer construction events should be assessed. The guidance indicates if one does assess cancer risk, how that assessment should account for exposure. As indicated in the most-recent OEHHA Guidance Manual for Preparation of Health Risk Assessments (February 2015) it is up to local air districts to determine whether construction-related Health Risk Assessments (HRA) are to be required.

Per Lijin Sun, J.D. Program Supervisor, CEQA IGR, South Coast Air Quality Management District (SCAQMD), at this time SCAQMD do not have recommendations for how to conduct a construction HRA for CEQA purposes using the revised OEHHA guidelines, but have been tasked with going through a public process to develop those recommendations to bring to the SCAQMD Board for approval (AEP/SCAQMD Update July 2018). Per current SCAQMD guidance, a construction-based health risk assessment is not required.

The Localized Significance Threshold (LST) analysis is performed to ensure that any nearby sensitive receptors to a project are not adversely affected by emissions from construction activities that are occurring on-site in close proximity to nearby receptors. As shown in Table 12, Localized Significance Thresholds, the closest sensitive receptors, located approximately 200 meters, will not be impacted by diesel exhaust particulate matter. Therefore, no significant short-term toxic air contaminant impacts would occur during construction of the proposed project and impacts from construction related diesel particulate matter (DPM) will be less than significant. No construction HRA is warranted or required.

Operational

The Proposed Project includes daily operation of a Motorcycle Park/Racetrack. The Project Proponent has disclosed that the Proposed Project is anticipated to host up to 100 riders for daily use, while events are anticipated to be hosted approximately 20 times per year (15% of the use), exclusively on Sunday, and could host up to 400 riders. Note, however, that to achieve a conservative analysis, it was assumed that an event would occur daily. The operational mobile source emissions were calculated in accordance with the Traffic Impact Analysis prepared for the Proposed Project by Urban Crossroads in August 2019. The Proposed Project is anticipated to generate approximately 410 total daily trips. Therefore, based on the number of street legal trips and the number of days the Site would be used over the year, operational impacts from DPM is anticipated to be less than significant. Refer to Tables 9 thru 12 for additional information.

3.5 PROJECT CUMULATIVE IMPACT

Development of the Proposed Project will be conditioned to comply with current SCAQMD rules and regulations to minimize impacts to air quality as discussed herein. Additionally, both summer and winter season construction and operational emissions are below the SCAQMD threshold of significance. Furthermore, the Proposed Project would not exceed the SCAQMD and CAP annual GHG threshold. Therefore, development of the proposed motorcycle park is not anticipated to generate significant impacts or generate significant emissions. As such, cumulative impacts are anticipated to be less than significant.

4.0 REPORT SUMMARY

Construction and operational emissions from the Proposed Project will not exceed the SCAQMD and County of Riverside CAP threshold of significance. Construction emissions are considered short-term. Potential dust emissions would be further reduced by implementation of standard dust control measures (water exposed surfaces twice per day, etc.) as required for all projects

within the SCAB. No impacts to local or regional air quality are anticipated during project operations. The Proposed Project as well as all projects within the SCAB will be required to comply with current SCAQMD rules and regulations as applicable. Therefore, potential impacts from operational activities are determined to be less than significant and no further analysis is required.

5.0 REFERENCES

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SCAQMD Offroad Mobile Source Emissions Factors 2020

Motorcycle Emissions Factors: EMVAC2017 (year 2020)

APPENDIX A
DATA MODEL OUTPUTS

Riverside Motorcycle Park

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	21.91	1000sqft	0.50	21,909.00	0
Other Non-Asphalt Surfaces	3,974.78	1000sqft	91.25	3,974,783.00	0
Regional Shopping Center	42.28	1000sqft	0.97	42,284.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The Proposed Project includes implementation of 42,284 square feet of building space, of which a majoriity will be optimized to support the proposed Pro Race Shop. Therefore, CalEEMod's "Regional Shopping Center" Land Use Subtype was determined to be most representative of the proposed building use.

Construction Phase - Demolition is not required.

Vehicle Trips - In accordance with the TIA prepared by Urban Crossroads.

Fleet Mix - In accordance with the TIA prepared by Urban Crossroads.

Construction Off-road Equipment Mitigation -

Riverside Motorcycle Park - Riverside-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	110.00	100.00
tblConstructionPhase	NumDays	1,550.00	100.00
tblConstructionPhase	NumDays	110.00	100.00
tblConstructionPhase	PhaseEndDate	8/13/2027	12/24/2021
tblConstructionPhase	PhaseEndDate	10/9/2026	3/19/2021
tblConstructionPhase	PhaseEndDate	3/12/2027	8/6/2021
tblConstructionPhase	PhaseStartDate	3/13/2027	8/9/2021
tblConstructionPhase	PhaseStartDate	10/31/2020	11/2/2020
tblConstructionPhase	PhaseStartDate	10/10/2026	3/22/2021
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.54	0.97
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.1410e-003	0.00
tblFleetMix	MCY	4.5820e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0380e-003	0.00
tblFleetMix	MHD	0.02	0.03
tblFleetMix	OBUS	1.3830e-003	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	UBUS	1.1830e-003	0.00
tblLandUse	LandUseSquareFeet	21,910.00	21,909.00
tblLandUse	LandUseSquareFeet	3,974,780.00	3,974,783.00
tblLandUse	LandUseSquareFeet	42,280.00	42,284.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

tblVehicleTrips	ST_TR	49.97	9.72
tblVehicleTrips	SU_TR	25.24	9.72
tblVehicleTrips	WD_TR	42.70	9.72

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	0.7860	7.3423	5.5615	0.0160	1.9013	0.2722	2.1735	0.7615	0.2513	1.0128	0.0000	1,452.8953	1,452.8953	0.2225	0.0000	1,458.4583
2021	1.2783	3.2604	4.2979	0.0158	1.0964	0.0748	1.1712	0.2942	0.0699	0.3641	0.0000	1,450.9528	1,450.9528	0.1018	0.0000	1,453.4972
Maximum	**1.2783**	**7.3423**	**5.5615**	**0.0160**	**1.9013**	**0.2722**	**2.1735**	**0.7615**	**0.2513**	**1.0128**	**0.0000**	**1,452.8953**	**1,452.8953**	**0.2225**	**0.0000**	**1,458.4583**

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	0.7860	7.3423	5.5615	0.0160	1.2335	0.2722	1.5057	0.4444	0.2513	0.6957	0.0000	1,452.8947	1,452.8947	0.2225	0.0000	1,458.4576
2021	1.2783	3.2604	4.2979	0.0158	1.0964	0.0748	1.1712	0.2942	0.0699	0.3641	0.0000	1,450.9526	1,450.9526	0.1018	0.0000	1,453.4970
Maximum	**1.2783**	**7.3423**	**5.5615**	**0.0160**	**1.2335**	**0.2722**	**1.5057**	**0.4444**	**0.2513**	**0.6957**	**0.0000**	**1,452.8947**	**1,452.8947**	**0.2225**	**0.0000**	**1,458.4576**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**22.28**	**0.00**	**19.97**	**30.04**	**0.00**	**23.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-6-2020	4-5-2020	1.5434	1.5434
2	4-6-2020	7-5-2020	1.7827	1.7827
3	7-6-2020	10-5-2020	1.8023	1.8023
4	10-6-2020	1-5-2021	3.0738	3.0738
5	1-6-2021	4-5-2021	2.7013	2.7013
6	4-6-2021	7-5-2021	0.4657	0.4657
7	7-6-2021	9-30-2021	0.5418	0.5418
		Highest	3.0738	3.0738

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	0.4912	4.7000e-004	0.0518	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1002	0.1002	2.7000e-004	0.0000	0.1069
Energy	5.1000e-004	4.6000e-003	3.8700e-003	3.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	177.6113	177.6113	7.2200e-003	1.5700e-003	178.2586
Mobile	0.0639	0.1728	0.8678	3.3400e-003	0.3919	2.4100e-003	0.3943	0.1046	2.2300e-003	0.1068	0.0000	303.7220	303.7220	5.3400e-003	0.0000	303.8556
Waste						0.0000	0.0000		0.0000	0.0000	9.0108	0.0000	9.0108	0.5325	0.0000	22.3238
Water						0.0000	0.0000		0.0000	0.0000	0.9936	19.7878	20.7814	0.1029	2.5800e-003	24.1215
Total	**0.5556**	**0.1779**	**0.9234**	**3.3700e-003**	**0.3919**	**2.9500e-003**	**0.3948**	**0.1046**	**2.7700e-003**	**0.1074**	**10.0043**	**501.2214**	**511.2257**	**0.6482**	**4.1500e-003**	**528.6663**

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	0.4912	4.7000e-004	0.0518	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1002	0.1002	2.7000e-004	0.0000	0.1069
Energy	5.1000e-004	4.6000e-003	3.8700e-003	3.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	177.6113	177.6113	7.2200e-003	1.5700e-003	178.2586
Mobile	0.0639	0.1728	0.8678	3.3400e-003	0.3919	2.4100e-003	0.3943	0.1046	2.2300e-003	0.1068	0.0000	303.7220	303.7220	5.3400e-003	0.0000	303.8556
Waste						0.0000	0.0000		0.0000	0.0000	9.0108	0.0000	9.0108	0.5325	0.0000	22.3238
Water						0.0000	0.0000		0.0000	0.0000	0.9936	19.7878	20.7814	0.1029	2.5800e-003	24.1215
Total	**0.5556**	**0.1779**	**0.9234**	**3.3700e-003**	**0.3919**	**2.9500e-003**	**0.3948**	**0.1046**	**2.7700e-003**	**0.1074**	**10.0043**	**501.2214**	**511.2257**	**0.6482**	**4.1500e-003**	**528.6663**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/6/2020	3/27/2020	5	60	
2	Grading	Grading	3/28/2020	10/30/2020	5	155	
3	Building Construction	Building Construction	11/2/2020	3/19/2021	5	100	
4	Paving	Paving	3/22/2021	8/6/2021	5	100	
5	Architectural Coating	Architectural Coating	8/9/2021	12/24/2021	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 387.5

Acres of Paving: 91.75

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 63,426; Non-Residential Outdoor: 21,142; Striped Parking Area: 239,802 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,692.00	662.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	338.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.5420	0.0000	0.5420	0.2979	0.0000	0.2979	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1223	1.2725	0.6454	1.1400e-003		0.0659	0.0659		0.0607	0.0607	0.0000	100.2920	100.2920	0.0324	0.0000	101.1030
Total	**0.1223**	**1.2725**	**0.6454**	**1.1400e-003**	**0.5420**	**0.0659**	**0.6079**	**0.2979**	**0.0607**	**0.3586**	**0.0000**	**100.2920**	**100.2920**	**0.0324**	**0.0000**	**101.1030**

3.2 Site Preparation - 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	3.1300e-003	2.2800e-003	0.0241	7.0000e-005	7.9900e-003	5.0000e-005	8.0400e-003	2.1200e-003	4.0000e-005	2.1700e-003	0.0000	6.6510	6.6510	1.6000e-004	0.0000	6.6551
Total	**3.1300e-003**	**2.2800e-003**	**0.0241**	**7.0000e-005**	**7.9900e-003**	**5.0000e-005**	**8.0400e-003**	**2.1200e-003**	**4.0000e-005**	**2.1700e-003**	**0.0000**	**6.6510**	**6.6510**	**1.6000e-004**	**0.0000**	**6.6551**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.2439	0.0000	0.2439	0.1341	0.0000	0.1341	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1223	1.2725	0.6454	1.1400e-003		0.0659	0.0659		0.0607	0.0607	0.0000	100.2919	100.2919	0.0324	0.0000	101.1028
Total	**0.1223**	**1.2725**	**0.6454**	**1.1400e-003**	**0.2439**	**0.0659**	**0.3098**	**0.1341**	**0.0607**	**0.1947**	**0.0000**	**100.2919**	**100.2919**	**0.0324**	**0.0000**	**101.1028**

3.2 Site Preparation - 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	3.1300e-003	2.2800e-003	0.0241	7.0000e-005	7.9900e-003	5.0000e-005	8.0400e-003	2.1200e-003	4.0000e-005	2.1700e-003	0.0000	6.6510	6.6510	1.6000e-004	0.0000	6.6551
Total	**3.1300e-003**	**2.2800e-003**	**0.0241**	**7.0000e-005**	**7.9900e-003**	**5.0000e-005**	**8.0400e-003**	**2.1200e-003**	**4.0000e-005**	**2.1700e-003**	**0.0000**	**6.6510**	**6.6510**	**1.6000e-004**	**0.0000**	**6.6551**

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					0.6722	0.0000	0.6722	0.2787	0.0000	0.2787	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3449	3.8903	2.4768	4.8100e-003		0.1685	0.1685		0.1550	0.1550	0.0000	422.2533	422.2533	0.1366	0.0000	425.6674
Total	**0.3449**	**3.8903**	**2.4768**	**4.8100e-003**	**0.6722**	**0.1685**	**0.8407**	**0.2787**	**0.1550**	**0.4337**	**0.0000**	**422.2533**	**422.2533**	**0.1366**	**0.0000**	**425.6674**

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	8.9900e-003	6.5500e-003	0.0693	2.1000e-004	0.0229	1.4000e-004	0.0231	6.0900e-003	1.3000e-004	6.2200e-003	0.0000	19.0908	19.0908	4.7000e-004	0.0000	19.1025
Total	**8.9900e-003**	**6.5500e-003**	**0.0693**	**2.1000e-004**	**0.0229**	**1.4000e-004**	**0.0231**	**6.0900e-003**	**1.3000e-004**	**6.2200e-003**	**0.0000**	**19.0908**	**19.0908**	**4.7000e-004**	**0.0000**	**19.1025**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.3025	0.0000	0.3025	0.1254	0.0000	0.1254	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3449	3.8903	2.4768	4.8100e-003		0.1685	0.1685		0.1550	0.1550	0.0000	422.2528	422.2528	0.1366	0.0000	425.6669
Total	**0.3449**	**3.8903**	**2.4768**	**4.8100e-003**	**0.3025**	**0.1685**	**0.4710**	**0.1254**	**0.1550**	**0.2804**	**0.0000**	**422.2528**	**422.2528**	**0.1366**	**0.0000**	**425.6669**

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	8.9900e-003	6.5500e-003	0.0693	2.1000e-004	0.0229	1.4000e-004	0.0231	6.0900e-003	1.3000e-004	6.2200e-003	0.0000	19.0908	19.0908	4.7000e-004	0.0000	19.1025
Total	**8.9900e-003**	**6.5500e-003**	**0.0693**	**2.1000e-004**	**0.0229**	**1.4000e-004**	**0.0231**	**6.0900e-003**	**1.3000e-004**	**6.2200e-003**	**0.0000**	**19.0908**	**19.0908**	**4.7000e-004**	**0.0000**	**19.1025**

3.4 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	0.0466	0.4221	0.3707	5.9000e-004		0.0246	0.0246		0.0231	0.0231	0.0000	50.9542	50.9542	0.0124	0.0000	51.2650
Total	**0.0466**	**0.4221**	**0.3707**	**5.9000e-004**		**0.0246**	**0.0246**		**0.0231**	**0.0231**	**0.0000**	**50.9542**	**50.9542**	**0.0124**	**0.0000**	**51.2650**

3.4 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	0.0440	1.5913	0.3113	4.1300e-003	0.1053	9.7400e-003	0.1150	0.0304	9.3200e-003	0.0397	0.0000	395.1803	395.1803	0.0292	0.0000	395.9100
Worker	0.2160	0.1573	1.6640	5.0700e-003	0.5510	3.3100e-003	0.5543	0.1463	3.0500e-003	0.1493	0.0000	458.4738	458.4738	0.0113	0.0000	458.7554
Total	**0.2600**	**1.7486**	**1.9753**	**9.2000e-003**	**0.6562**	**0.0131**	**0.6693**	**0.1766**	**0.0124**	**0.1890**	**0.0000**	**853.6541**	**853.6541**	**0.0405**	**0.0000**	**854.6654**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0466	0.4221	0.3707	5.9000e-004		0.0246	0.0246		0.0231	0.0231	0.0000	50.9541	50.9541	0.0124	0.0000	51.2649
Total	**0.0466**	**0.4221**	**0.3707**	**5.9000e-004**		**0.0246**	**0.0246**		**0.0231**	**0.0231**	**0.0000**	**50.9541**	**50.9541**	**0.0124**	**0.0000**	**51.2649**

3.4 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	0.0440	1.5913	0.3113	4.1300e-003	0.1053	9.7400e-003	0.1150	0.0304	9.3200e-003	0.0397	0.0000	395.1803	395.1803	0.0292	0.0000	395.9100
Worker	0.2160	0.1573	1.6640	5.0700e-003	0.5510	3.3100e-003	0.5543	0.1463	3.0500e-003	0.1493	0.0000	458.4738	458.4738	0.0113	0.0000	458.7554
Total	**0.2600**	**1.7486**	**1.9753**	**9.2000e-003**	**0.6562**	**0.0131**	**0.6693**	**0.1766**	**0.0124**	**0.1890**	**0.0000**	**853.6541**	**853.6541**	**0.0405**	**0.0000**	**854.6654**

3.4 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	0.0532	0.4881	0.4641	7.5000e-004		0.0268	0.0268		0.0252	0.0252	0.0000	64.8584	64.8584	0.0157	0.0000	65.2496
Total	**0.0532**	**0.4881**	**0.4641**	**7.5000e-004**		**0.0268**	**0.0268**		**0.0252**	**0.0252**	**0.0000**	**64.8584**	**64.8584**	**0.0157**	**0.0000**	**65.2496**

3.4 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	0.0466	1.8034	0.3475	5.2200e-003	0.1340	3.7300e-003	0.1377	0.0386	3.5700e-003	0.0422	0.0000	499.0980	499.0980	0.0352	0.0000	499.9773
Worker	0.2567	0.1797	1.9400	6.2400e-003	0.7012	4.1000e-003	0.7053	0.1862	3.7800e-003	0.1900	0.0000	563.9954	563.9954	0.0129	0.0000	564.3178
Total	**0.3034**	**1.9831**	**2.2875**	**0.0115**	**0.8352**	**7.8300e-003**	**0.8430**	**0.2248**	**7.3500e-003**	**0.2322**	**0.0000**	**1,063.0933**	**1,063.0933**	**0.0481**	**0.0000**	**1,064.2950**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0532	0.4881	0.4641	7.5000e-004		0.0268	0.0268		0.0252	0.0252	0.0000	64.8584	64.8584	0.0157	0.0000	65.2496
Total	**0.0532**	**0.4881**	**0.4641**	**7.5000e-004**		**0.0268**	**0.0268**		**0.0252**	**0.0252**	**0.0000**	**64.8584**	**64.8584**	**0.0157**	**0.0000**	**65.2496**

3.4 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	0.0466	1.8034	0.3475	5.2200e-003	0.1340	3.7300e-003	0.1377	0.0386	3.5700e-003	0.0422	0.0000	499.0980	499.0980	0.0352	0.0000	499.9773
Worker	0.2567	0.1797	1.9400	6.2400e-003	0.7012	4.1000e-003	0.7053	0.1862	3.7800e-003	0.1900	0.0000	563.9954	563.9954	0.0129	0.0000	564.3178
Total	**0.3034**	**1.9831**	**2.2875**	**0.0115**	**0.8352**	**7.8300e-003**	**0.8430**	**0.2248**	**7.3500e-003**	**0.2322**	**0.0000**	**1,063.0933**	**1,063.0933**	**0.0481**	**0.0000**	**1,064.2950**

3.5 Paving - 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	0.0628	0.6460	0.7327	1.1400e-003		0.0339	0.0339		0.0312	0.0312	0.0000	100.1174	100.1174	0.0324	0.0000	100.9269
Paving	6.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0634**	**0.6460**	**0.7327**	**1.1400e-003**		**0.0339**	**0.0339**		**0.0312**	**0.0312**	**0.0000**	**100.1174**	**100.1174**	**0.0324**	**0.0000**	**100.9269**

3.5 Paving - 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	4.0600e-003	2.8400e-003	0.0307	1.0000e-004	0.0111	6.0000e-005	0.0112	2.9500e-003	6.0000e-005	3.0100e-003	0.0000	8.9285	8.9285	2.0000e-004	0.0000	8.9336
Total	**4.0600e-003**	**2.8400e-003**	**0.0307**	**1.0000e-004**	**0.0111**	**6.0000e-005**	**0.0112**	**2.9500e-003**	**6.0000e-005**	**3.0100e-003**	**0.0000**	**8.9285**	**8.9285**	**2.0000e-004**	**0.0000**	**8.9336**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0628	0.6460	0.7327	1.1400e-003		0.0339	0.0339		0.0312	0.0312	0.0000	100.1173	100.1173	0.0324	0.0000	100.9268
Paving	6.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0634**	**0.6460**	**0.7327**	**1.1400e-003**		**0.0339**	**0.0339**		**0.0312**	**0.0312**	**0.0000**	**100.1173**	**100.1173**	**0.0324**	**0.0000**	**100.9268**

3.5 Paving - 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	4.0600e-003	2.8400e-003	0.0307	1.0000e-004	0.0111	6.0000e-005	0.0112	2.9500e-003	6.0000e-005	3.0100e-003	0.0000	8.9285	8.9285	2.0000e-004	0.0000	8.9336
Total	**4.0600e-003**	**2.8400e-003**	**0.0307**	**1.0000e-004**	**0.0111**	**6.0000e-005**	**0.0112**	**2.9500e-003**	**6.0000e-005**	**3.0100e-003**	**0.0000**	**8.9285**	**8.9285**	**2.0000e-004**	**0.0000**	**8.9336**

3.6 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	0.7517					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.0763	0.0909	1.5000e-004		4.7000e-003	4.7000e-003		4.7000e-003	4.7000e-003	0.0000	12.7663	12.7663	8.8000e-004	0.0000	12.7882
Total	**0.7627**	**0.0763**	**0.0909**	**1.5000e-004**		**4.7000e-003**	**4.7000e-003**		**4.7000e-003**	**4.7000e-003**	**0.0000**	**12.7663**	**12.7663**	**8.8000e-004**	**0.0000**	**12.7882**

3.6 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	0.0916	0.0641	0.6921	2.2200e-003	0.2501	1.4600e-003	0.2516	0.0664	1.3500e-003	0.0678	0.0000	201.1888	201.1888	4.6000e-003	0.0000	201.3038
Total	**0.0916**	**0.0641**	**0.6921**	**2.2200e-003**	**0.2501**	**1.4600e-003**	**0.2516**	**0.0664**	**1.3500e-003**	**0.0678**	**0.0000**	**201.1888**	**201.1888**	**4.6000e-003**	**0.0000**	**201.3038**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.7517					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.0763	0.0909	1.5000e-004		4.7000e-003	4.7000e-003		4.7000e-003	4.7000e-003	0.0000	12.7663	12.7663	8.8000e-004	0.0000	12.7882
Total	**0.7627**	**0.0763**	**0.0909**	**1.5000e-004**		**4.7000e-003**	**4.7000e-003**		**4.7000e-003**	**4.7000e-003**	**0.0000**	**12.7663**	**12.7663**	**8.8000e-004**	**0.0000**	**12.7882**

3.6 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	0.0916	0.0641	0.6921	2.2200e-003	0.2501	1.4600e-003	0.2516	0.0664	1.3500e-003	0.0678	0.0000	201.1888	201.1888	4.6000e-003	0.0000	201.3038
Total	**0.0916**	**0.0641**	**0.6921**	**2.2200e-003**	**0.2501**	**1.4600e-003**	**0.2516**	**0.0664**	**1.3500e-003**	**0.0678**	**0.0000**	**201.1888**	**201.1888**	**4.6000e-003**	**0.0000**	**201.3038**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0639	0.1728	0.8678	3.3400e-003	0.3919	2.4100e-003	0.3943	0.1046	2.2300e-003	0.1068	0.0000	303.7220	303.7220	5.3400e-003	0.0000	303.8556
Unmitigated	0.0639	0.1728	0.8678	3.3400e-003	0.3919	2.4100e-003	0.3943	0.1046	2.2300e-003	0.1068	0.0000	303.7220	303.7220	5.3400e-003	0.0000	303.8556

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	410.96	410.96	410.96	1,038,997	1,038,997
Total	410.96	410.96	410.96	1,038,997	1,038,997

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Parking Lot	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Regional Shopping Center	0.966000	0.000000	0.000000	0.000000	0.000000	0.000000	0.034000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	172.6020	172.6020	7.1300e-003	1.4700e-003	173.2195
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	172.6020	172.6020	7.1300e-003	1.4700e-003	173.2195
NaturalGas Mitigated	5.1000e-004	4.6000e-003	3.8700e-003	3.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	5.0093	5.0093	1.0000e-004	9.0000e-005	5.0391
NaturalGas Unmitigated	5.1000e-004	4.6000e-003	3.8700e-003	3.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	5.0093	5.0093	1.0000e-004	9.0000e-005	5.0391

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	93870.5	5.1000e-004	4.6000e-003	3.8700e-003	3.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	5.0093	5.0093	1.0000e-004	9.0000e-005	5.0391
Total		**5.1000e-004**	**4.6000e-003**	**3.8700e-003**	**3.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**5.0093**	**5.0093**	**1.0000e-004**	**9.0000e-005**	**5.0391**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	93870.5	5.1000e-004	4.6000e-003	3.8700e-003	3.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	5.0093	5.0093	1.0000e-004	9.0000e-005	5.0391
Total		**5.1000e-004**	**4.6000e-003**	**3.8700e-003**	**3.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**5.0093**	**5.0093**	**1.0000e-004**	**9.0000e-005**	**5.0391**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	7668.15	2.4432	1.0000e-004	2.0000e-005	2.4520
Regional Shopping Center	534047	170.1588	7.0200e-003	1.4500e-003	170.7675
Total		**172.6020**	**7.1200e-003**	**1.4700e-003**	**173.2195**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	7668.15	2.4432	1.0000e-004	2.0000e-005	2.4520
Regional Shopping Center	534047	170.1588	7.0200e-003	1.4500e-003	170.7675
Total		**172.6020**	**7.1200e-003**	**1.4700e-003**	**173.2195**

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	0.4912	4.7000e-004	0.0518	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1002	0.1002	2.7000e-004	0.0000	0.1069
Unmitigated	0.4912	4.7000e-004	0.0518	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1002	0.1002	2.7000e-004	0.0000	0.1069

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	0.0752					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4112					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8300e-003	4.7000e-004	0.0518	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1002	0.1002	2.7000e-004	0.0000	0.1069
Total	**0.4912**	**4.7000e-004**	**0.0518**	**0.0000**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**	**0.0000**	**0.1002**	**0.1002**	**2.7000e-004**	**0.0000**	**0.1069**

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	0.0752					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4112					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8300e-003	4.7000e-004	0.0518	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1002	0.1002	2.7000e-004	0.0000	0.1069
Total	**0.4912**	**4.7000e-004**	**0.0518**	**0.0000**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**	**0.0000**	**0.1002**	**0.1002**	**2.7000e-004**	**0.0000**	**0.1069**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	20.7814	0.1029	2.5800e-003	24.1215
Unmitigated	20.7814	0.1029	2.5800e-003	24.1215

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.13179 / 1.91948	20.7814	0.1029	2.5800e-003	24.1215
Total		**20.7814**	**0.1029**	**2.5800e-003**	**24.1215**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.13179 / 1.91948	20.7814	0.1029	2.5800e-003	24.1215
Total		**20.7814**	**0.1029**	**2.5800e-003**	**24.1215**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	9.0108	0.5325	0.0000	22.3238
Unmitigated	9.0108	0.5325	0.0000	22.3238

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	44.39	9.0108	0.5325	0.0000	22.3238
Total		**9.0108**	**0.5325**	**0.0000**	**22.3238**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	44.39	9.0108	0.5325	0.0000	22.3238
Total		**9.0108**	**0.5325**	**0.0000**	**22.3238**

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

Riverside Motorcycle Park

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	21.91	1000sqft	0.50	21,909.00	0
Other Non-Asphalt Surfaces	3,974.78	1000sqft	91.25	3,974,783.00	0
Regional Shopping Center	42.28	1000sqft	0.97	42,284.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The Proposed Project includes implementation of 42,284 square feet of building space, of which a majoriity will be optimized to support the proposed Pro Race Shop. Therefore, CalEEMod's "Regional Shopping Center" Land Use Subtype was determined to be most representative of the proposed building use.

Construction Phase - Demolition is not required.

Vehicle Trips - In accordance with the TIA prepared by Urban Crossroads.

Fleet Mix - In accordance with the TIA prepared by Urban Crossroads.

Construction Off-road Equipment Mitigation -

Riverside Motorcycle Park - Riverside-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	110.00	100.00
tblConstructionPhase	NumDays	1,550.00	100.00
tblConstructionPhase	NumDays	110.00	100.00
tblConstructionPhase	PhaseEndDate	8/13/2027	12/24/2021
tblConstructionPhase	PhaseEndDate	10/9/2026	3/19/2021
tblConstructionPhase	PhaseEndDate	3/12/2027	8/6/2021
tblConstructionPhase	PhaseStartDate	3/13/2027	8/9/2021
tblConstructionPhase	PhaseStartDate	10/31/2020	11/2/2020
tblConstructionPhase	PhaseStartDate	10/10/2026	3/22/2021
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.54	0.97
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.1410e-003	0.00
tblFleetMix	MCY	4.5820e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0380e-003	0.00
tblFleetMix	MHD	0.02	0.03
tblFleetMix	OBUS	1.3830e-003	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	UBUS	1.1830e-003	0.00
tblLandUse	LandUseSquareFeet	21,910.00	21,909.00
tblLandUse	LandUseSquareFeet	3,974,780.00	3,974,783.00
tblLandUse	LandUseSquareFeet	42,280.00	42,284.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

tblVehicleTrips	ST_TR	49.97	9.72
tblVehicleTrips	SU_TR	25.24	9.72
tblVehicleTrips	WD_TR	42.70	9.72

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	14.7855	97.2551	119.4412	0.4682	30.3193	2.1990	32.0276	10.0025	2.0231	12.0256	0.0000	47,613.3365	47,613.3365	2.6496	0.0000	47,679.5765
2021	17.2470	87.2158	110.0993	0.4582	30.3191	1.2368	31.5559	8.1499	1.1621	9.3120	0.0000	46,624.2706	46,624.2706	2.5043	0.0000	46,686.8776
Maximum	**17.2470**	**97.2551**	**119.4412**	**0.4682**	**30.3193**	**2.1990**	**32.0276**	**10.0025**	**2.0231**	**12.0256**	**0.0000**	**47,613.3365**	**47,613.3365**	**2.6496**	**0.0000**	**47,679.5765**

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	14.7855	97.2551	119.4412	0.4682	30.3193	2.1990	32.0276	8.1500	2.0231	9.7606	0.0000	47,613.3365	47,613.3365	2.6496	0.0000	47,679.5765
2021	17.2470	87.2158	110.0993	0.4582	30.3191	1.2368	31.5559	8.1499	1.1621	9.3120	0.0000	46,624.2706	46,624.2706	2.5043	0.0000	46,686.8776
Maximum	**17.2470**	**97.2551**	**119.4412**	**0.4682**	**30.3193**	**2.1990**	**32.0276**	**8.1500**	**2.0231**	**9.7606**	**0.0000**	**47,613.3365**	**47,613.3365**	**2.6496**	**0.0000**	**47,679.5765**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.21**	**0.00**	**10.62**	**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	2.7034	3.8000e-003	0.4140	3.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		0.8839	0.8839	2.3500e-003		0.9426
Energy	2.7700e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2564	30.2564	5.8000e-004	5.5000e-004	30.4362
Mobile	0.4409	0.9156	5.4324	0.0198	2.1894	0.0132	2.2026	0.5836	0.0122	0.5959		1,980.7012	1,980.7012	0.0350		1,981.5763
Total	**3.1471**	**0.9447**	**5.8675**	**0.0199**	**2.1894**	**0.0166**	**2.2060**	**0.5836**	**0.0156**	**0.5993**		**2,011.8415**	**2,011.8415**	**0.0379**	**5.5000e-004**	**2,012.9551**

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	2.7034	3.8000e-003	0.4140	3.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		0.8839	0.8839	2.3500e-003		0.9426
Energy	2.7700e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2564	30.2564	5.8000e-004	5.5000e-004	30.4362
Mobile	0.4409	0.9156	5.4324	0.0198	2.1894	0.0132	2.2026	0.5836	0.0122	0.5959		1,980.7012	1,980.7012	0.0350		1,981.5763
Total	**3.1471**	**0.9447**	**5.8675**	**0.0199**	**2.1894**	**0.0166**	**2.2060**	**0.5836**	**0.0156**	**0.5993**		**2,011.8415**	**2,011.8415**	**0.0379**	**5.5000e-004**	**2,012.9551**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/6/2020	3/27/2020	5	60	
2	Grading	Grading	3/28/2020	10/30/2020	5	155	
3	Building Construction	Building Construction	11/2/2020	3/19/2021	5	100	
4	Paving	Paving	3/22/2021	8/6/2021	5	100	
5	Architectural Coating	Architectural Coating	8/9/2021	12/24/2021	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 387.5

Acres of Paving: 91.75

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 63,426; Non-Residential Outdoor: 21,142; Striped Parking Area: 239,802 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,692.00	662.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	338.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.2 Site Preparation - 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	0.1138	0.0710	0.9516	2.6700e-003	0.2709	1.6000e-003	0.2725	0.0719	1.4700e-003	0.0733		265.6599	265.6599	6.7100e-003		265.8277
Total	**0.1138**	**0.0710**	**0.9516**	**2.6700e-003**	**0.2709**	**1.6000e-003**	**0.2725**	**0.0719**	**1.4700e-003**	**0.0733**		**265.6599**	**265.6599**	**6.7100e-003**		**265.8277**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**8.1298**	**2.1974**	**10.3272**	**4.4688**	**2.0216**	**6.4904**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.2 Site Preparation - 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	0.1138	0.0710	0.9516	2.6700e-003	0.2709	1.6000e-003	0.2725	0.0719	1.4700e-003	0.0733		265.6599	265.6599	6.7100e-003		265.8277
Total	**0.1138**	**0.0710**	**0.9516**	**2.6700e-003**	**0.2709**	**1.6000e-003**	**0.2725**	**0.0719**	**1.4700e-003**	**0.0733**		**265.6599**	**265.6599**	**6.7100e-003**		**265.8277**

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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**8.6733**	**2.1739**	**10.8472**	**3.5965**	**2.0000**	**5.5965**		**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

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	0.1265	0.0789	1.0573	2.9600e-003	0.3010	1.7800e-003	0.3028	0.0798	1.6400e-003	0.0815		295.1776	295.1776	7.4600e-003		295.3641
Total	**0.1265**	**0.0789**	**1.0573**	**2.9600e-003**	**0.3010**	**1.7800e-003**	**0.3028**	**0.0798**	**1.6400e-003**	**0.0815**		**295.1776**	**295.1776**	**7.4600e-003**		**295.3641**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9030	0.0000	3.9030	1.6184	0.0000	1.6184			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**3.9030**	**2.1739**	**6.0769**	**1.6184**	**2.0000**	**3.6184**	**0.0000**	**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

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	0.1265	0.0789	1.0573	2.9600e-003	0.3010	1.7800e-003	0.3028	0.0798	1.6400e-003	0.0815		295.1776	295.1776	7.4600e-003		295.3641
Total	**0.1265**	**0.0789**	**1.0573**	**2.9600e-003**	**0.3010**	**1.7800e-003**	**0.3028**	**0.0798**	**1.6400e-003**	**0.0815**		**295.1776**	**295.1776**	**7.4600e-003**		**295.3641**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.4 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	1.9649	71.3938	13.1448	0.1906	4.8510	0.4407	5.2918	1.3964	0.4216	1.8181		20,088.2468	20,088.2468	1.3958		20,123.1407
Worker	10.7008	6.6752	89.4478	0.2507	25.4683	0.1505	25.6188	6.7536	0.1386	6.8922		24,972.0267	24,972.0267	0.6310		24,987.8013
Total	**12.6656**	**78.0690**	**102.5927**	**0.4413**	**30.3193**	**0.5913**	**30.9106**	**8.1500**	**0.5602**	**8.7102**		**45,060.2735**	**45,060.2735**	**2.0267**		**45,110.9420**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.4 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	1.9649	71.3938	13.1448	0.1906	4.8510	0.4407	5.2918	1.3964	0.4216	1.8181		20,088.2468	20,088.2468	1.3958		20,123.1407
Worker	10.7008	6.6752	89.4478	0.2507	25.4683	0.1505	25.6188	6.7536	0.1386	6.8922		24,972.0267	24,972.0267	0.6310		24,987.8013
Total	**12.6656**	**78.0690**	**102.5927**	**0.4413**	**30.3193**	**0.5913**	**30.9106**	**8.1500**	**0.5602**	**8.7102**		**45,060.2735**	**45,060.2735**	**2.0267**		**45,110.9420**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 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	1.6316	63.7900	11.4676	0.1890	4.8508	0.1317	4.9825	1.3964	0.1259	1.5223		19,934.3784	19,934.3784	1.3207		19,967.3966
Worker	9.9794	5.9938	82.0565	0.2422	25.4683	0.1465	25.6147	6.7536	0.1349	6.8884		24,136.5283	24,136.5283	0.5675		24,150.7168
Total	**11.6110**	**69.7837**	**93.5241**	**0.4313**	**30.3191**	**0.2781**	**30.5973**	**8.1499**	**0.2608**	**8.4107**		**44,070.9067**	**44,070.9067**	**1.8883**		**44,118.1134**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 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	1.6316	63.7900	11.4676	0.1890	4.8508	0.1317	4.9825	1.3964	0.1259	1.5223		19,934.3784	19,934.3784	1.3207		19,967.3966
Worker	9.9794	5.9938	82.0565	0.2422	25.4683	0.1465	25.6147	6.7536	0.1349	6.8884		24,136.5283	24,136.5283	0.5675		24,150.7168
Total	**11.6110**	**69.7837**	**93.5241**	**0.4313**	**30.3191**	**0.2781**	**30.5973**	**8.1499**	**0.2608**	**8.4107**		**44,070.9067**	**44,070.9067**	**1.8883**		**44,118.1134**

3.5 Paving - 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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0131					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2687**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.5 Paving - 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	0.0885	0.0531	0.7275	2.1500e-003	0.2258	1.3000e-003	0.2271	0.0599	1.2000e-003	0.0611		213.9763	213.9763	5.0300e-003		214.1021
Total	**0.0885**	**0.0531**	**0.7275**	**2.1500e-003**	**0.2258**	**1.3000e-003**	**0.2271**	**0.0599**	**1.2000e-003**	**0.0611**		**213.9763**	**213.9763**	**5.0300e-003**		**214.1021**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0131					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2687**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.5 Paving - 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	0.0885	0.0531	0.7275	2.1500e-003	0.2258	1.3000e-003	0.2271	0.0599	1.2000e-003	0.0611		213.9763	213.9763	5.0300e-003		214.1021
Total	**0.0885**	**0.0531**	**0.7275**	**2.1500e-003**	**0.2258**	**1.3000e-003**	**0.2271**	**0.0599**	**1.2000e-003**	**0.0611**		**213.9763**	**213.9763**	**5.0300e-003**		**214.1021**

3.6 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	15.0346					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	**15.2535**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.6 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	1.9935	1.1973	16.3919	0.0484	5.0876	0.0293	5.1169	1.3491	0.0269	1.3761		4,821.5996	4,821.5996	0.1134		4,824.4340
Total	**1.9935**	**1.1973**	**16.3919**	**0.0484**	**5.0876**	**0.0293**	**5.1169**	**1.3491**	**0.0269**	**1.3761**		**4,821.5996**	**4,821.5996**	**0.1134**		**4,824.4340**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	15.0346					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	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**15.2535**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.6 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	1.9935	1.1973	16.3919	0.0484	5.0876	0.0293	5.1169	1.3491	0.0269	1.3761		4,821.5996	4,821.5996	0.1134		4,824.4340
Total	**1.9935**	**1.1973**	**16.3919**	**0.0484**	**5.0876**	**0.0293**	**5.1169**	**1.3491**	**0.0269**	**1.3761**		**4,821.5996**	**4,821.5996**	**0.1134**		**4,824.4340**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4409	0.9156	5.4324	0.0198	2.1894	0.0132	2.2026	0.5836	0.0122	0.5959		1,980.7012	1,980.7012	0.0350		1,981.5763
Unmitigated	0.4409	0.9156	5.4324	0.0198	2.1894	0.0132	2.2026	0.5836	0.0122	0.5959		1,980.7012	1,980.7012	0.0350		1,981.5763

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	410.96	410.96	410.96	1,038,997	1,038,997
Total	410.96	410.96	410.96	1,038,997	1,038,997

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Parking Lot	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Regional Shopping Center	0.966000	0.000000	0.000000	0.000000	0.000000	0.000000	0.034000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.7700e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2564	30.2564	5.8000e-004	5.5000e-004	30.4362
NaturalGas Unmitigated	2.7700e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2564	30.2564	5.8000e-004	5.5000e-004	30.4362

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	257.179	2.7700e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2564	30.2564	5.8000e-004	5.5000e-004	30.4362
Total		**2.7700e-003**	**0.0252**	**0.0212**	**1.5000e-004**		**1.9200e-003**	**1.9200e-003**		**1.9200e-003**	**1.9200e-003**		**30.2564**	**30.2564**	**5.8000e-004**	**5.5000e-004**	**30.4362**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.257179	2.7700e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2564	30.2564	5.8000e-004	5.5000e-004	30.4362
Total		**2.7700e-003**	**0.0252**	**0.0212**	**1.5000e-004**		**1.9200e-003**	**1.9200e-003**		**1.9200e-003**	**1.9200e-003**		**30.2564**	**30.2564**	**5.8000e-004**	**5.5000e-004**	**30.4362**

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	2.7034	3.8000e-003	0.4140	3.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		0.8839	0.8839	2.3500e-003		0.9426
Unmitigated	2.7034	3.8000e-003	0.4140	3.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		0.8839	0.8839	2.3500e-003		0.9426

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	0.4119					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.2529					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0387	3.8000e-003	0.4140	3.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		0.8839	0.8839	2.3500e-003		0.9426
Total	**2.7034**	**3.8000e-003**	**0.4140**	**3.0000e-005**		**1.4800e-003**	**1.4800e-003**		**1.4800e-003**	**1.4800e-003**		**0.8839**	**0.8839**	**2.3500e-003**		**0.9426**

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	0.4119					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.2529					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0387	3.8000e-003	0.4140	3.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		0.8839	0.8839	2.3500e-003		0.9426
Total	**2.7034**	**3.8000e-003**	**0.4140**	**3.0000e-005**		**1.4800e-003**	**1.4800e-003**		**1.4800e-003**	**1.4800e-003**		**0.8839**	**0.8839**	**2.3500e-003**		**0.9426**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Riverside Motorcycle Park

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	21.91	1000sqft	0.50	21,909.00	0
Other Non-Asphalt Surfaces	3,974.78	1000sqft	91.25	3,974,783.00	0
Regional Shopping Center	42.28	1000sqft	0.97	42,284.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The Proposed Project includes implementation of 42,284 square feet of building space, of which a majoriity will be optimized to support the proposed Pro Race Shop. Therefore, CalEEMod's "Regional Shopping Center" Land Use Subtype was determined to be most representative of the proposed building use.

Construction Phase - Demolition is not required.

Vehicle Trips - In accordance with the TIA prepared by Urban Crossroads.

Fleet Mix - In accordance with the TIA prepared by Urban Crossroads.

Construction Off-road Equipment Mitigation -

Riverside Motorcycle Park - Riverside-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	110.00	100.00
tblConstructionPhase	NumDays	1,550.00	100.00
tblConstructionPhase	NumDays	110.00	100.00
tblConstructionPhase	PhaseEndDate	8/13/2027	12/24/2021
tblConstructionPhase	PhaseEndDate	10/9/2026	3/19/2021
tblConstructionPhase	PhaseEndDate	3/12/2027	8/6/2021
tblConstructionPhase	PhaseStartDate	3/13/2027	8/9/2021
tblConstructionPhase	PhaseStartDate	10/31/2020	11/2/2020
tblConstructionPhase	PhaseStartDate	10/10/2026	3/22/2021
tblFleetMix	HHD	0.07	0.00
tblFleetMix	LDA	0.54	0.97
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.1410e-003	0.00
tblFleetMix	MCY	4.5820e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0380e-003	0.00
tblFleetMix	MHD	0.02	0.03
tblFleetMix	OBUS	1.3830e-003	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	UBUS	1.1830e-003	0.00
tblLandUse	LandUseSquareFeet	21,910.00	21,909.00
tblLandUse	LandUseSquareFeet	3,974,780.00	3,974,783.00
tblLandUse	LandUseSquareFeet	42,280.00	42,284.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

tblVehicleTrips	ST_TR	49.97	9.72
tblVehicleTrips	SU_TR	25.24	9.72
tblVehicleTrips	WD_TR	42.70	9.72

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	14.8962	97.3010	103.6797	0.4357	30.3193	2.1990	32.0322	10.0025	2.0231	12.0256	0.0000	44,349.3156	44,349.3156	2.7177	0.0000	44,417.2584
2021	17.2531	87.0269	95.5534	0.4266	30.3191	1.2403	31.5594	8.1499	1.1654	9.3153	0.0000	43,451.3909	43,451.3909	2.5748	0.0000	43,515.7613
Maximum	**17.2531**	**97.3010**	**103.6797**	**0.4357**	**30.3193**	**2.1990**	**32.0322**	**10.0025**	**2.0231**	**12.0256**	**0.0000**	**44,349.3156**	**44,349.3156**	**2.7177**	**0.0000**	**44,417.2584**

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	14.8962	97.3010	103.6797	0.4357	30.3193	2.1990	32.0322	8.1500	2.0231	9.7649	0.0000	44,349.3156	44,349.3156	2.7177	0.0000	44,417.2584
2021	17.2531	87.0269	95.5534	0.4266	30.3191	1.2403	31.5594	8.1499	1.1654	9.3153	0.0000	43,451.3909	43,451.3909	2.5748	0.0000	43,515.7613
Maximum	**17.2531**	**97.3010**	**103.6797**	**0.4357**	**30.3193**	**2.1990**	**32.0322**	**8.1500**	**2.0231**	**9.7649**	**0.0000**	**44,349.3156**	**44,349.3156**	**2.7177**	**0.0000**	**44,417.2584**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.21**	**0.00**	**10.59**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7034	3.8000e-003	0.4140	3.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		0.8839	0.8839	2.3500e-003		0.9426
Energy	2.7700e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2564	30.2564	5.8000e-004	5.5000e-004	30.4362
Mobile	0.3471	0.9369	4.5833	0.0180	2.1894	0.0132	2.2026	0.5836	0.0123	0.5959		1,802.8045	1,802.8045	0.0317		1,803.5968
Total	**3.0533**	**0.9660**	**5.0185**	**0.0182**	**2.1894**	**0.0166**	**2.2060**	**0.5836**	**0.0157**	**0.5993**		**1,833.9448**	**1,833.9448**	**0.0346**	**5.5000e-004**	**1,834.9757**

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	2.7034	3.8000e-003	0.4140	3.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		0.8839	0.8839	2.3500e-003		0.9426
Energy	2.7700e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2564	30.2564	5.8000e-004	5.5000e-004	30.4362
Mobile	0.3471	0.9369	4.5833	0.0180	2.1894	0.0132	2.2026	0.5836	0.0123	0.5959		1,802.8045	1,802.8045	0.0317		1,803.5968
Total	**3.0533**	**0.9660**	**5.0185**	**0.0182**	**2.1894**	**0.0166**	**2.2060**	**0.5836**	**0.0157**	**0.5993**		**1,833.9448**	**1,833.9448**	**0.0346**	**5.5000e-004**	**1,834.9757**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/6/2020	3/27/2020	5	60	
2	Grading	Grading	3/28/2020	10/30/2020	5	155	
3	Building Construction	Building Construction	11/2/2020	3/19/2021	5	100	
4	Paving	Paving	3/22/2021	8/6/2021	5	100	
5	Architectural Coating	Architectural Coating	8/9/2021	12/24/2021	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 387.5

Acres of Paving: 91.75

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 63,426; Non-Residential Outdoor: 21,142; Striped Parking Area: 239,802 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,692.00	662.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	338.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.2 Site Preparation - 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	0.1139	0.0735	0.7613	2.3900e-003	0.2709	1.6000e-003	0.2725	0.0719	1.4700e-003	0.0733		238.2240	238.2240	5.8000e-003		238.3689
Total	**0.1139**	**0.0735**	**0.7613**	**2.3900e-003**	**0.2709**	**1.6000e-003**	**0.2725**	**0.0719**	**1.4700e-003**	**0.0733**		**238.2240**	**238.2240**	**5.8000e-003**		**238.3689**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**8.1298**	**2.1974**	**10.3272**	**4.4688**	**2.0216**	**6.4904**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.2 Site Preparation - 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	0.1139	0.0735	0.7613	2.3900e-003	0.2709	1.6000e-003	0.2725	0.0719	1.4700e-003	0.0733		238.2240	238.2240	5.8000e-003		238.3689
Total	**0.1139**	**0.0735**	**0.7613**	**2.3900e-003**	**0.2709**	**1.6000e-003**	**0.2725**	**0.0719**	**1.4700e-003**	**0.0733**		**238.2240**	**238.2240**	**5.8000e-003**		**238.3689**

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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**8.6733**	**2.1739**	**10.8472**	**3.5965**	**2.0000**	**5.5965**		**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

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	0.1266	0.0816	0.8459	2.6600e-003	0.3010	1.7800e-003	0.3028	0.0798	1.6400e-003	0.0815		264.6933	264.6933	6.4400e-003		264.8544
Total	**0.1266**	**0.0816**	**0.8459**	**2.6600e-003**	**0.3010**	**1.7800e-003**	**0.3028**	**0.0798**	**1.6400e-003**	**0.0815**		**264.6933**	**264.6933**	**6.4400e-003**		**264.8544**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9030	0.0000	3.9030	1.6184	0.0000	1.6184			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**3.9030**	**2.1739**	**6.0769**	**1.6184**	**2.0000**	**3.6184**	**0.0000**	**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

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	0.1266	0.0816	0.8459	2.6600e-003	0.3010	1.7800e-003	0.3028	0.0798	1.6400e-003	0.0815		264.6933	264.6933	6.4400e-003		264.8544
Total	**0.1266**	**0.0816**	**0.8459**	**2.6600e-003**	**0.3010**	**1.7800e-003**	**0.3028**	**0.0798**	**1.6400e-003**	**0.0815**		**264.6933**	**264.6933**	**6.4400e-003**		**264.8544**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.4 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	2.0665	71.2098	15.2679	0.1841	4.8510	0.4453	5.2963	1.3964	0.4260	1.8224		19,403.1985	19,403.1985	1.5499		19,441.9457
Worker	10.7099	6.9052	71.5633	0.2247	25.4683	0.1505	25.6188	6.7536	0.1386	6.8922		22,393.0540	22,393.0540	0.5450		22,406.6783
Total	**12.7764**	**78.1150**	**86.8312**	**0.4088**	**30.3193**	**0.5958**	**30.9152**	**8.1500**	**0.5646**	**8.7146**		**41,796.2525**	**41,796.2525**	**2.0949**		**41,848.6240**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.4 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	2.0665	71.2098	15.2679	0.1841	4.8510	0.4453	5.2963	1.3964	0.4260	1.8224		19,403.1985	19,403.1985	1.5499		19,441.9457
Worker	10.7099	6.9052	71.5633	0.2247	25.4683	0.1505	25.6188	6.7536	0.1386	6.8922		22,393.0540	22,393.0540	0.5450		22,406.6783
Total	**12.7764**	**78.1150**	**86.8312**	**0.4088**	**30.3193**	**0.5958**	**30.9152**	**8.1500**	**0.5646**	**8.7146**		**41,796.2525**	**41,796.2525**	**2.0949**		**41,848.6240**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 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	1.7281	63.3967	13.4616	0.1826	4.8508	0.1352	4.9860	1.3964	0.1293	1.5257		19,253.9878	19,253.9878	1.4685		19,290.7004
Worker	10.0103	6.1982	65.5166	0.2171	25.4683	0.1465	25.6147	6.7536	0.1349	6.8884		21,644.0392	21,644.0392	0.4903		21,656.2966
Total	**11.7384**	**69.5948**	**78.9782**	**0.3997**	**30.3191**	**0.2816**	**30.6008**	**8.1499**	**0.2641**	**8.4141**		**40,898.0270**	**40,898.0270**	**1.9588**		**40,946.9971**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 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	1.7281	63.3967	13.4616	0.1826	4.8508	0.1352	4.9860	1.3964	0.1293	1.5257		19,253.9878	19,253.9878	1.4685		19,290.7004
Worker	10.0103	6.1982	65.5166	0.2171	25.4683	0.1465	25.6147	6.7536	0.1349	6.8884		21,644.0392	21,644.0392	0.4903		21,656.2966
Total	**11.7384**	**69.5948**	**78.9782**	**0.3997**	**30.3191**	**0.2816**	**30.6008**	**8.1499**	**0.2641**	**8.4141**		**40,898.0270**	**40,898.0270**	**1.9588**		**40,946.9971**

3.5 Paving - 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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0131					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2687**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.5 Paving - 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	0.0887	0.0550	0.5808	1.9200e-003	0.2258	1.3000e-003	0.2271	0.0599	1.2000e-003	0.0611		191.8798	191.8798	4.3500e-003		191.9885
Total	**0.0887**	**0.0550**	**0.5808**	**1.9200e-003**	**0.2258**	**1.3000e-003**	**0.2271**	**0.0599**	**1.2000e-003**	**0.0611**		**191.8798**	**191.8798**	**4.3500e-003**		**191.9885**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0131					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2687**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.5 Paving - 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	0.0887	0.0550	0.5808	1.9200e-003	0.2258	1.3000e-003	0.2271	0.0599	1.2000e-003	0.0611		191.8798	191.8798	4.3500e-003		191.9885
Total	**0.0887**	**0.0550**	**0.5808**	**1.9200e-003**	**0.2258**	**1.3000e-003**	**0.2271**	**0.0599**	**1.2000e-003**	**0.0611**		**191.8798**	**191.8798**	**4.3500e-003**		**191.9885**

3.6 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	15.0346					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	**15.2535**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.6 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	1.9997	1.2382	13.0878	0.0434	5.0876	0.0293	5.1169	1.3491	0.0269	1.3761		4,323.6910	4,323.6910	0.0979		4,326.1396
Total	**1.9997**	**1.2382**	**13.0878**	**0.0434**	**5.0876**	**0.0293**	**5.1169**	**1.3491**	**0.0269**	**1.3761**		**4,323.6910**	**4,323.6910**	**0.0979**		**4,326.1396**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	15.0346					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	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**15.2535**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.6 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	1.9997	1.2382	13.0878	0.0434	5.0876	0.0293	5.1169	1.3491	0.0269	1.3761		4,323.6910	4,323.6910	0.0979		4,326.1396
Total	**1.9997**	**1.2382**	**13.0878**	**0.0434**	**5.0876**	**0.0293**	**5.1169**	**1.3491**	**0.0269**	**1.3761**		**4,323.6910**	**4,323.6910**	**0.0979**		**4,326.1396**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3471	0.9369	4.5833	0.0180	2.1894	0.0132	2.2026	0.5836	0.0123	0.5959		1,802.8045	1,802.8045	0.0317		1,803.5968
Unmitigated	0.3471	0.9369	4.5833	0.0180	2.1894	0.0132	2.2026	0.5836	0.0123	0.5959		1,802.8045	1,802.8045	0.0317		1,803.5968

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	410.96	410.96	410.96	1,038,997	1,038,997
Total	410.96	410.96	410.96	1,038,997	1,038,997

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Parking Lot	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Regional Shopping Center	0.966000	0.000000	0.000000	0.000000	0.000000	0.000000	0.034000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.7700e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2564	30.2564	5.8000e-004	5.5000e-004	30.4362
NaturalGas Unmitigated	2.7700e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2564	30.2564	5.8000e-004	5.5000e-004	30.4362

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	257.179	2.7700e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2564	30.2564	5.8000e-004	5.5000e-004	30.4362
Total		**2.7700e-003**	**0.0252**	**0.0212**	**1.5000e-004**		**1.9200e-003**	**1.9200e-003**		**1.9200e-003**	**1.9200e-003**		**30.2564**	**30.2564**	**5.8000e-004**	**5.5000e-004**	**30.4362**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.257179	2.7700e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2564	30.2564	5.8000e-004	5.5000e-004	30.4362
Total		**2.7700e-003**	**0.0252**	**0.0212**	**1.5000e-004**		**1.9200e-003**	**1.9200e-003**		**1.9200e-003**	**1.9200e-003**		**30.2564**	**30.2564**	**5.8000e-004**	**5.5000e-004**	**30.4362**

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	2.7034	3.8000e-003	0.4140	3.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		0.8839	0.8839	2.3500e-003		0.9426
Unmitigated	2.7034	3.8000e-003	0.4140	3.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		0.8839	0.8839	2.3500e-003		0.9426

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	0.4119					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.2529					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0387	3.8000e-003	0.4140	3.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		0.8839	0.8839	2.3500e-003		0.9426
Total	**2.7034**	**3.8000e-003**	**0.4140**	**3.0000e-005**		**1.4800e-003**	**1.4800e-003**		**1.4800e-003**	**1.4800e-003**		**0.8839**	**0.8839**	**2.3500e-003**		**0.9426**

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	0.4119					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.2529					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0387	3.8000e-003	0.4140	3.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		0.8839	0.8839	2.3500e-003		0.9426
Total	**2.7034**	**3.8000e-003**	**0.4140**	**3.0000e-005**		**1.4800e-003**	**1.4800e-003**		**1.4800e-003**	**1.4800e-003**		**0.8839**	**0.8839**	**2.3500e-003**		**0.9426**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Table A1
Motorcross Park Riverside
Onsite Track Operational Emissions

Operation		Emission Factor	Units	Equation Variables		Emissions							
				1	Hours or Miles Per Day	PM-10 lbs/day	PM-2.5 lbs/day	ROG lbs/day	CO lbs/day	NOX lbs/day	SOX lbs/day	CO2 lbs/day	CH4 lbs/day
Equipment Exhaust Emissions				Equipment #									
PM-10 & PM-2.5	Dozer	0.0630	lbs/hr	1	4	0.252	0.232						
	Tractor	0.0378	lbs/hr	1	4	0.151	0.139						
	Water truck	0.0139	lbs/hr	1	6	0.083	0.077						
ROG	Dozer	0.2118	lbs/hr	1	4			0.85					
	Tractor	0.1049	lbs/hr	1	4			0.42					
	Water truck	0.0563	lbs/hr	1	6			0.34					
CO	Dozer	0.8006	lbs/hr	1	4				3.20				
	Tractor	0.5260	lbs/hr	1	4				2.10				
	Water truck	0.3508	lbs/hr	1	6				2.10				
NOX	Dozer	1.5773	lbs/hr	1	4					6.31			
	Tractor	0.6772	lbs/hr	1	4					2.71			
	Water truck	0.3519	lbs/hr	1	6					2.11			
										0.00			
SOX	Dozer	0.0025	lbs/hr	1	4						0.01		
	Tractor	0.0013	lbs/hr	1	4						0.01		
	Water truck	0.0013	lbs/hr	1	6						0.01		
											0.00		
CO2	Dozer	239.00	lbs/hr	1	4							956.0	
	Tractor	114.00	lbs/hr	1	4							456.0	
	Water Truck	122.00	lbs/hr	1	6							732.0	
CH4	Dozer	0.0191	lbs/hr	1	4								0.08
	Tractor	0.0095	lbs/hr	1	4								0.04
	Water Truck	0.00510	lbs/hr	1	6								0.03
					Total (lbs/day)	0.49	0.45	1.60	7.41	11.13	0.02	2,144	0.15
								Annual Metric Tons of CO2e (MTCO2e)				355.71	57.28

Emission Sources: SCAQMD Offroad Mobile Source Emissions Factors 2020
PM2.5 fraction of PM10 Exhaust is 0.92 (CEIDARS List)

Motorcycles estimated are based on 96 laps per day or 6,990 miles/day. This represents an "Event Day". Event days occur 20 days a year. Therefore, this is a worst case daily asumption.

Table A2
Motorcross Park Riverside
On-Site Motorcycles Emissions

Operation		Emission Factor	Units	Equation Variables 1	Equation Variables 2	Emissions PM-10 lbs/day	PM-2.5 lbs/day	ROG lbs/day	CO lbs/day	NOX lbs/day	SOX lbs/day	CO2 lbs/day	CH4 lbs/day
Vehicle Emissions On-site				hours per day	vmt						Negl		
PM-10	Motorcycles	0.00005	lbs/mile		6,990	0.350							
PM-2.5		0.00005	lbs/mile		6,990		0.350						
ROG	Motorcycles	0.00510	lbs/mile		6990			35.6					
CO	Motorcycles	0.00360	lbs/mile		6990				25.16				
NOX	Motorcycles	0.00210	lbs/mile		6990					14.68			
CO2	Motorcycles	0.48000	lbs/mile		6990							3,355	
CH4	Motorcycles	0.00077	lbs/mile		6990								5.38
					Total	0.35	0.35	35.65	25.16	14.68	Negl	3,355.20	5.38
								Annual Metric Tons of CO2e (MTCO2e)				556.7	22.3

Source:
Motorcycle Emissions Factors: EMVAC2017 (year 2020)
Notes:
PM2.5 fraction of PM10 Exhaust is 0.92 (CEIDARS List)
vmt = miles driven on-site
Motorcycles estimated are based on 96 laps per day or 6,990 miles/day. This represents an "Event Day". Event days occur 20 days a year. Therefore, this is a worst case daily asumption.