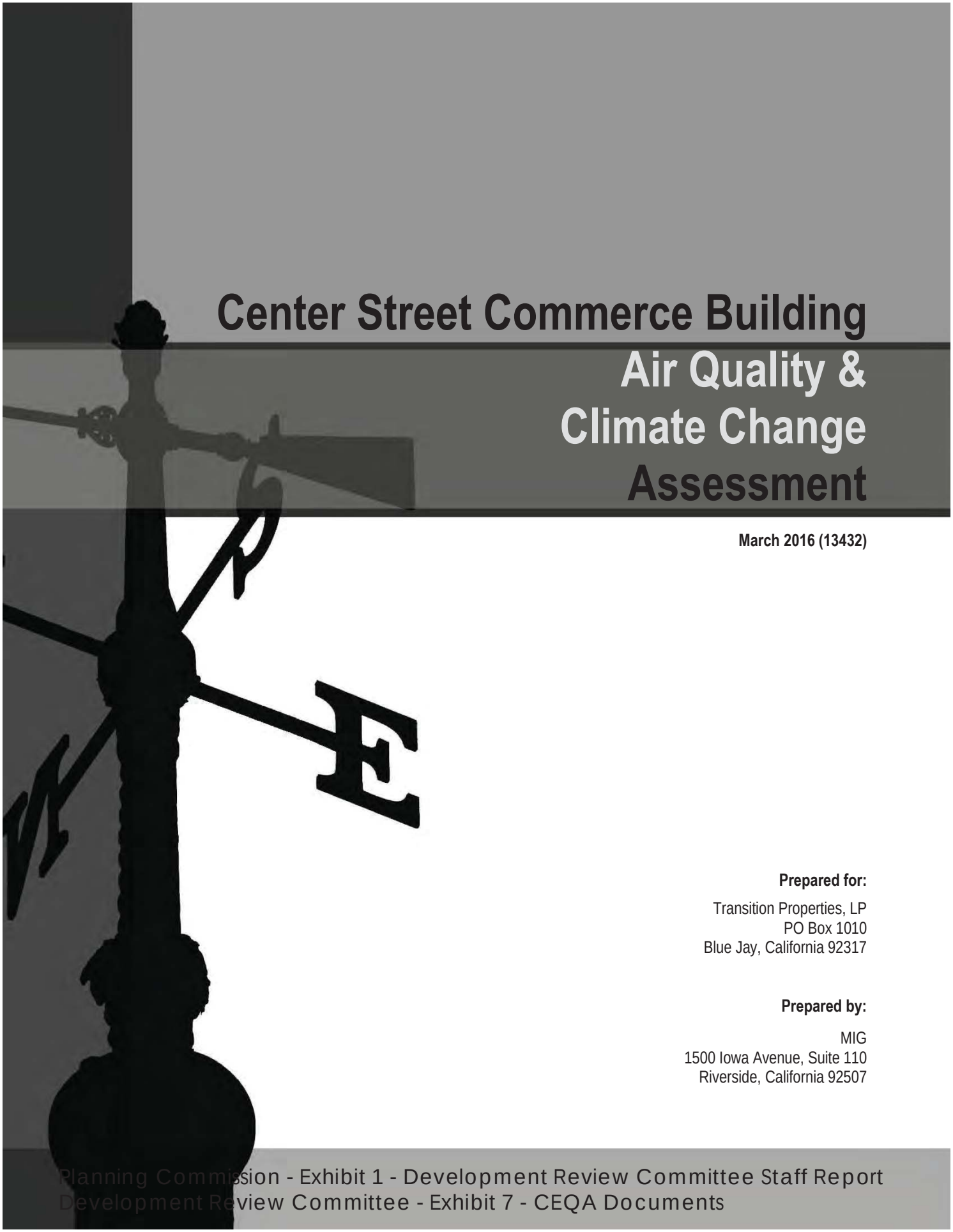

Center Street Commerce Building

Air Quality & Climate Change Assessment

March 2016 (13432)

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Center Street Commerce Building

Air Quality & Climate Change Assessment

March 2016

City of Riverside

Planning Commission - Exhibit 1 - Development Review Committee Staff Report
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1 Executive Summary

Construction-related and operational emissions of criteria pollutants were modeled and analyzed for the proposed Center Street Commerce Building project. The building is located south of Center Street and north of Placentia Lane in the City of Riverside. This report also analyzes the project's consistency with the South Coast Air Quality Management District (SCAQMD) 2012 Air Quality Management Plan (AQMP) for the South Coast Air Basin. Cumulative impacts were analyzed using the methodology provided by the 1993 SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook. Please note that a Health Risk Assessment (HRA) was prepared for this project under separate cover.

Additionally, this report models and analyzes construction- and operation-related emissions of greenhouse gases from the proposed project. This analysis utilizes guidance provided in the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper and the *Quantifying Greenhouse Gas Mitigation Measures* handbook. Modeling of emissions utilizes the California Emissions Estimator Model (CalEEMod) v 2013.2.2.

1.1 Project Description

The project includes the construction of a 308,000-square-foot building on 15.63 acres located south of Center Street and north of Placentia Lane in the City of Riverside, California. The building includes 110,591 square feet of landscaping, the potential for up to 282 parking stalls, and 47 loading docks. There is no tenant for the proposed building, thus, the operational components of the project are speculative at this time. The City of Riverside recommended consideration of a "manufacturing" use as a worst-case, conservative approach to assessing operational impacts. The building has been treated as such herein, consistent with the project traffic impact analysis and health risk assessment. Project design features related to pollutant emissions includes use of low-VOC coatings on interiors and exterior surface of 37 grams per liter or less.

1.2 Air Quality

The project will not result in substantial emissions of nitrogen oxides, volatile organic compounds, or particulate matter and would not exceed the regional growth assumptions used in the Air Quality Management Plan (AQMP). The project will not individually cause or cumulatively contribute to an air quality standard violation. Emissions of carbon monoxide and localized construction emissions will not substantially impact sensitive receptors in vicinity of the project. The project will not emit substantial amounts of diesel particulate matter due to the operation of heavy-duty trucks on the project site. The project will not expose a substantial number of people to odors.

1.3 Climate Change

Greenhouse gas emissions will not exceed the annual 10,000 metric ton carbon dioxide equivalent threshold established by the South Coast Air Quality Management District and will not conflict with state greenhouse gas emissions strategies.

1.4 Mitigation Measures

None required.

2 Introduction

This report models and analyzes construction- and operation-related emissions of criteria air pollutants and greenhouse gas emissions from the proposed Center Street Commerce Building project totaling 308,000 square feet on 15.63 acres located in City of Riverside, California.

The air quality analysis provided herein utilizes guidance provided in the South Coast Air Quality Management District (SCAQMD) the 1993 California Environmental Quality Act (CEQA) Air Quality handbook as amended and supplemented (http://www.aqmd.gov/ceqa/hdbk.html). Please note that analysis of toxic air contaminants (TAC) is provided under separate cover. Pollutant emissions were assessed utilizing the following:

- California Emissions Estimator Model (CalEEMod) v 2013.2.2
- EMFAC2014
- Final Localized Significance Thresholds Methodology

The climate change analysis provided herein utilizes guidance provided in the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper and the *Quantifying Greenhouse Gas Mitigation Measures* handbook. Modeling of greenhouse gas emissions utilizes the California Emissions Estimator Model (CalEEMod) v 2013.2.2.

This report has been prepared utilizing project-specific characteristics where available. In those instances, where project-specific data is not available, the analysis has been supplemented by model defaults or other standardized sources of comparable data. In any case where non-project defaults or other data have been used, a "worst-case" scenario was developed to ensure a conservative estimate of emissions.

This report has been prepared for use by the Lead Agency to assess potential project-related air quality impacts in compliance with the State CEQA Statutes and Guidelines, particularly in respect to the air quality issues identified in Appendix G of the State CEQA Guidelines. This report does not make determinations of significance pursuant to CEQA because such determinations are required to be made solely in the purview of the Lead Agency.

This document has been reviewed in accordance with the *Table 7-2, Checklist for an Air Quality Analysis Section* of the SCAQMD Air Quality Handbook for quality control purposes.

This report was prepared by Christopher Brown (Director of Environmental Services), Olivia Chan (Associate Analyst), and Cameron Hile (Assistant Analyst) of MIG, Inc. under contract with Transitions Properties, LP.

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3.1 Climate

The project is located in the City of Riverside. The City of Riverside and the broader Inland Empire are defined by a semi-arid, Mediterranean climate with mild winters and warm summers. Annual rainfall averages 9.86 inches with the rainy season occurring during the winter.[1] The coolest month of the year is December with an average monthly low of 41.3° Fahrenheit (F). The warmest month is August with an average monthly high of 94.4° F. Riverside is located at an elevation of approximately 700 feet to 1,400 feet above mean sea level (AMSL).[2] The project site is located at an approximate elevation of 830 AMSL. Wind generally blows from the west.[3]

3.2 Regional Air Quality

The proposed project is located within the South Coast Air Basin (Basin).[4] The basin includes Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. The San Gabriel, San Bernardino, and San Jacinto Mountains bound the Basin to the north and east that trap ambient air and pollutants within the Los Angeles and Inland Empire valleys below. The South Coast Air Quality Management District (SCAQMD) manages the Basin. Pursuant to the California Clean Air Act (CCAA), SCAQMD is responsible for bringing air quality within the Basin into conformity with federal and State air quality standards by reducing existing emission levels and ensuring that future emission levels meet applicable air quality standards. SCAQMD works with federal, State, and local agencies to reduce pollutant sources through the development of rules and regulations.

Both California and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as *criteria pollutants*). These pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), inhalable particulate matter with a diameter of 10 microns or less (PM_{10}), fine particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$), and lead (Pb). The State has also established AAQS for the additional pollutants of visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the State and federal standards differ, State AAQS are more stringent than federal AAQS. Federal and State standards are shown in Table 1 (Ambient Air Quality Standards). A brief description of each criteria pollutant is provided below.

Ozone. Ozone is a pungent, colorless, and highly reactive gas that forms from the atmospheric reaction of organic gases with nitrogen oxides in the presence of sunlight. Ozone is most commonly associated with smog. Ozone precursors such as reactive organic gases (ROG) and oxides of nitrogen (NO_X) are released from mobile and stationary sources. Ozone is a respiratory irritant and can cause cardiovascular diseases, eye irritation, and impaired cardiopulmonary function. Ozone can also damage building materials and plant leafs.

Carbon Monoxide. Carbon monoxide is primarily emitted from vehicles due to the incomplete combustion of fuels. Carbon monoxide has wide ranging impacts on human health because it combines with hemoglobin in the body and reduces the amount of oxygen transported in the bloodstream. Carbon monoxide can result in reduced tolerance for exercise, impairment of mental function, impairment of fetal development, headaches, nausea, and death at high levels of exposure.

Nitrogen Dioxide. Nitrogen dioxide and other oxides of nitrogen (NO_X) contribute to the formation of smog and results in the brownish haze associated with it. They are primarily emitted from motor vehicle exhaust but can be omitted from other high-temperature stationary sources. Nitrogen oxides can aggravate respiratory illnesses, reduce visibility, impair plant growth, and form acid rain.

Table 1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secontary[3,6]	Method[7]
Ozone (O_3)	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)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM_{10}) [8]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		-		
Fine Particulate Matter($PM_{2.5}$) [8]	24 Hour	-	-	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12 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 (10mg/m^3)		9 ppm (10 mg/m^3)	-	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/ m^3)		-	-	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.03 ppm (57 µg/m^3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m^3)		100 ppb (188 µg/m^3)	-	
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	-	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method) -
	3 Hour	-		-	0.5 ppm (1,300 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[11,12]	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[10]	-		0.15 µg/m^3		
Visibility Reducing Particles[13]	8 Hour	See footnote 13	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[11]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: ARB, October 2015
PPM, parts per million
µg/m3, micrograms per cubic meter
Footnotes for this table can be found at http://www.arb.ca.gov/research/aaqs/aaqs2.pdf

Particulate Matter. Particulate matter is a complex mixture of small-suspended particles and liquid droplets in the air. Particulate matter between ten microns and 2.5 microns is known as PM_{10}, also known as coarse or inhalable particulate matter. PM_{10} is emitted from diverse sources including road dust, diesel soot, combustion products, abrasion of tires and brakes, construction operations, and windstorms. PM_{10} can also be formed secondarily in the atmosphere when NO_2 and SO_2 react with ammonia. Particulate matter less than 2.5 microns in size are called $PM_{2.5}$ or fine particulate matter. $PM_{2.5}$ is primarily emitted from point

sources such as power plants, industrial facilities, automobiles, wood-burning fireplaces, and construction sites. Particulate matter is deposited in the lungs and cause permanent lung damage, potentially resulting in lung disease and respiratory symptoms like asthma and bronchitis. Particulate matter has also been linked to cardiovascular problems such as arrhythmia and heart attacks. Particulate matter can also interfere with the body's ability to clear the respiratory tract and can act as a carrier of absorbed toxic substances. Particulate matter causes welfare issues because it scatters light and reduces visibility, causes environmental damage such as increasing the acidity of lakes and streams, and can stain and damage stone, such as that applied in statues and monuments.

Sulfur Dioxide. Sulfur dioxide and other oxides of sulfur (SO_X) are reactive gases emitted from the burning of fossil fuels, primarily from power plants and other industrial facilities.[5] Other less impacting sources include metal extraction activities, locomotives, large ships, and off-road equipment. Human health impacts associated with SO_X emissions include bronchoconstriction and increased asthma symptoms.

Lead. Lead is primarily emitted from metal processing facilities (i.e. secondary lead smelters) and other sources such as manufacturers of batteries, paints, ink, ceramics, and ammunition. Historically, automobiles were the primary sources before lead was phased out of gasoline. The health effects of exposure to lead include gastrointestinal disturbances, anemia, kidney diseases, and potential neuromuscular and neurologic dysfunction. Lead is also classified as a probable human carcinogen.

3.3 Non-Attainment Status

Air pollution levels are measured at monitoring stations located throughout the Basin. Areas that are in nonattainment with respect to criteria pollutants are required to prepare plans and implement measures that will bring the region into attainment. Table 2 (South Coast Air Basin Attainment Status) summarizes the attainment status in the Basin for the criteria pollutants. The Basin is currently in nonattainment status for ozone and inhalable and fine particulate matter.

Pollution problems in the Basin are caused by emissions within the area and the specific meteorology that promotes pollutant concentrations. Emissions sources vary widely from smaller sources such as individual residential water heaters and short-term grading activities to extensive operational sources including long-term operation of electrical power plants and other intense industrial use. Pollutants in the Basin are blown inward from coastal areas by sea breezes from the Pacific Ocean and are prevented from horizontally dispersing due to the surrounding mountains. This is further complicated by atmospheric temperature inversions that create inversion layers. The inversion layer in Southern California refers to the warm layer of air that lies over the cooler air from the Pacific Ocean. This is strongest in the summer and prevents ozone and other pollutants from dispersing upward. A ground-level surface inversion commonly occurs during winter nights and traps carbon monoxide emitted during the morning rush hour.

Table 2
South Coast Air Basin Attainment Status

Pollutant	Federal	State
O_3 (1-hr)	--	Nonattainment
O_3 (8-hr)	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO_2	Attainment	Nonattainment
SO_2	Attainment	Attainment
Pb	Nonattainment	Nonattainment
VRP	--	Unclassified
SO_4	--	Attainment
H_2S	--	Unclassified
Sources: ARB 2014		

3.4 Local Air Quality

The City of Riverside is located within the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The project site is located in Area 23. Air quality in Area 23 is monitored in Riverside. Air monitoring results for station 4144 over the last three years of available data is summarized in Table 3 (2011-2013 Local Air Quality).[6] [7] [8] Table 4 (2011-2013 Air Quality Standards Exceedance) summarizes the number of days for each monitoring year that air quality standards were exceeded. Based on the 2011-2013 air quality monitoring data, ozone pollution did not exceed the State-8-hour standard or the Federal 8-hour standard in 2013. The Metropolitan Riverside County area experiences ozone pollution and has exceeded the State 8-hr maximum concentration for 70 days in 2012 and 92 days in 2011. This is not necessarily due to local production of ozone, but due to how ozone forms and travels over the Basin. Ozone precursors are emitted primarily in the urban centers of the Basin such as Los Angeles. Ozone does not form immediately but rather forms over the day. This combined with prevailing winds blowing ozone precursors inland cause the highest concentrations of ozone in the Basin to occur in Riverside County and mountain regions. The County also experiences particulate matter pollution, with approximately 19 percent of PM_{10} samples in year 2012 exceeding the State standard.

Table 3
2011-2013 Local Air Quality

Monitoring Station	CO		O_3 (PPM)		NO_2 (PPB)		PM_{10} (µg/m³)		$PM_{2.5}$ (µg/m³)		TSP (µg/m³)		Pb (µg/m³)		SO_4 (µg/m³)
	Max 1-hr	Max 8-hr	Max 1-hr	Max 8-hr	Max 1-hr	AAM	Max 24-hr	AAM	Max 24-hr	AAM	Max 24-hr	AAM	Max Month	Max Qtr	Max 24-hr
Metropolitan Riverside County 2															
2013	--	1.6	--	--	57.6	15.8	--	--	53.7	11.28	--	--	0.007	0.006	--
2012	--	1.6	0.126	0.102	61.7	15.5	67	34.5	38.1	13.51	126	65.7	0.008	0.006	7.7
2011	--	1.4	0.128	0.115	63.3	16.6	82	33.7	60.8	13.6	107	62.7	0.007	0.007	5.1

Source: SCAQMD 2011-2013
* specific station data is not provided by SCAQMD; however, all stations are noted as not exceeding the 20 PPM state 1-hour standard
-- pollutant not monitored
PPM, parts per million
ug/m3, micrograms per cubic meter
AAM, annual arithmetic mean

Table 4
2011-2013 Air Quality Standards Exceedance

Monitoring Station	O_3 (PPM)			PM_{10} (µg/m³)		$PM_{2.5}$ (µg/m³)
	Fed* 8-hr	State 1-hr	State 8-hr	Fed 24-hr	State 24-hr	Fed^ 24-hr
Metropolitan Riverside County 2						
2013	--	--	--	--	--	1
2012	47	27	70	0	19	7
2011	67	52	92	0	14	4

Source: SCAQMD 2011-2013
-- pollutant not monitored
* 0.075 ppm
^35 µg/m3

3.5 Sensitive Receptors

Some populations are more susceptible to the effects of air pollution than the population at large; these populations are defined as sensitive receptors. Sensitive receptors include children, the elderly, the sick, and the athletic. Land uses associated with sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive receptors are located north, east, and south of the project. The Ab Brown Sports Complex Park is located directly south of the project site. Residential uses are located north and west of the project site. Exhibit 2 (Radius Map) identifies existing development in the project vicinity based on recent assessor's parcel data.

3.6 Local Transportation

The proposed project is located south of Center Street and north of Placentia Lane. Both roadways are two-lane, undivided roadways.

3.7 Climate Change

3.7.1 Defining Climate Change

Climate change is the distinct change in measures of climate for a long period of time. Climate change can result from natural processes and from human activities. Natural changes in the climate can be caused by indirect processes such as changes in the Earth's orbit around the Sun or direct changes within the climate system itself (i.e. changes in ocean circulation). Human activities can affect the atmosphere through emissions of gases and changes to the planet's surface. Emissions affect the atmosphere directly by changing its chemical composition, while changes to the land surface indirectly affects the atmosphere by changing the way the Earth absorbs gases from the atmosphere. The term "climate change" is preferred over the term "global warming" because "climate change" conveys the fact that other changes can occur beyond just average increase in temperatures near the Earth's surface. Elements that indicate that climate change is occurring on Earth include:

- Rising of global surface temperatures by 1.3° Fahrenheit (F) over the last 100 years
- Changes in precipitation patterns
- Melting ice in the Arctic
- Melting glaciers throughout the world
- Rising ocean temperatures
- Acidification of oceans
- Range shifts in plant and animal species

Climate change is intimately tied to the Earth's greenhouse effect. The greenhouse effect is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it keeps the planet approximately 60° F warmer than without it. Emissions from human activities since the beginning of the industrial revolution (approximately 150 years) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature. Human activities that enhance the greenhouse effect are detailed below.

Greenhouse Gases

The greenhouse effect is caused by a variety of "greenhouse gases". Greenhouse gases (GHGs) occur naturally and from human activities. Greenhouse gases produced by human activities include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Since the year 1750, it is estimated

that the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased over 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity. The primary GHGs are discussed below.[9]

Carbon Dioxide. CO_2 is emitted and removed from the atmosphere naturally. Animal and plant respiration involves the release of carbon dioxide from animals and its absorption by plants in a continuous cycle. The ocean-atmosphere exchange results in the absorption and release of CO_2 at the sea surface. Carbon dioxide is also released from plants during wildfires. Volcanic eruptions release a small amount of CO_2 from the Earth's crust.

Human activities that affect carbon dioxide in the atmosphere include burning of fossil fuels, industrial processes, and product uses. Combustion of fossil fuels is the largest source of carbon dioxide emissions in the United States, accounting for approximately 85 percent of all equivalent emissions. Because of the fossil fuels used, the largest of these sources is electricity generation and transportation. When fossil fuels are burned, the carbon stored in them is released into the atmosphere entirely as CO_2. Emissions from on site industrial activities also emit carbon dioxide such as cement, metal, and chemical production and use of petroleum produced in plastics, solvents, and lubricants.

Methane. Methane (CH_4) is emitted from human activities and natural sources. Natural sources of methane include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, soils, and wildfires. Human activities that cause methane releases include fossil fuel production, animal digestive processes from farms, manure management, and waste management. It is estimated that 50 percent of global methane emissions are human generated. Wetlands are the primary natural producers of methane in the world because the habitat is conducive to bacteria that produce methane during decomposition of organic material. Methane is produced from landfills as solid waste decomposes. Methane is a primary component of natural gas and is emitted during its production, processing, storage, transmission, distribution, and use. Decomposition of organic material in manure stocks or in liquid manure management systems also releases methane. Releases from animal digestive processes are the primary source of human-related methane.

Nitrous Oxide. Anthropogenic (human) sources of nitrous oxide include agricultural soil management, animal manure management, sewage treatment, combustion of fossil fuels, and production of certain acids. N_2O is produced naturally in soil and water, especially in wet, tropical forests. The primary human-related source of N_2O is agricultural soil management due to use of synthetic nitrogen fertilizers and other techniques to boost nitrogen in soils. Combustion of fossil fuels (mobile and stationary) is the second leading source of nitrous oxide, although parts of the world where catalytic converters are used (such as California) have significantly lower levels than those areas that do not.

High Global Warming Potential Gases. High global warming potential (GWP) gases (or fluorinated gases) are entirely manmade and are mainly used in industrial processes. HFCs, PFCs, and SF_6 are high GWP gases. These types of gases are used in aluminum production, semiconductor manufacturing, electric power transmission, magnesium production and processing, and in the production of hydrochlorofuorocarbon-22 (HCFC-22). High GWP gases are also used as substitutes for ozone-depleting gases like chlorofluorocarbons (CFCs) and halons. Use of high GWP gases as substitutes for ozone-depleting substances is the primary use of these gases in the United States.

Water Vapor. It should be noted that water vapor is also a significant GHG in the atmosphere; however, concentration of water vapor in the air is primarily dependent on air temperature and cannot be influenced by humans.

GHGs behave differently in the atmosphere and contribute to climate change in different ways. Some gases have more potential to reflect infrared heat back towards the earth while some persist in the atmosphere longer than others. To equalize the contribution of GHGs to climate change, the Intergovernmental Panel on Climate Change (IPCC) devised a weighted metric to compare all greenhouse gases to carbon dioxide.[10] The weighting depends on the lifetime of the gas in the atmosphere and its radiative efficiency. As an example, over a time horizon of 100-years, emissions of nitrous oxide will contribute to climate change 298 times more than the same amount of emissions of carbon dioxide while emissions of HFC-23 would contribute 14,800 times more than the same amount of carbon dioxide. These differences define a gas's GWP. Table 5 (Global Warming Potential of Greenhouse Gases) identifies the lifetime and GWP of select GHGs. The lifetime of the GHG represents how many years the

GHG will persist in the atmosphere. The GWP of the GHG represents the GHG's relative potential to induce climate change as compared to carbon dioxide.

Carbon Sequestration

Carbon sequestration is the process by which plants absorb CO_2 from the atmosphere and store it in biomass like leaves and grasses. Agricultural lands, forests, and grasslands can all sequester carbon dioxide, or emit it. The key is to determine if the land use is emitting carbon dioxide faster than it is absorbing it. Young, fast-growing trees are particularly good at absorbing more than they release and are known as a *sink*. Agricultural resources often end up being sources of carbon release because of soil management practices. Deforestation contributes to carbon dioxide emissions by removing trees, or carbon sinks, that would otherwise absorb CO_2. Forests are a crucial part of sequestration in some parts of the world, but not much in the United States. Another form of sequestration is geologic sequestration. This is a manmade process that results in the collection and transport of CO_2 from industrial emitters (i.e. power plants) and injecting it into underground reservoirs.

Table 5
Global Warming Potential (GWP) of Greenhouse Gases (GHG)

GHG	Lifetime (yrs)	GWP
Carbon Dioxide	50-200	1
Methane	12	25
Nitrous Oxide	114	298
HFC-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC-14	50,000	7,390
PFC-116	10,000	12,200
Sulfur Hexafluoride	3,200	22,800
Source: IPCC 2007		

3.7.2 Climate Change and California

Specific, anticipated impacts to California have been identified in the 2009 California Climate Adaptation Strategy prepared by the California Natural Resources Agency (CNRA) through extensive modeling efforts.[11] General climate changes in California indicate that:

- California is likely to get hotter and drier as climate change occurs with a reduction in winter snow, particularly in the Sierra Nevadas
- Some reduction in precipitation is likely by the middle of the century
- Sea-levels will rise up to an estimated 55 inches
- Extreme events such as heat waves, wildfires, droughts, and floods will increase
- Ecological shifts of habitat and animals are already occurring and will continue to occur

It should be noted that changes are based on the results of several models prepared under different climatic scenarios; therefore, discrepancies occur between the projections. The potential impacts of global climate change in California are detailed below.

Public Health and Welfare

Concerns related to public health and climate change includes higher rates of mortality and morbidity, change in prevalence and spread of disease vectors, decreases in food quality and security, reduced water availability, and increased exposure to pesticides. These concerns are all generally related to increase in ambient outdoor air temperature, particularly in summer.

Higher rates of mortality and morbidity could arise from more frequent heat waves at greater intensities. Health impacts associated with extreme heat events include heat stroke, heat exhaustion, and exacerbation of medical conditions such as

cardiovascular and respiratory diseases, diabetes, nervous system disorders, emphysema, and epilepsy. Climate change would result in degradation of air quality promoting the formation of ground-level pollutants, particularly ozone. Degradation of air quality would increase the severity of health impacts from criteria and other air pollutants discussed in Section 4.3 (Air Quality). Temperature increases and increases in carbon dioxide are also expected to increase plant production of pollens, spores, and fungus. Pollens and spores could induce or aggravate allergic rhinitis, asthma, and obstructive pulmonary diseases.

Precipitation projections suggest that California will become drier over the next century due to reduced precipitation and increased evaporation from higher temperatures. These conditions could result in increased occurrences of drought. Surface water reductions will increase the need to pump groundwater, reducing supplies and increasing the potential for land subsidence.

Precipitation changes are also suspected to impact the Sierra snowpack (see "Water Management" herein). Earlier snowmelts could coincide with the rainy season and could result in failure of the flood control devices in that region. Flooding can cause property damage and loss of life for those affected. Increased wildfires are also of concern as the State "dries" over time. Wildfires can also cause property damage, loss of life, and injuries to citizens and emergency response services.

Sea-level rises would also threaten human health and welfare. Flood risks will be increased in coastal areas due to strengthened storm surges and greater tidal damage that could result in injury and loss of property and life. Gradual rising of the sea will permanently inundate many coastal areas in the state.

Other concerns related to public health are changes in the range, incidence, and spread of infectious, water-borne, and food-borne diseases. Changes in humidity levels, distribution of surface water, and precipitation changes are all likely to shift or increase the preferred range of disease vectors (i.e. mosquitoes). This could expose more people and animals to potential for vector-borne disease.

Biodiversity and Habitat

Changes in temperature will change the livable ranges of plants and animals throughout the state and cause considerable stress on these species. Species will shift their range if appropriate habitat is available and accessible if they cannot adapt to their new climate. If they do not adapt or shift, they face local extirpation or extinction. As the climate changes, community compositions and interactions will be interrupted and changed. These have substantial implications on the ecosystems in the state. Extreme events will lead to tremendous stress and displacement on affected species. This could make it easier for invasive species to enter new areas, due to their ability to more easily adapt. Precipitation changes would alter stream flow patterns and affect fish populations during their life cycle. Sea level rises could impact fragile wetland and other coastal habitat.

Water Management

Although disagreement among scientists on long-term precipitation patterns in the State has occurred, it is generally accepted by scientists that rising temperatures will impact California's water supply due to changes in the Sierra Nevada snowpack. Currently, the State's water infrastructure is designed to both gather and convey water from melting snow and to serve as a flood control device. Snowpack melts gradually through spring warming into early summer, releasing an average of approximately 15 million acre-feet of water. The State's concern related to climate change is that due to rising temperatures, snowpack melt will begin earlier in the spring and will coincide with the rainy season. The combination of precipitation and snowmelt would overwhelm the current system, requiring tradeoffs between water storage and flood protection to be made. Reduction in reserves from the Sierra Nevada snowpack is troublesome for California and particularly for Southern California. Approximately 75-percent of California's available water supply originates in the northern third of the state while 80 percent of demand occurs in the southern two-thirds. There is also concern is that rising temperatures will result in decreasing volumes from the Colorado River basin. Colorado River water is important to Southern California because it supplies water directly to Metropolitan Water District of Southern California. Water from the Colorado River is also used to recharge groundwater basins in the Coachella Valley.

Agriculture

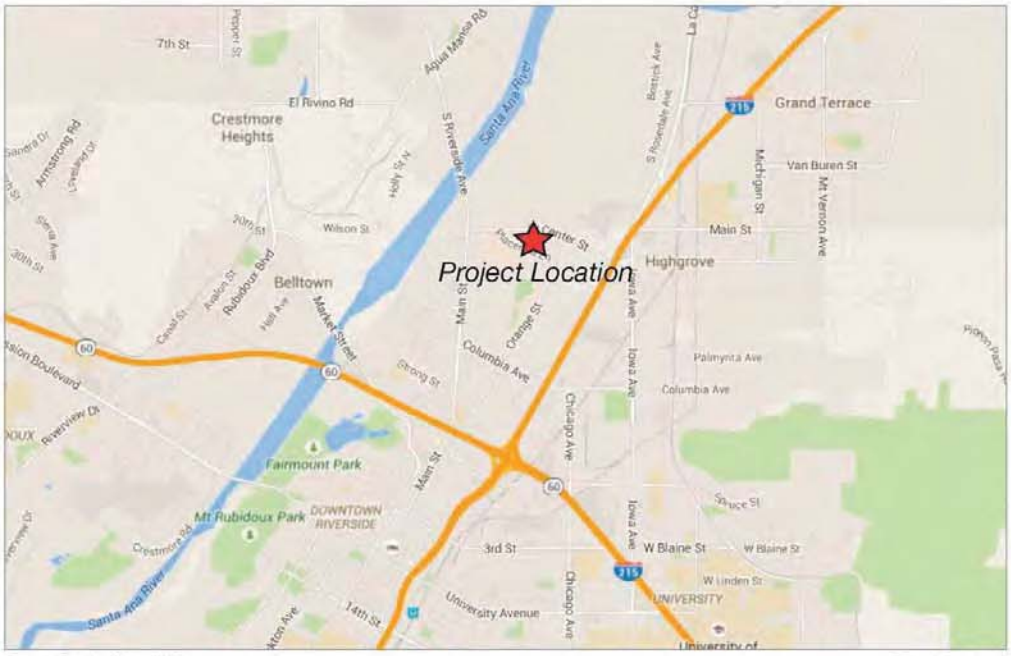
California is the most agriculturally productive state in the US resulting in more than 37 billion dollars in revenue in 2008. California is the nation's leading producer of nearly 80 crops and livestock commodities, supplying more than half of the nation's fruit and vegetables and over 90 percent of the nation's production of almonds, apricots, raisin grapes, olives, pistachios, and walnuts. Production of crops is not limited to the Central Valley but also occurs in Southern California. Strawberries and grapes are grown in San Bernardino and Riverside Counties. Orange County and San Diego County also contribute to strawberry production. Cherries are also grown in Los Angeles and Riverside County. Anticipated impacts to agricultural resources are mixed when compared to the potentially increased temperatures, reduced chill hours, and changes in precipitation associated with climate change. For example, wheat, cotton, maize, sunflower, and rice are anticipated to show declining yields as temperatures rise. Conversely, grapes and almonds would benefit from warming temperatures. Anticipated increases in the number and severity in heat waves would have a negative impact on livestock where heat stress would make livestock more vulnerable to disease, infection and mortality. The projected drying trend and changes in precipitation are a threat to agricultural production in California. Reduced water reliability and changes in weather patterns would impact irrigated farmlands and reduce food security. Furthermore, a drying trend would increase wildfire risk. Overall, agriculture in California is anticipated to suffer due to climate change impacts.

Forestry

Increases in wildfires will substantially impact California's forest resources that are prime targets for wildfires. This can increase public safety risks, property damage, emergency response costs, watershed quality, and habitat fragmentation. Climate change is also predicted to affect the behavior or plant species including seed production, seedling establishment, growth, and vigor due to rising temperatures. Precipitation changes will affect forests due to longer dry periods and moisture deficits and drought conditions that limit seedling and sapling growth. Prolonged drought also weakens trees, making them more susceptible to disease and pest invasion. Furthermore, as trees die due to disease and pest invasion (i.e. the Bark Beetle invasion of the San Bernardino Forest), wildfires can spread more rapidly.

Transportation and Energy Infrastructure

Higher temperatures will require increased cooling, raising energy production demand. Higher temperatures also decrease the efficiency of distributing electricity and could lead to more power outages during peak demand. Climate changes would impact the effectiveness of California's transportation infrastructure as extreme weather events damage, destroy, and impair roadways and railways throughout the state causing governmental costs to increase as well as impacts to human life as accidents increase. Other infrastructure costs and potential impacts to life would increase due to the need to upgrade levees and other flood control devices throughout the state. Infrastructure improvement costs related to climate change adaptation are estimated in the tens of billions of dollars.



Source: Google Maps, 2015

Regional

Source: Google Maps, 2015

Vicinity

Not to Scale

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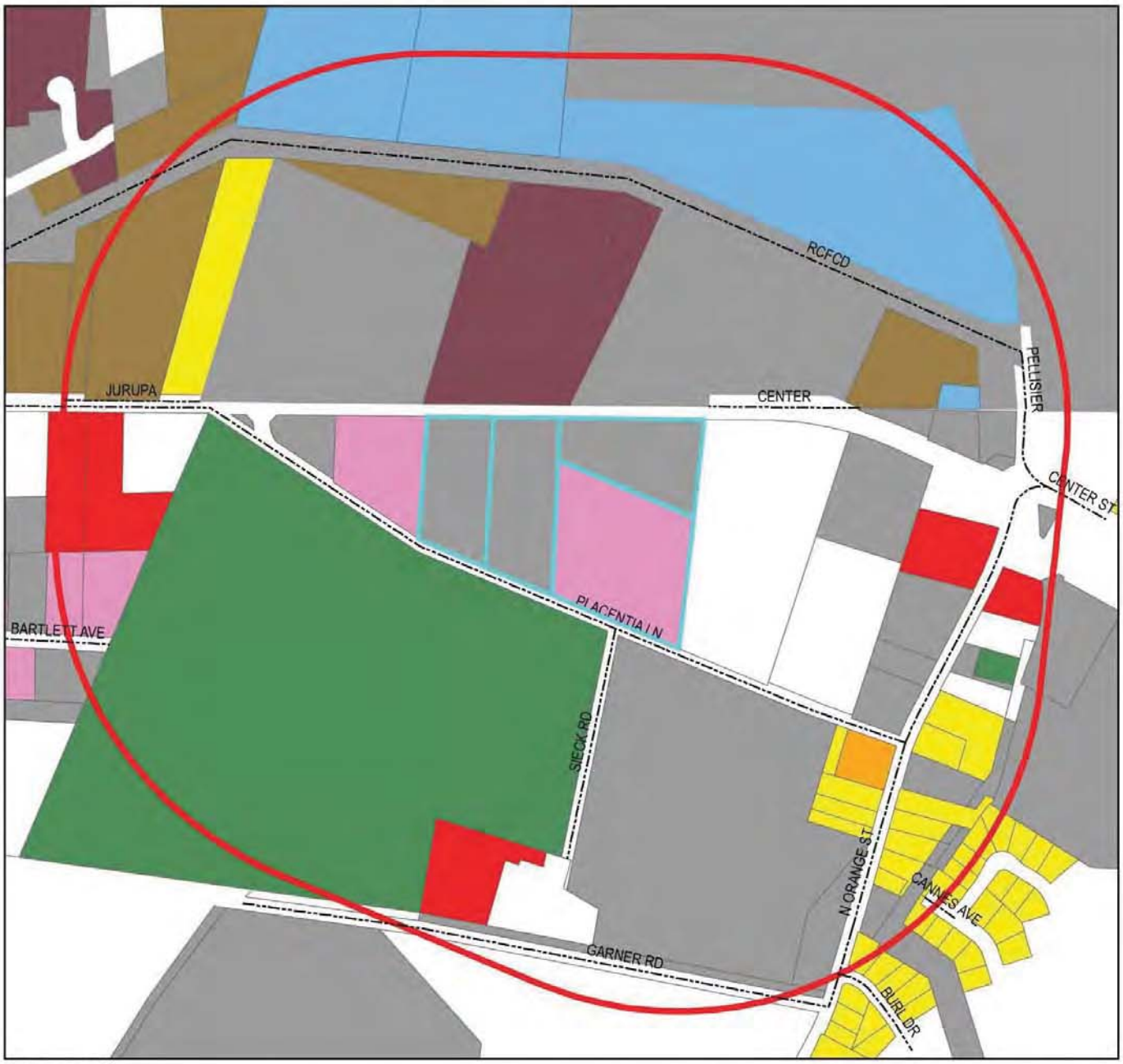
Exhibit 1 Regional and Vicinity Map

Center Street Commerce Building Project
6550 Center Street, Riverside, California



Legend

Project Site

0.25 Mile Radius

0 0.03 0.06 0.12 0.18 0.24 Miles

Land Uses

- Unknown
- Vacant
- Commercial
- Storage
- Light Industrial
- Residential Use in Commercial Zone
- Single Family Residential
- Multi-Family Residential
- Miscellaneous Structures
- Electric Power Transmissions

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Exhibit 2 Radius Map

Center Street Commercial Building Project

6550 Center Street, Riverside, California

The following summarizes Federal, State, and local regulations related to air quality, pollution control, greenhouse gas emissions.

4.1 Clean Air Act

The Federal Clean Air Act (CAA) defines the Environmental Protection Agency's (EPA) responsibilities for protecting and improving the United States air quality and ozone layer.[12] Key components of the CAA include reducing ambient concentrations of air pollutants that cause health and aesthetic problems, reducing emission of toxic air pollutants, and stopping production and use of chemicals that destroy the ozone.

Federal clean air laws require areas with unhealthy levels of ozone, inhalable particulate matter, Carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop State Implementation Plans (SIPs); comprehensive documents that identify how an area will attain NAAQS. Deadlines for attainment were established in the 1990 amendments to the CAA based on the severity of an area's air pollution problem. Failure to meet air quality deadlines can result in sanctions against the State or the EPA taking over enforcement of the CAA in the affected area. SIPs are a compilation of new and previously submitted plans, programs, district rules, and State and Federal regulations. The SCAQMD implements the required provisions of an applicable SIP through its AQMP. Currently, SCAQMD implements the 8-hr Ozone and $PM_{2.5}$ SIP in the 2007 AQMP and the PM_{10} SIP in the 2003 AQMP. The $PM_{2.5}$ SIP is currently being revised by SCAQMD in response to partial disapproval by the EPA. The 2012 Lead SIP for the Los Angeles County portion of SCAB was adopted by the SCAQMD Board on May 4, 2012 and approved by ARB on May 24, 2012 and forwarded to the EPA for approval as a revision to the California SIP.

4.2 California Clean Air Act

The California Clean Air Act (CCAA) of 1988 was enacted to develop plans and strategies for attaining California Ambient Air Quality Standards (CAAQS). The California Air Resources Board (ARB), which is part of the California Environmental Protection Agency (Cal-EPA), develops statewide air quality regulations, including industry-specific limits on criteria, toxic, and nuisance pollutants. The CCAA is more stringent than Federal law in a number of ways including revised standards for PM^{10} and ozone and State for visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

4.3 2012 Air Quality Management Plan

The purpose of an Air Quality Management Plan (AQMP) is to bring an air basin into compliance with federal and state air quality standards and is a multi-tiered document that builds on previously adopted AQMPs.[13] The 2003 AQMP was adopted in August 2003 and demonstrated O_3 and PM_{10} for the Basin. It also provides the maintenance plans for CO and NO_2, which the Basin has been in attainment for since 1997 and 1992, respectively. The 2007 AQMP for the Basin was approved by the SCAQMD Board of Directors in June 2007. The 2007 AQMP builds on the 2003 AQMP and is designed to address the federal 8-hour ozone and $PM_{2.5}$ air quality standards. The AQMP identifies short- and long-term control measures designed to reduce stationary, area, and mobile source emissions, organized into four primary components:

1. District Stationary and Mobile Source Control Measures
2. Air Resources Board (ARB) State Strategy
3. Supplement to ARB Control Strategy
4. SCAG Regional Transportation Strategy and Control Measures

The 2012 AQMP was adopted by the SCAQMD board on December 7, 2012. The 2012 AQMP incorporated the latest scientific and technological information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories. The 2012 AQMP includes the new and changing federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches. The SCAQMD is currently initiating an early development process for preparation of the 2016 AQMP.

4.4 SCAQMD Rule Book

In order to control air pollution in the Basin, SCAQMD adopts rules that establish permissible air pollutant emissions and governs a variety of businesses, processes, operations, and products to implement the AQMP and the various federal and state air quality requirements. SCAQMD does not adopt rules for mobile sources; those are established by ARB or the United States Environmental Protection Agency (EPA). Rules that will be applicable during construction of the proposed project include Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings). Rule 403 prohibits emissions of fugitive dust from any grading activity, storage pile, or other disturbed surface area if it crosses the project property line or if emissions caused by vehicle movement cause substantial impairment of visibility (defined as exceeding 20 percent opacity in the air). Rule 403 requires the implementation of Best Available Control Measures (BACM) and includes additional provisions for projects disturbing more than five acres and those disturbing more than fifty acres. Rule 1113 establishes maximum concentrations of VOCs in paints and other applications and establishes the thresholds for low-VOC coatings.

4.5 Executive Order S-3-05

Executive Order S-3-05 was issued by California Governor Arnold Schwarzenegger and established targets for the reduction of greenhouse gas emission at the milestone years of 2010, 2020, and 2050. Statewide GHG emissions must be reduced to 1990 levels by year 2020 and by 80 percent beyond that by year 2050. The Order requires the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate with other State departments to identify strategies and reduction programs to meet the identified targets. A Climate Action Team (CAT) was created and is headed by the Secretary of CalEPA who reports on the progress of the reduction strategies. The latest CAT *Biennial Report to the Governor and Legislature* was completed in April 2010.[14] CAT also works in 11 subgroups to support development and implementation of the Scoping Plan (see "California Global Warming Solutions Act" herein).

4.6 Executive Order B-30-15

Executive Order B-30-15 was issued by California Governor Edmund G. Brown Jr. on April 29, 2015 to establish a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030. This is meant as an interim target to ensure the state meets its ultimate goal of 80 percent below 1990 levels by 2050.

4.7 California Global Warming Solutions Act

The California State Legislature adopted the California Global Warming Solutions Act in 2006 (AB32). AB32 establishes the caps on statewide greenhouse gas emissions proclaimed in Executive Order S-3-05 and establishes a regulatory timeline to meet the reduction targets. The timeline is as follows:

January 1, 2009	Adopt Scoping Plan
January 1, 2010	Early action measures take effect
January 1, 2011	Adopt GHG reduction measures
January 1, 2012	Reduction measures take effect
December 31, 2020	Deadline for 2020 reduction target

As part of AB32, CARB had to determine what 1990 GHG emissions levels were and projected a business-as-usual (BAU) estimate for 2020 to determine the amount of GHG emissions that will need to be reduced. BAU is a term used to define emissions levels without considering reductions from future or existing programs or technologies. 1990 emissions are estimated at 427 million metric tons of carbon dioxide equivalent (MMTCO2E) while 2020 emissions (after accounting for the economic downturn in 2008 and implementation of Pavley 1 vehicle emissions reductions and the State Renewable Portfolio Standard identified in Air Resources Board Scoping Plan below) are estimated at 507 MMTCO2E; therefore, California GHG emissions

must be reduced 80 MMTCO2E (507 – 427 = 80) by 2020, a reduction of approximately 16 percent below BAU. Emissions are required to be reduced an additional 80 percent below 1990 levels by 2050.

4.8 Sustainable Communities and Climate Protection Act

In January 2009, California Senate Bill (SB) 375 went into effect known as the Sustainable Communities and Climate Protection Act.[15] The objective of SB375 is to better integrate regional planning of transportation, land use, and housing to reduce sprawl and ultimately reduce greenhouse gas emissions and other air pollutants. SB375 tasks ARB to set greenhouse gas reduction targets for each of California's 18 regional Metropolitan Planning Organizations (MPOs). Each MPO is required to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP). The SCS is a growth strategy in combination with transportation policies that will show how the MPO will meet its GHG reduction target. If the SCS cannot meet the reduction goal, an Alternative Planning Strategy (APS) may be adopted that meets the goal through alternative development, infrastructure, and transportation measures or policies.

In the Southern California Association of Governments (SCAG) region (in which the proposed project is located), sub-regions can also elect to prepare their own SCS or APS. In August 2010, ARB released the proposed GHG reduction targets for the MPOs to be adopted in September 2010. The proposed reduction targets for the SCAG region were 8-percent by year 2020 and 13-percent by year 2035. The 8-percent year 2020 target was adopted in September 2010 and tentatively adopted the year 2035 until February 2011 to provide additional time for SCAG, ARB, and other stakeholders to account for additional resources (such as state transportation funds) needed to achieve the proposed targets. In February 2011, the SCAG President affirmed the year 2035 reduction target and SCAG Staff updated ARB on additional funding opportunities.

4.9 Air Resources Board Scoping Plan

The ARB Scoping Plan is the comprehensive plan to reach the GHG reduction targets stipulated in AB32. The key elements of the plan are to expand and strengthen energy efficiency programs, achieve a statewide renewable energy mix of 33 percent, develop a cap-and-trade program with other partners in the Western Climate Initiative (includes seven states in the United States and four territories in Canada), establish transportation-related targets, and establish fees.[16] The Scoping Plan measures are identified in Table 6 (Scoping Plan Measures). Note that the current early discrete actions are incorporated into these measures. ARB estimates that implementation of these measures will reduce GHG emissions in the state by 174 MMTCO2E by 2020; therefore, implementation of the Scoping Plan will meet the 2020 reduction target. In a report prepared on September 23, 2010, ARB indicates that 40 percent of the reduction measures identified in the Scoping Plan have been secured.[17] The cap-and-trade program began on January 1, 2012 after ARB completes a series of activities that deal with the registration process, compliance cycle, and tracking system; however, covered entities will not have an emissions obligation until 2013.[18] ARB is currently working on the low carbon fuel standard where public hearings and workshops are currently being conducted. In August 2011, the Scoping plan was reapproved by the ARB Board with the program's environmental documentation.

The ARB has prepared the First Update to the Scoping Plan (Update) with a draft made available for public review on February 10, 2014. The Update to the Scoping Plan builds upon the 2008 Scoping Plan with new strategies and recommendations. The Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The Update defines ARB's climate change priorities for the next five years and sets the groundwork to reach post-2020 goals set forth in Executive Orders S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the 2020 GHG emission reduction goals defined in the 2008 Scoping Plan. It also evaluates how to align the State's long-term GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. A draft Environmental Analysis (EA) was released for a 45-day public review period on March 14, 2014. After considering public comments and Board direction, the final First Update, summary of comments received on the draft EA, and ARB's responses to those comments were released on May 15, 2014. The First Update to the Scoping Plan was approved by the Board on May 22, 2014.

4.10 Water Conservation in Landscaping Act

Section 65591 of the Government Code requires all local jurisdictions to adopt a water efficient landscape ordinance. The ordinance is to address water conservation through appropriate use and grouping of plants based on environmental conditions, water budgeting to maximize irrigation efficiency, storm water retention, and automatic irrigation systems. Failure to adopt a water efficiency ordinance requires a local jurisdiction to enforce the provisions of the State's model water efficiency ordinance. In 2009, the Department of Water Resources (DWR) updated the Model Water Efficient Landscape Ordinance pursuant to amendments to the 1991 Act. These amendments and the new model ordinance went into effect on January 1, 2010. The amended Act is applicable to any new commercial, multi-family, industrial or tract home project containing 2,500 square feet (SF) or more of landscaping. Individual landscape projects of 5,000 SF or more on single-family properties will also be subject to the Act. All landscape plans are required to include calculations verifying conformance with the maximum applied water allowance and must be prepared and stamped by a licensed landscape architect.

4.11 California Green Building Standards

New California Green Building Standards Code (CALGREEN) went into effect on January 1, 2011.[19] The purpose of the new addition to the California Building Code (CBC) is to improve public health, safety, and general welfare by enhancing the design and construction of buildings using concepts to reduce negative impacts or produce positive impacts on the environment. The CALGREEN regulations cover planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and environmental quality. Many of the new regulations have the effect of reducing greenhouse gas emissions from the operation of new buildings. Table 7 (CALGREEN Requirements) summarizes the previous requirements of the CBC and the new requirements of CALGREEN that went into effect in January 2011. Minor technical revisions and additional requirements went into effect in July 2012. The Code was further updated in 2013, effective January 1, 2014 through 2016.

Table 6
Scoping Plan Measures

Measure	Description
T-1	Pavely I and II – Light Duty Vehicle Greenhouse Gas Standards
T-2	Low Carbon Fuel Standard
T-3	Regional Transportation-Related Greenhouse Gas Targets
T-4	Vehicle Efficiency Measures
T-5	Ship Electrification at Ports
T-6	Good Movement Efficiency Measures
T-7	Heavy-Duty Vehicle Aerodynamic Efficiency
T-8	Medium and Heavy-Duty Vehicle Hybridization
T-9	High Speed Rail
E-1	Energy Efficiency (Electricity Demand Reduction)
E-2	Increase Combined Heat and Power Use
E-3	Renewable Portfolio Standard
E-4	Million Solar Roofs
CR-1	Energy Efficiency (Natural Gas Demand Reduction)
CR-2	Solar Water Heating
GB-1	Green Buildings
W-1	Water Use Efficiency
W-2	Water Recycling
W-3	Water System Energy Efficiency
W-4	Reuse Urban Runoff
W-5	Increase Renewable Energy Production
W-6	Public Good Charge (Water)
I-1	Energy Efficiency for Large Industrial Sources
I-2	Oil and Gas Extraction GHG Reductions
I-3	Oil and Gas Transmission Leak Reductions
I-4	Refinery Flare Recovery Process Improvements
I-5	Removal of Methane Exemption from Existing Refinery Regulations
RW-1	Landfill Methane Control
RW-2	Increase Landfill Methane Capture Efficiency
RW-3	Recycling and Zero Waste
F-1	Sustainable Forest Target
H-1	Motor Vehicle Air Conditioning
H-2	Non-Utilities and Non-Semiconductor SF_6 Limits
H-3	Semiconductor Manufacturing PFC Reductions
H-4	Consumer Products High GWP Limits
H-5	High GWP Mobile Source Reductions
H-6	High GWP Stationary Source Reductions
H-7	High GWP Mitigation Fees
A-1	Large Dairy Methane Capture

Table 7
CALGREEN Requirements

Item		Requirements	
		Previous	CALGREEN
4.1	Stormwater Management	Stormwater management required on projects > than one acre	All projects subject to stormwater management.
	Surface Drainage	Surface water must flow away from building	Drainage patterns must be analyzed
4.2	Energy Efficiency	California Energy Code	Minimum energy efficiency to be established by California Energy Commissions
4.3	Indoor Water Use	HCD maximum flush rates; CEC water use standards for appliances and fixtures	Indoor water use must decrease by at least 20 percent (prescriptive or performance based)
	Multiple Showerheads	Not covered	Multiple showerheads cannot exceed combined flow of the code
	Irrigation Controllers	Not covered	Irrigation controllers must be weather or soil moisture based controllers
4.4	Joint Protection	Plumbing and Mechanical Codes	All openings must be sealed with materials that rodents cannot penetrate
	Construction Waste	Local Ordinances	Establishes minimum 50 percent recycling and waste management plan
	Operation	Plumbing Code for gray water systems	Educational materials and manuals must be provided to building occupants and owners to ensure proper equipment operation
4.5	Fireplaces	Local Ordinances	Gas fireplaces must be direct-vent sealed-combustion type; Wood stoves and pellet stoves must meet USEPA Phase II emissions limits
	Mechanical Equipment	Not covered	All ventilation equipment must be sealed from contamination during construction
	VOCs	Local Ordinances	Establishes statewide limits on VOC emissions from adhesives, paints, sealants, and other coatings
	Capillary Break	No prescriptive method of compliance	Establishes minimum requirements for vapor barriers in slab on grade foundations
	Moisture Content	Current mill moisture levels for wall and floor beams is 15-20 percent	Moisture content must be verified prior to enclosure of wall or floor beams
	Whole House Fans	Not covered	Requires insulated louvers and closing mechanism when fan is off
	Bath Exhaust Fans	Not covered	Requires Energy Star compliance and humidistat control
	HVAC Design	Minimal requirements for heat loss, heat gain, and duct systems	Entire system must be designed in respects to the local climate
7	Installer Qualifications	HVAC installers need not be trained	HVAC installers must be trained or certified
	Inspectors	Training only required for structural materials	All inspectors must be trained

Source: HCD 2010

5 Project Description

The project includes the construction of a 308,000-square-foot building on 15.63 acres located south of Center Street and north of Placentia Lane in the City of Riverside, California. The building includes 110,591 square feet of landscaping, the potential for up to 282 parking stalls, and 47 loading docks. There is no tenant for the proposed building, thus, the operational components of the project are speculative at this time. The City of Riverside recommended consideration of a “manufacturing” use as a worst-case, conservative approach to assessing operational impacts. The building has been treated as such herein, consistent with the project traffic impact analysis and health risk assessment. Project design features related to pollutant emissions includes use of low-VOC coatings on interiors and exterior surface of 37 grams per liter or less.

Exhibit 3 Site Plan
Center Street Commerce Building Project
6550 Center Street, Riverside, California
CENTER STREET
PROPOSED BUILDING
BASIN
SITE A - ROAD
PLACENTIA LANE
Hogle-Ireland
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The impact analysis contained herein was prepared utilizing guidance provided in the 1993 SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook. The thresholds identified in Appendix G of the State CEQA Guidelines, as implemented by the City of Riverside, have been utilized to determine the significance of potential impacts.

6.1 Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines and the local implementation procedures of the City of Riverside, the project could result in potentially significant impacts related to air quality if it:

A. Conflicts with or obstructs implementation of the applicable air quality plan.
B. Violates any air quality standard or contributes substantially to an existing or projected air quality violation.
C. Results in a cumulatively considerable net increase of any criteria pollutant that the region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).
D. Exposes sensitive receptors to substantial pollutant concentrations.
E. Create objectionable odors affecting a substantial number of people.

To determine if maximum daily criteria pollutant emissions from construction and operation of the proposed project are significant, the SCAQMD significance thresholds are used. These thresholds are identified in Table 8 (SCAQMD Maximum Daily Emissions Thresholds (lbs/day)).

Table 8
SCAQMD Maximum Daily Emissions Thresholds (lbs/days)

Pollutant	Construction	Operation
NO_X	100	55
VOC/ROG	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_X	150	150
CO	550	550
Lead	3	3
Source: SCAQMD 2015		

6.2 AQMP Consistency

A significant impact could occur if the proposed project conflicts with or obstructs the implementation of South Coast Air Basin 2012 Air Quality Management Plan. Conflicts and obstructions that hinder implementation of the AQMP can delay efforts to meet attainment deadlines for criteria pollutants and maintaining existing compliance with applicable air quality standards. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD CEQA Air Quality Handbook, consistency with the South Coast Air Basin 2012 Air Quality Management Plan (AQMP) is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation and (2) is consistent with the growth assumptions in the AQMP.[20] Consistency review is presented below:

1. The project would result in short-term construction and long-term pollutant emissions that are less than the CEQA significance emissions thresholds established by the SCAQMD, as demonstrated in Section 6.3 et seq of this report; therefore, the project could not result in an increase in the frequency or severity of any air quality standards violation and will not cause a new air quality standard violation.

2. The CEQA Air Quality Handbook indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and *significant projects*. *Significant projects* include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and off-shore drilling facilities; therefore, the proposed project is not defined as *significant*. This project does not include a General Plan Amendment and therefore does not require analysis consistency with the AQMP.

Based on the consistency analysis presented above, the proposed project will not conflict with the AQMP.

6.3 Pollutant Emissions

6.3.1 Construction

Short-term criteria pollutant emissions will occur during demolition, site grading, building construction, paving, and architectural coating activities. Emissions will occur from use of equipment, worker, vendor, and hauling trips, and disturbance of onsite soils (fugitive dust). To determine if construction of the proposed project could result in a significant air quality impact, the California Emissions Estimator Model (CalEEMod) has been utilized. CalEEMod defaults have generally been used for construction inputs in the model (see Appendix A for input values) and the results are summarized in Table 9 (Daily Construction Emissions). The methodology for calculating emissions is included in the CalEEMod *User Guide,* freely available at http://www.caleemod.com.

It was estimated that 7,416 square feet of existing, on-site structures will be demolished to accommodate the project. Construction of the building is anticipated to start in early 2017. CalEEMod defaults for construction schedule phase duration and equipment needs were utilized. Based on the results of the model, maximum daily emissions from the construction of the project will not result in excessive emissions of criteria pollutants when compared to SCAQMD daily thresholds. Volatile organic compounds (identified as reactive organic gases) associated with interior and exterior coating activities typically would exceed the threshold for a building of this size; however, the model includes use of a maximum 37 grams per liter (g/l) VOC content for interior and exterior coatings, as identified as a design feature in the project description. Use of low-VOC coatings during construction activities will result in daily, construction-related VOC emissions of 72 lbs/day, less than the threshold established by SCAQMD.

Table 9
Daily Construction Emissions (lbs/day)

Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
2017	6	70	48	<1	21	13
2018	72	33	43	<1	6	3
Winter						
2017	6	70	48	<1	21	13
2018	72	33	44	<1	6	3
Threshold	75	100	550	150	150	55
Substantial?	No	No	No	No	No	No

6.3.2 Operational and Area Sources

Long-term criteria air pollutant emissions will result from the operation of the proposed project. Long-term emissions are categorized as area source emissions, energy demand emissions, and operational emissions. Operational emissions will result from automobile and other vehicle sources associated with daily trips to and from the project. Area source emissions are the combination of many small emission sources that include use of outdoor landscape maintenance equipment, use of consumer products such as cleaning products, and periodic repainting of the proposed project. Off-site energy demand emissions result from use of electricity and natural gas and were also modeled using default information encoded into the emissions estimation software. Emissions from area sources were estimated using CalEEMod defaults.

The California Emissions Estimator Model (CalEEMod) was utilized to estimate mobile source emissions. Trip generation (3.82 daily trips per 1,000 SF) is based on the trip generation rates provided in the Institute of Transportation Engineers *Trip Generation Manual* (9th Edition).[21] Passenger vehicles will consist of 74.4 percent of the fleet mix, light-duty trucks will consist of 8.4 percent of the fleet mix, medium-heavy duty trucks will consist of 4.6 percent of the truck trips, and heavy-heavy duty truck trips consist of 16.6 percent of the fleet mix. CalEEMod defaults were used for trip length, prime and no-primer trip percentages, and trip purpose in light of the proposed project being assessed as manufacturing us. It was assumed that the facility will use five forklifts and one generator set during operations. Assuming an opening year of 2019, the results of the CalEEMod model for summer and winter operation of the project are summarized in Table 10 (Daily Operational Emissions). Based on the results of the model, impacts associated with operation of the Project will not exceed the threshold established by SCAQMD.

Table 10
Daily Operational Emissions (lbs/day)

Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
Area Sources	16	<1	<1	0	<1	<1
Energy Demand	<1	3	2	<1	<1	<1
Mobile Sources	4	31	55	<1	12	3
Equipment	1	11	10	<1	2	1
Summer Total	*22*	*45*	*67*	*<1*	*13*	*4*
Winter						
Area Sources	16	<1	<1	0	<1	<1
Energy Demand	<1	3	2	<1	<1	<1
Mobile Sources	4	33	58	<1	12	3
Equipment	1	11	10	<1	2	1
Winter Total	*22*	*46*	*70*	*<1*	*13*	*4*
Maximum Daily	**22**	**46**	**70**	**<1**	**13**	**4**
Threshold	55	55	550	150	150	55
Substantial?	No	No	No	No	No	No

6.4 Sensitive Receptors

6.4.1 Localized Significance Thresholds

As part of SCAQMD's environmental justice program, attention has recently been focusing more on the localized effects of air quality. Although the region may be in attainment for a particular criteria pollutant, localized emissions from construction activities coupled with ambient pollutant levels can cause localized increases in criteria pollutant that exceed national and/or State air quality standards.

Construction

Construction-related criteria pollutant emissions and potentially significant localized impacts were evaluated pursuant to the SCAQMD Final Localized Significance Thresholds Methodology. This methodology provides screening tables for one through five-acre project scenarios, depending on the amount of site disturbance during a day using the Fact Sheet for equipment usage in CalEEMod.[22] Daily oxides of nitrogen (NO_X), carbon monoxide (CO), and particulate matter (PM_{10} and $PM_{2.5}$) emissions will occur during construction of the project, grading of the project site, and paving of facility parking lots and drive aisles. Table 11 (Localized Significance Threshold Analysis) summarize on- and off-site emissions as compared to the local thresholds established for Source Receptor Area (SRA) 23 (Metropolitan Riverside County). Based on the use of four tractors and three dozers during site preparation activities, a 3.5-acre threshold will be used (using linear regression). A 50-meter receptor distance was used to reflect the proximity of residential uses to the sports fields south of the project site. Note that particulate matter

emissions account for daily watering required by SCAQMD Rule 403 (three times per day for a 55 percent reduction in fugitive dust). Emissions from construction activities will not exceed any localized threshold.

Table 11
Localized Significance Threshold Analysis for Construction (lbs/day)

Phase	CO	NO_X	PM^{10}	$PM^{2.5}$
Demolition	34	43	2	2
Site Preparation	40	52	10	6
Grading	47	70	7	4
Building Construction	18	26	2	2
Paving	14	17	1	1
Architectural Coating	2	2	<1	<1
Threshold	**1,708**	**248**	**28**	**8**
Potentially Substantial?	**No**	**No**	**No**	**No**

Operational

Operation-related LSTs become of concern when there are substantial on-site stationary and on-site mobile sources that could impact surrounding receptors. The proposed building does not have a tenant and is speculatively considered for manufacturing uses, thus the type and extent of on-site stationary or on-site mobile sources is unknown. In order to generally assess operational impacts related to LSTs, the ARB *Characterization of the Off-Road Equipment Population* for the state was used to estimate the amount of on-site equipment that may be used as part of future operations in the proposed building.[23] The "residual" category of businesses was queried that includes manufacturing uses as a result survey inquires throughout the state and extrapolated to the state and county levels. According to this report, manufacturing uses in Riverside County average 0.0313 pieces of equipment per employee. An estimate of 106 employees was calculated for the proposed project based on the NAIOP[1] logistics trends analysis for warehouses.[24] This results in an estimated 4 pieces of equipment that when compared to the countywide ratios of equipment populations and the type of non-specialized equipment associated with manufacturing uses, results in an estimate of three forklifts and one generator set. It's estimated that the facility will operate the generator at least once a month for an hour for maintenance purposes. According to Southern California Edison, the Ontario District (that includes parts of western Riverside), the area experiences an average of 100 minutes of "sustained" outage a year (from 2010 through 2015 for outages over five minutes in duration) with an annual frequency of 0.81 "sustained" outages per year. Using a composite of this information, the generator set was assumed to operated twelve times a year at 167 hours per operation. Use of these equipment coupled with on-site idling of trucks (subject to the state's 5-minute maximum idling restrictions) comprises the on-site emissions estimates for comparison to operation LSTs and summarized in Table 12 (Localized Significance Thresholds for Operations). The project will not result in local emissions in excessive of applicable screening thresholds.

Table 12
Localized Significance Thresholds for Operations)

Source	CO	NO_X	PM^{10}	$PM^{2.5}$
Landscaping	0.04	0.00	0.00	0.00
Natural Gas	2.31	2.75	0.21	0.21
On-Site Idling	0.23	1.78	0.00	0.00
On-Site Equipment	1.36	5.07	0.38	0.35
Total	*3.94*	*9.6*	*0.59*	*0.56*
Threshold	**1,708**	**248**	**28**	**8**
Potentially Substantial?	**No**	**No**	**No**	**No**

[1] Note that this is not an acronym.

6.4.2 Carbon Monoxide Hotspots

A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots have the potential to violate State and Federal CO standards at intersections, even if the broader Basin is in attainment for Federal and State levels. The California Department of Transportation Project-Level Carbon Monoxide Protocol (Protocol) screening procedures have been utilized to determine if the proposed project could potentially result in a CO hotspot. Based on the recommendations of the Protocol, a screening analysis should be performed for the proposed project to determine if a detailed analysis will be required. The California Department of Transportation notes that because of the age of the assumptions used in the screening procedures and the obsolete nature of the modeling tools utilized to develop the screening procedures in the Protocol, they are no longer accepted. More recent screening procedures based on more current methodologies have been developed. The Sacramento Metropolitan Air Quality Management District (SMAQMD) developed a screening threshold in 2011, which states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis. In addition, the Bay Area Air Quality Management District developed a screening threshold in 2010, which states that any project involving an intersection experiencing 44,000 vehicles per hour would require detailed analysis. The proposed project's operations would not involve an intersection experiencing this level of traffic; therefore, the proposed project passes the screening analysis and impacts are deemed less than significant. Based on the local analysis procedures, the proposed project would not result in a CO hotspot.

6.5 Odors

According to the CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). The proposed project is sited within an existing industrial and commercial area. The proposed project does not produce odors that would affect a substantial number of people considering that the proposed project will not result in heavy manufacturing activities.

6.6 Cumulative Impacts

6.6.1 Cumulative Construction Impacts

Cumulative short-term, construction-related emissions from the project will not contribute considerably to any potential cumulative air quality impact because short-term project emissions will be less than significant and other concurrent construction projects in the region will be required to implement standard air quality regulations and mitigation pursuant to State CEQA requirements, just as this project has.

6.6.2 Cumulative Operational Impacts

The SCAQMD CEQA Air Quality Handbook identifies methodologies for analyzing long-term cumulative air quality impacts for criteria pollutants for which the Basin is nonattainment. These methodologies identify three performance standards that can be used to determine if long-term emissions will result in cumulative impacts. Essentially, these methodologies assess growth associated with a land use project and are evaluated for consistency with regional projections. These methodologies are outdated, and are no longer recommended by SCAQMD. SCAQMD allows a project to be analyzed using the projection method such that consistency with the AQMP will indicate that a project will not contribute considerably to cumulative air quality impacts. As discussed in AQMP Consistency, the proposed project is consistent with growth assumptions in the AQMP, and would not exceed any applicable SCAQMD thresholds for short- and long-term emissions. Therefore, the proposed project will not contribute to any potential cumulative air quality impacts.

7.1 Thresholds of Significance

The proposed project could result in potentially significant impacts related to greenhouse gas emissions and global climate change if it would:

A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

B. Conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases.

A numerical threshold for determining the significance of greenhouse gas emissions in the South Coast Air Basin (Basin) has not been established by the South Coast Air Quality Management District (SCAQMD). As an interim threshold based on guidance provided in the CAPCOA *CEQA and Climate Change* handbook, a non-zero threshold approach based on Approach 2 of the handbook has been used. Threshold 2.5 (Unit-Based Thresholds Based on Market Capture) establishes a numerical threshold based on capture of approximately 90 percent of emissions from future development. The latest threshold developed by SCAQMD using this method is 10,000 metric tons carbon dioxide equivalent (MTCO2E) per year for industrial projects.[25] This threshold is based on the review of 711 CEQA projects. This threshold will be utilized herein to determine if emissions of greenhouse gases from this project will be significant.

7.2 Direct and Indirect Emissions

The proposed project will include activities that emit greenhouse gas emissions over the short- and long-term. While one project could not be said to cause global climate change, individual projects contribute cumulatively to greenhouse gas emissions that result in climate change. A greenhouse gas emissions inventory was prepared for the project using under BAU conditions and is analyzed below.

7.2.1 Short-Term Emissions

The project will result in short-term greenhouse gas emissions from construction and installation activities associated with construction of the proposed project. Greenhouse gas emissions will be released by equipment used for grading, paving, and building construction activities. GHG emissions will also result from worker and vendor trips to and from the project site. Table 12 (Construction Greenhouse Gas Emissions) summarizes the estimated yearly emissions from construction activities. Carbon dioxide emissions from construction equipment and worker/vendor trips were estimated utilizing the California Emissions Estimator Model (CalEEMod) version 2013.2.2 (see Appendix A). Construction activities are short-term and cease to emit greenhouse gases upon completion, unlike operational emissions that are continuous year after year until operation of the use ceases. Because of this difference, SCAQMD recommends in its draft threshold to amortize construction emissions over a 30-year operational lifetime. This normalizes construction emissions so that they can be grouped with operational emissions in order to generate a precise project GHG inventory. Amortized construction emissions are included in Table 12.

Table 13
Construction Greenhouse Gas Emissions

Construction Year	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
2017	910	<1	0	912
2018	391	<1	0	392
*AMORTIZED TOTAL^*	*43*	*<1*	*0*	*43*

* MTCO2E
Note: Slight variations may occur due to rounding and variations in modeling software
^ Amortized over 30-years

7.2.2 Long-Term Emissions

Warehousing and distribution activities will result in continuous greenhouse gas emissions from mobile and operational sources. Mobile sources including vehicle trips to and from the project site will result primarily in emissions of CO_2 with minor emissions of CH_4 and N_2O. The most significant GHG emission from natural gas usage will be methane. Electricity usage by the project and indirect usage of electricity for water and wastewater conveyance will result primarily in emissions of carbon dioxide. Disposal of solid waste will result in emissions of methane from the decomposition of waste at landfills coupled with CO_2 emission from the handling and transport of solid waste. These sources combine to define the long-term greenhouse gas emissions for the build-out of the proposed project.

To determine long-term emissions, CalEEMod was used. The methodology utilized for each emissions source is based on the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures* handbook.[26] A summary of the project's net long-term greenhouse gas emissions is included in Table 13 (Operational Greenhouse Gas Emissions). Emissions are presented as metric tons of carbon dioxide equivalent (MTCO2E) meaning that all emissions have been weighted based on their Global Warming Potential (GWP) (a metric ton is equal to 1.102 US short tons).

Table 14
Operational Greenhouse Gas Emissions

Source	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
Area	<1	<1	0	<1
Energy	2,741	<1	<1	2,748
Mobile	2,087	<1	0	2,088
Solid Waste	39	2	0	87
Water/Wastewater	600	1	<1	632
TOTAL	*5,467*	*6*	*<1*	*5,555*

* MTCO2E/YR
Note: Slight variations may occur due to rounding

Mobile sources are based on annual vehicle miles traveled (VMT) based on daily trip generation identified in the trip generation memorandum.[27] Trip lengths have been adjusted based on a study of metropolitan commercial and freight travel conducted by the National Cooperative Highway Research Program. According to observed data collected in the field for the Southern California Association of Governments (SCAG) region, trip lengths for similar uses are estimated at 5.92 miles for light-duty trucks, 13.06 for medium-duty trucks, and 22.40 for heavy-duty trucks. Total vehicle miles were calculated using the average daily trips for each vehicle class and divided by total daily truck trips to get to an average truck distance of 17.41 miles. Natural gas usage and electricity usage are based on default demand figures utilized in CalEEMod. Solid waste generation is also based on CalEEMod defaults.

CalEEMod does not include outdoor landscape irrigation demand defaults for this type of project. Estimated irrigation needs for landscaping was calculated at 2,591,811 gallons per year. Landscape irrigation requirements were calculated using the California Department of Water Resources (DWR) *Water Budget* Workbook that calculates the Maximum Applied Water Allowance (MAWA) for landscaping based on the requirements of the state water conservation in landscaping act.[28] This reflects the maximum allowable amount of water that is permitted to be used annually after consideration of effective precipitation (25 percent of annual rainfall). MAWA is calculated using the following equation:

$MAWA = (ET_0 - Eppt) * 0.62 * [(0.70 * LA) + (0.30 * SLA)]$

Where:

MAWA = Maximum Applied Water Allowance (gallons per year)
ET_0 = Reference Evapotranspiration for Locale (inches per year)
Eppt = Effective Precipitation (inches per year)
LA = Landscape Area (square feet)
SLA = Special Landscape Area (square feet)

Indoor water demand and wastewater discharges are based on CalEEMod defaults.

7.2.3 Greenhouse Gas Emissions Inventory

Table 14 (Greenhouse Gas Emissions Inventory) summarizes the yearly estimated greenhouse gas emissions from construction and operational sources. The total yearly carbon dioxide equivalent emissions for the proposed project are estimated at 5,598 MTCO2E. This does not exceed the SCAQMD threshold of 10,000 MTCO2E per year.

Table 15
Greenhouse Gas Emissions Inventory

Source	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
Construction	*43*	*<1*	*0*	*43*
Operation	*5,467*	*6*	*<1*	*5,555*
			Total	**5,598**

* MTCO2E/YR
Note: Slight variations may occur due to rounding
^ Construction impacts amortized over 30-years

7.3 Greenhouse Gas Emissions Reduction Planning

ARB's *Scoping Plan* identifies strategies to reduce California's greenhouse gas emissions in support of AB32. Many of the strategies identified in the Scoping Plan are not applicable at the project level, such as long-term technological improvements to reduce emissions from vehicles. Some measures are applicable and supported by the project, such as energy efficiency. Finally, while some measures are not directly applicable, the project would not conflict with their implementation. Reduction measures are grouped into 18 action categories, as follows:

1. **California Cap-and-Trade Program Linked to Western Climate Initiative Partner Jurisdictions.** Implement a broad-based California cap-and-trade program to provide a firm limit on emissions. Link the California cap–and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California.[29] Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.
2. **California Light-Duty Vehicle Greenhouse Gas Standards.** Implement adopted Pavley standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.
3. **Energy Efficiency.** Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).
4. **Renewables Portfolio Standards.** Achieve 33 percent renewable energy mix statewide.
5. **Low Carbon Fuel Standard.** Develop and adopt the Low Carbon Fuel Standard.

6. **Regional Transportation-Related Greenhouse Gas Targets.** Develop regional greenhouse gas emissions reduction targets for passenger vehicles.
7. **Vehicle Efficiency Measures.** Implement light-duty vehicle efficiency measures.
8. **Goods Movement.** Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.
9. **Million Solar Roofs Program.** Install 3,000 megawatts of solar-electric capacity under California's existing solar programs.
10. **Medium- and Heavy-Duty Vehicles.** Adopt medium- (MD) and heavy-duty (HD) vehicle efficiencies. Aerodynamic efficiency measures for HD trucks pulling trailers 53-feet or longer that include improvements in trailer aerodynamics and use of rolling resistance tires were adopted in 2008 and went into effect in 2010.[30] Future, yet to be determined improvements, includes hybridization of MD and HD trucks.
11. **Industrial Emissions.** Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.
12. **High Speed Rail.** Support implementation of a high speed rail system.
13. **Green Building Strategy.** Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.
14. **High Global Warming Potential Gases.** Adopt measures to reduce high warming global potential gases.
15. **Recycling and Waste.** Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials, and mandate commercial recycling. Move toward zero-waste.
16. **Sustainable Forests.** Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation. The 2020 target for carbon sequestration is 5 million MTCO2E/YR.
17. **Water.** Continue efficiency programs and use cleaner energy sources to move and treat water.
18. **Agriculture.** In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.

Table 15 (Scoping Plan Consistency Summary) summarizes the project's consistency with the State Scoping Plan. As summarized, the project will not conflict with any of the provisions of the Scoping Plan and in fact supports seven of the action categories through water conservation and recycling.

Table 16
Scoping Plan Consistency Summary

Action	Supporting Measures	Consistency
Cap-and-Trade Program	--	**Not Applicable.** These programs involve capping emissions from electricity generation, industrial facilities, and broad scoped fuels. Caps do not directly affect this type of project.
Light-Duty Vehicle Standards	T-1	**Not Applicable.** This is a statewide measure establishing vehicle emissions standards.
Energy Efficiency	E-1	**Consistent.** The project will not conflict with any State mandated energy efficiency requirements.
	E-2	
	CR-1	
	CR-2	
Renewables Portfolio Standard	E-3	**Not Applicable.** Establishes the minimum statewide renewable energy mix.
Low Carbon Fuel Standard	T-2	**Not Applicable.** Establishes reduced carbon intensity of transportation fuels.
Regional Transportation-Related Greenhouse Gas Targets	T-3	**Consistent.** The project includes features that reduce greenhouse gas emissions, assisting the region in meeting emissions targets.
Vehicle Efficiency Measures	T-4	**Not Applicable.** Identifies measures such as minimum tire-fuel efficiency, lower friction oil, and reduction in air conditioning use.
Goods Movement	T-5	**Not applicable.** Identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories. While these measures are yet to be implemented and will be voluntary, the proposed project would not interfere with their implementation.
	T-6	
Million Solar Roofs Program	E-4	**Not Applicable.** Sets goal for use of solar systems throughout the state. While the project currently does not include solar energy generation, the buildings could support solar panels in the future.
Medium- & Heavy-Duty Vehicles	T-7	**Consistent.** MD and HD trucks and trailers working from the proposed project will be subject to aerodynamic and hybridization requirements as established by ARB; no feature of the project would interfere with implementation of these requirements and programs.
	T-8	
Industrial Emissions	I-1	**Not Applicable.** These measures are applicable to large industrial facilities (> 500,000 MTCOE2/YR) and other intensive uses such as refineries.
	I-2	
	I-3	

Action	Supporting Measures	Consistency
	I-4	
	I-5	
High Speed Rail	T-9	**Not Applicable.** Supports increased mobility choice.
Green Building Strategy	GB-1	**Consistent.** The project includes water and solid waste efficiencies consistent with 2011 CALGREEN requirements.
High Global Warming Potential Gases	H-1	**Not Applicable.** The proposed project is not a substantial source of high GWP emissions and will comply with any future changes in air conditioning, fire protection suppressant, and other requirements.
	H-2	
	H-3	
	H-4	
	H-5	
	H-6	
	H-7	
Recycling and Waste	RW-1	**Consistent.** The project is subject to a minimum 50 percent recycling standard and will recycle a minimum of 50 percent of construction debris per State and City requirements.
	RW-2	
	RW-3	
Sustainable Forests	F-1	**Consistent.** The project will increase carbon sequestration by maintaining on-site trees in project landscaping.
Water	W-1	**Consistent.** The project includes use of recycled water and low-flow fixtures.
	W-2	
	W-3	
	W-4	
	W-5	
	W-6	
Agriculture	A-1	**Not Applicable.** The project is not an agricultural use.

8 Mitigation Measures

None required.

9 References

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Appendix A
CalEEMod Results

Planning Commission - Exhibit 1 - Development Review Committee Staff Report
Development Review Committee - Exhibit 7 - CEQA Documents

Center Street Warehouse

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	308.00	1000sqft	7.07	308,000.00	0
Other Non-Asphalt Surfaces	101.59	1000sqft	2.33	101,590.00	0
Parking Lot	6.23	Acre	6.23	271,378.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2019
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Demolition -

Architectural Coating - Use of Low-VOC Paints

Vehicle Trips -

Vehicle Emission Factors - Fleet Mix Per Traffic Study

Vehicle Emission Factors - Fleet Mix Per Traffic Study

Vehicle Emission Factors - Fleet Mix Per SCAQMD Recommendation

Water And Wastewater - Include Landscape Water Demand using State Water Budget Worksheet

Solid Waste - 50% Mandatory Recycling Requirement

Construction Off-road Equipment Mitigation - Water 3 times daily

Operational Off-Road Equipment - Assume Forklifts and Generator Set Equipment per ERG/ARB 2005 Survey
Generators Operatiosn Based on SCE Outage Data

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	37.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	37.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	12.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	1.67
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	3.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblSolidWaste	SolidWasteGenerationRate	381.92	190.96
tblVehicleEF	HHD	0.03	0.13
tblVehicleEF	HHD	0.03	0.13
tblVehicleEF	LDA	0.51	0.74
tblVehicleEF	LDA	0.51	0.74
tblVehicleEF	LDA	0.51	0.74
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00

tblVehicleEF	LHD1	0.04	0.08
tblVehicleEF	LHD1	0.04	0.08
tblVehicleEF	LHD1	0.04	0.09
tblVehicleEF	LHD2	6.6660e-003	0.00
tblVehicleEF	LHD2	6.6660e-003	0.00
tblVehicleEF	LHD2	6.6660e-003	0.00
tblVehicleEF	MCY	4.3770e-003	0.00
tblVehicleEF	MCY	4.3770e-003	0.00
tblVehicleEF	MCY	4.3770e-003	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MH	2.1280e-003	0.00
tblVehicleEF	MH	2.1280e-003	0.00
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	SBUS	5.8200e-004	0.00
tblVehicleEF	SBUS	5.8200e-004	0.00
tblVehicleEF	UBUS	2.4960e-003	0.00
tblVehicleEF	UBUS	2.4960e-003	0.00
tblVehicleEF	UBUS	2.4960e-003	0.00
tblWater	AerobicPercent	87.46	97.79

tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	OutdoorWaterUseRate	0.00	2,591,811.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.6684	5.5485	5.9757	0.0108	0.6154	0.2811	0.8965	0.2099	0.2623	0.4722	0.0000	909.8475	909.8475	0.1175	0.0000	912.3146
2018	0.9682	1.8518	2.3844	4.8300e-003	0.1993	0.0936	0.2928	0.0536	0.0877	0.1413	0.0000	391.0767	391.0767	0.0435	0.0000	391.9891
Total	**1.6366**	**7.4003**	**8.3601**	**0.0157**	**0.8146**	**0.3747**	**1.1893**	**0.2635**	**0.3500**	**0.6135**	**0.0000**	**1,300.9241**	**1,300.9241**	**0.1609**	**0.0000**	**1,304.3037**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.6684	5.5485	5.9757	0.0108	0.4809	0.2811	0.7620	0.1467	0.2623	0.4090	0.0000	909.8470	909.8470	0.1175	0.0000	912.3142
2018	0.9682	1.8518	2.3844	4.8300e-003	0.1993	0.0936	0.2928	0.0536	0.0877	0.1413	0.0000	391.0765	391.0765	0.0435	0.0000	391.9889
Total	**1.6366**	**7.4003**	**8.3601**	**0.0157**	**0.6802**	**0.3747**	**1.0548**	**0.2003**	**0.3500**	**0.5503**	**0.0000**	**1,300.9235**	**1,300.9235**	**0.1609**	**0.0000**	**1,304.3030**

	ROG	NOx	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	16.51	0.00	11.31	23.98	0.00	10.30	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.9452	5.0000e-005	5.3600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0103	0.0103	3.0000e-005	0.0000	0.0109
Energy	0.0553	0.5026	0.4222	3.0200e-003		0.0382	0.0382		0.0382	0.0382	0.0000	2,740.9403	2,740.9403	0.0585	0.0200	2,748.3561
Mobile					1.3370	0.0000	1.3370	0.3282	0.0000	0.3282	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	0.0629	0.5618	0.4704	6.0000e-004		0.0434	0.0434		0.0400	0.0400	0.0000	54.2454	54.2454	0.0170	0.0000	54.6021
Waste						0.0000	0.0000		0.0000	0.0000	38.7632	0.0000	38.7632	2.2908	0.0000	86.8707
Water						0.0000	0.0000		0.0000	0.0000	25.1995	574.9771	600.1766	0.6713	0.0574	632.0694
Total	**3.0635**	**1.0644**	**0.8980**	**3.6200e-003**	**1.3370**	**0.0817**	**1.4186**	**0.3282**	**0.0782**	**0.4064**	**63.9627**	**3,370.1731**	**3,434.1358**	**3.0377**	**0.0774**	**3,521.9092**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.9452	5.0000e-005	5.3600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0103	0.0103	3.0000e-005	0.0000	0.0109
Energy	0.0553	0.5026	0.4222	3.0200e-003		0.0382	0.0382		0.0382	0.0382	0.0000	2,740.9403	2,740.9403	0.0585	0.0200	2,748.3561
Mobile					1.3370	0.0000	1.3370	0.3282	0.0000	0.3282	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	0.0629	0.5618	0.4704	6.0000e-004		0.0434	0.0434		0.0400	0.0400	0.0000	54.2454	54.2454	0.0170	0.0000	54.6021
Waste						0.0000	0.0000		0.0000	0.0000	38.7632	0.0000	38.7632	2.2908	0.0000	86.8707
Water						0.0000	0.0000		0.0000	0.0000	25.1995	574.9771	600.1766	0.6709	0.0573	632.0292
Total	**3.0635**	**1.0644**	**0.8980**	**3.6200e-003**	**1.3370**	**0.0817**	**1.4186**	**0.3282**	**0.0782**	**0.4064**	**63.9627**	**3,370.1731**	**3,434.1358**	**3.0372**	**0.0773**	**3,521.8690**

	ROG	NOx	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	2.05	52.78	52.39	16.57	0.00	53.20	3.06	0.00	51.13	9.84	0.00	1.61	1.58	0.57	0.12	1.55

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	5	10	
3	Grading	Grading	2/11/2017	3/24/2017	5	30	
4	Building Construction	Building Construction	3/25/2017	5/18/2018	5	300	
5	Paving	Paving	5/19/2018	6/15/2018	5	20	
6	Architectural Coating	Architectural Coating	6/16/2018	7/13/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 626,597; Non-Residential Outdoor: 208,866 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38

Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	733.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	286.00	112.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Architectural Coating	1	57.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8292
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**		**0.0213**	**0.0213**		**0.0198**	**0.0198**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8292**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.2000e-003	0.0981	0.0774	2.7000e-004	6.2800e-003	1.4400e-003	7.7200e-003	1.7200e-003	1.3200e-003	3.0500e-003	0.0000	24.3087	24.3087	1.7000e-004	0.0000	24.3124
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	8.0000e-004	8.2900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total	**6.7400e-003**	**0.0989**	**0.0857**	**2.9000e-004**	**7.9300e-003**	**1.4500e-003**	**9.3800e-003**	**2.1600e-003**	**1.3300e-003**	**3.5000e-003**	**0.0000**	**25.7914**	**25.7914**	**2.5000e-004**	**0.0000**	**25.7967**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8291
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**		**0.0213**	**0.0213**		**0.0198**	**0.0198**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8291**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.2000e-003	0.0981	0.0774	2.7000e-004	6.2800e-003	1.4400e-003	7.7200e-003	1.7200e-003	1.3200e-003	3.0500e-003	0.0000	24.3087	24.3087	1.7000e-004	0.0000	24.3124
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	8.0000e-004	8.2900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total	**6.7400e-003**	**0.0989**	**0.0857**	**2.9000e-004**	**7.9300e-003**	**1.4500e-003**	**9.3800e-003**	**2.1600e-003**	**1.3300e-003**	**3.5000e-003**	**0.0000**	**25.7914**	**25.7914**	**2.5000e-004**	**0.0000**	**25.7967**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
Total	**0.0242**	**0.2588**	**0.1970**	**2.0000e-004**	**0.0903**	**0.0138**	**0.1041**	**0.0497**	**0.0127**	**0.0623**	**0.0000**	**18.1577**	**18.1577**	**5.5600e-003**	**0.0000**	**18.2745**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	4.8000e-004	4.9700e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8896	0.8896	5.0000e-005	0.0000	0.8906
Total	**3.2000e-004**	**4.8000e-004**	**4.9700e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.8896**	**0.8896**	**5.0000e-005**	**0.0000**	**0.8906**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
Total	**0.0242**	**0.2588**	**0.1970**	**2.0000e-004**	**0.0352**	**0.0138**	**0.0490**	**0.0194**	**0.0127**	**0.0320**	**0.0000**	**18.1577**	**18.1577**	**5.5600e-003**	**0.0000**	**18.2745**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	4.8000e-004	4.9700e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8896	0.8896	5.0000e-005	0.0000	0.8906
Total	**3.2000e-004**	**4.8000e-004**	**4.9700e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.8896**	**0.8896**	**5.0000e-005**	**0.0000**	**0.8906**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0915	1.0439	0.7021	9.3000e-004		0.0498	0.0498		0.0458	0.0458	0.0000	85.9109	85.9109	0.0263	0.0000	86.4637
Total	**0.0915**	**1.0439**	**0.7021**	**9.3000e-004**	**0.1301**	**0.0498**	**0.1799**	**0.0540**	**0.0458**	**0.0997**	**0.0000**	**85.9109**	**85.9109**	**0.0263**	**0.0000**	**86.4637**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0800e-003	1.5900e-003	0.0166	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.9653	2.9653	1.5000e-004	0.0000	2.9685
Total	**1.0800e-003**	**1.5900e-003**	**0.0166**	**4.0000e-005**	**3.2900e-003**	**3.0000e-005**	**3.3200e-003**	**8.7000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**2.9653**	**2.9653**	**1.5000e-004**	**0.0000**	**2.9685**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0507	0.0000	0.0507	0.0210	0.0000	0.0210	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0915	1.0439	0.7021	9.3000e-004		0.0498	0.0498		0.0458	0.0458	0.0000	85.9108	85.9108	0.0263	0.0000	86.4636
Total	**0.0915**	**1.0439**	**0.7021**	**9.3000e-004**	**0.0507**	**0.0498**	**0.1005**	**0.0210**	**0.0458**	**0.0668**	**0.0000**	**85.9108**	**85.9108**	**0.0263**	**0.0000**	**86.4636**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0800e-003	1.5900e-003	0.0166	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.9653	2.9653	1.5000e-004	0.0000	2.9685
Total	**1.0800e-003**	**1.5900e-003**	**0.0166**	**4.0000e-005**	**3.2900e-003**	**3.0000e-005**	**3.3200e-003**	**8.7000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**2.9653**	**2.9653**	**1.5000e-004**	**0.0000**	**2.9685**

3.3 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3102	2.6406	1.8129	2.6800e-003		0.1781	0.1781		0.1673	0.1673	0.0000	239.4791	239.4791	0.0589	0.0000	240.7169
Total	**0.3102**	**2.6406**	**1.8129**	**2.6800e-003**		**0.1781**	**0.1781**		**0.1673**	**0.1673**	**0.0000**	**239.4791**	**239.4791**	**0.0589**	**0.0000**	**240.7169**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0911	0.9253	1.2370	2.4300e-003	0.0689	0.0142	0.0831	0.0197	0.0130	0.0327	0.0000	217.3424	217.3424	1.5600e-003	0.0000	217.3751
Worker	0.1027	0.1521	1.5806	3.8500e-003	0.3138	2.5700e-003	0.3164	0.0833	2.3700e-003	0.0857	0.0000	282.6929	282.6929	0.0146	0.0000	282.9996
Total	**0.1939**	**1.0774**	**2.8175**	**6.2800e-003**	**0.3827**	**0.0167**	**0.3994**	**0.1030**	**0.0154**	**0.1184**	**0.0000**	**500.0353**	**500.0353**	**0.0162**	**0.0000**	**500.3747**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3102	2.6406	1.8129	2.6800e-003		0.1781	0.1781		0.1673	0.1673	0.0000	239.4788	239.4788	0.0589	0.0000	240.7166
Total	**0.3102**	**2.6406**	**1.8129**	**2.6800e-003**		**0.1781**	**0.1781**		**0.1673**	**0.1673**	**0.0000**	**239.4788**	**239.4788**	**0.0589**	**0.0000**	**240.7166**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0911	0.9253	1.2370	2.4300e-003	0.0689	0.0142	0.0831	0.0197	0.0130	0.0327	0.0000	217.3424	217.3424	1.5600e-003	0.0000	217.3751
Worker	0.1027	0.1521	1.5806	3.8500e-003	0.3138	2.5700e-003	0.3164	0.0833	2.3700e-003	0.0857	0.0000	282.6929	282.6929	0.0146	0.0000	282.9996
Total	**0.1939**	**1.0774**	**2.8175**	**6.2800e-003**	**0.3827**	**0.0167**	**0.3994**	**0.1030**	**0.0154**	**0.1184**	**0.0000**	**500.0353**	**500.0353**	**0.0162**	**0.0000**	**500.3747**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1334	1.1630	0.8766	1.3400e-003		0.0747	0.0747		0.0702	0.0702	0.0000	118.3848	118.3848	0.0290	0.0000	118.9932
Total	**0.1334**	**1.1630**	**0.8766**	**1.3400e-003**		**0.0747**	**0.0747**		**0.0702**	**0.0702**	**0.0000**	**118.3848**	**118.3848**	**0.0290**	**0.0000**	**118.9932**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0426	0.4247	0.5925	1.2100e-003	0.0345	6.6700e-003	0.0411	9.8400e-003	6.1300e-003	0.0160	0.0000	106.8481	106.8481	7.7000e-004	0.0000	106.8643
Worker	0.0461	0.0690	0.7157	1.9300e-003	0.1569	1.2500e-003	0.1581	0.0417	1.1600e-003	0.0428	0.0000	136.0707	136.0707	6.7800e-003	0.0000	136.2130
Total	**0.0888**	**0.4936**	**1.3083**	**3.1400e-003**	**0.1914**	**7.9200e-003**	**0.1993**	**0.0515**	**7.2900e-003**	**0.0588**	**0.0000**	**242.9187**	**242.9187**	**7.5500e-003**	**0.0000**	**243.0773**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1334	1.1630	0.8766	1.3400e-003		0.0747	0.0747		0.0702	0.0702	0.0000	118.3847	118.3847	0.0290	0.0000	118.9931
Total	**0.1334**	**1.1630**	**0.8766**	**1.3400e-003**		**0.0747**	**0.0747**		**0.0702**	**0.0702**	**0.0000**	**118.3847**	**118.3847**	**0.0290**	**0.0000**	**118.9931**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0426	0.4247	0.5925	1.2100e-003	0.0345	6.6700e-003	0.0411	9.8400e-003	6.1300e-003	0.0160	0.0000	106.8481	106.8481	7.7000e-004	0.0000	106.8643
Worker	0.0461	0.0690	0.7157	1.9300e-003	0.1569	1.2500e-003	0.1581	0.0417	1.1600e-003	0.0428	0.0000	136.0707	136.0707	6.7800e-003	0.0000	136.2130
Total	**0.0888**	**0.4936**	**1.3083**	**3.1400e-003**	**0.1914**	**7.9200e-003**	**0.1993**	**0.0515**	**7.2900e-003**	**0.0588**	**0.0000**	**242.9187**	**242.9187**	**7.5500e-003**	**0.0000**	**243.0773**

3.3 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0161	0.1716	0.1449	2.2000e-004		9.3900e-003	9.3900e-003		8.6400e-003	8.6400e-003	0.0000	20.3687	20.3687	6.3400e-003	0.0000	20.5019
Paving	8.1600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0243**	**0.1716**	**0.1449**	**2.2000e-004**		**9.3900e-003**	**9.3900e-003**		**8.6400e-003**	**8.6400e-003**	**0.0000**	**20.3687**	**20.3687**	**6.3400e-003**	**0.0000**	**20.5019**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	7.2000e-004	7.5100e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4273	1.4273	7.0000e-005	0.0000	1.4288
Total	**4.8000e-004**	**7.2000e-004**	**7.5100e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4273**	**1.4273**	**7.0000e-005**	**0.0000**	**1.4288**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0161	0.1716	0.1449	2.2000e-004		9.3900e-003	9.3900e-003		8.6400e-003	8.6400e-003	0.0000	20.3687	20.3687	6.3400e-003	0.0000	20.5019
Paving	8.1600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0243**	**0.1716**	**0.1449**	**2.2000e-004**		**9.3900e-003**	**9.3900e-003**		**8.6400e-003**	**8.6400e-003**	**0.0000**	**20.3687**	**20.3687**	**6.3400e-003**	**0.0000**	**20.5019**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	7.2000e-004	7.5100e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4273	1.4273	7.0000e-005	0.0000	1.4288
Total	**4.8000e-004**	**7.2000e-004**	**7.5100e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4273**	**1.4273**	**7.0000e-005**	**0.0000**	**1.4288**

3.3 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7164					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0185	3.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	2.5533	2.5533	2.4000e-004	0.0000	2.5584
Total	**0.7194**	**0.0201**	**0.0185**	**3.0000e-005**		**1.5100e-003**	**1.5100e-003**		**1.5100e-003**	**1.5100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.4000e-004**	**0.0000**	**2.5584**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8400e-003	2.7500e-003	0.0285	8.0000e-005	6.2500e-003	5.0000e-005	6.3000e-003	1.6600e-003	5.0000e-005	1.7100e-003	0.0000	5.4238	5.4238	2.7000e-004	0.0000	5.4295
Total	**1.8400e-003**	**2.7500e-003**	**0.0285**	**8.0000e-005**	**6.2500e-003**	**5.0000e-005**	**6.3000e-003**	**1.6600e-003**	**5.0000e-005**	**1.7100e-003**	**0.0000**	**5.4238**	**5.4238**	**2.7000e-004**	**0.0000**	**5.4295**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.7164					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0185	3.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	2.5533	2.5533	2.4000e-004	0.0000	2.5584
Total	**0.7194**	**0.0201**	**0.0185**	**3.0000e-005**		**1.5100e-003**	**1.5100e-003**		**1.5100e-003**	**1.5100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.4000e-004**	**0.0000**	**2.5584**

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8400e-003	2.7500e-003	0.0285	8.0000e-005	6.2500e-003	5.0000e-005	6.3000e-003	1.6600e-003	5.0000e-005	1.7100e-003	0.0000	5.4238	5.4238	2.7000e-004	0.0000	5.4295
Total	**1.8400e-003**	**2.7500e-003**	**0.0285**	**8.0000e-005**	**6.2500e-003**	**5.0000e-005**	**6.3000e-003**	**1.6600e-003**	**5.0000e-005**	**1.7100e-003**	**0.0000**	**5.4238**	**5.4238**	**2.7000e-004**	**0.0000**	**5.4295**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Mitigated					1.3370	0.0000	1.3370	0.3282	0.0000	0.3282	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated					1.3370	0.0000	1.3370	0.3282	0.0000	0.3282	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Manufacturing	1,176.56	458.92	190.96	4,132,646	4,132,646
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	1,176.56	458.92	190.96	4,132,646	4,132,646

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
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

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

1.744000	0.000000	0.000000	0.000000	0.084000	0.000000	0.046000		0.000000	0.000000	0.000000	0.000582	0.002128	

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,193.7841	2,193.7841	0.0480	9.9300e-003	2,197.8700
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,193.7841	2,193.7841	0.0480	9.9300e-003	2,197.8700
NaturalGas Mitigated	0.0553	0.5026	0.4222	3.0200e-003		0.0382	0.0382		0.0382	0.0382	0.0000	547.1562	547.1562	0.0105	0.0100	550.4861
NaturalGas Unmitigated	0.0553	0.5026	0.4222	3.0200e-003		0.0382	0.0382		0.0382	0.0382	0.0000	547.1562	547.1562	0.0105	0.0100	550.4861

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
Manufacturing	1.02533e+007	0.0553	0.5026	0.4222	3.0200e-003		0.0382	0.0382		0.0382	0.0382	0.0000	547.1562	547.1562	0.0105	0.0100	550.4861
Total		**0.0553**	**0.5026**	**0.4222**	**3.0200e-003**		**0.0382**	**0.0382**		**0.0382**	**0.0382**	**0.0000**	**547.1562**	**547.1562**	**0.0105**	**0.0100**	**550.4861**

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
Manufacturing	1.02533e+007	0.0553	0.5026	0.4222	3.0200e-003		0.0382	0.0382		0.0382	0.0382	0.0000	547.1562	547.1562	0.0105	0.0100	550.4861
Total		**0.0553**	**0.5026**	**0.4222**	**3.0200e-003**		**0.0382**	**0.0382**		**0.0382**	**0.0382**	**0.0000**	**547.1562**	**547.1562**	**0.0105**	**0.0100**	**550.4861**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
Manufacturing	3.40956e+006		2,050.1845	0.0449	9.2800e-003	2,054.0030
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	238813		143.5996	3.1400e-003	6.5000e-004	143.8670
Total			**2,193.7841**	**0.0480**	**9.9300e-003**	**2,197.8700**

Mitigated

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
Manufacturing	3.40956e+006		2,050.1845	0.0449	9.2800e-003	2,054.0030
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	238813		143.5996	3.1400e-003	6.5000e-004	143.8670
Total			**2,193.7841**	**0.0480**	**9.9300e-003**	**2,197.8700**

6.E Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.9452	5.0000e-005	5.3600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0103	0.0103	3.0000e-005	0.0000	0.0109
Unmitigated	2.9452	5.0000e-005	5.3600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0103	0.0103	3.0000e-005	0.0000	0.0109

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	0.4841					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4607					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.3600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0103	0.0103	3.0000e-005	0.0000	0.0109
Total	**2.9452**	**5.0000e-005**	**5.3600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0103**	**0.0103**	**3.0000e-005**	**0.0000**	**0.0109**

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	0.4841					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4607					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.3600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0103	0.0103	3.0000e-005	0.0000	0.0109
Total	**2.9452**	**5.0000e-005**	**5.3600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0103**	**0.0103**	**3.0000e-005**	**0.0000**	**0.0109**

7.3 Water Detail

7.3.1 Mitigation Measures Water

		Total CO2	CH4	N2O	CO2e
Category	tons/yr	MT/yr			
Mitigated		600.1766	0.6709	0.0573	632.0292
Unmitigated		600.1766	0.6713	0.0574	632.0694

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
Manufacturing	71.225 / 2.59181		600.1766	0.6713	0.0574	632.0694
Other Non-Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0		0.0000	0.0000	0.0000	0.0000
Total			**600.1766**	**0.6713**	**0.0574**	**632.0694**

Mitigated

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
Manufacturing	71.225 / 2.59181		600.1766	0.6709	0.0573	632.0292
Other Non-Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0		0.0000	0.0000	0.0000	0.0000
Total			**600.1766**	**0.6709**	**0.0573**	**632.0292**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

		Total CO2	CH4	N2O	CO2e
	tons/yr	MT/yr			
Mitigated		38.7632	2.2908	0.0000	86.8707
Unmitigated		38.7632	2.2908	0.0000	86.8707

8.2 Waste by Land Use

Unmitigated

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
Manufacturing	190.96		38.7632	2.2908	0.0000	86.8707
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0		0.0000	0.0000	0.0000	0.0000
Total			**38.7632**	**2.2908**	**0.0000**	**86.8707**

Mitigated

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
Manufacturing	190.96		38.7632	2.2908	0.0000	86.8707
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0		0.0000	0.0000	0.0000	0.0000
Total			**38.7632**	**2.2908**	**0.0000**	**86.8707**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	3	8.00	260	89	0.20	CNG
Generator Sets	1	1.67	12	84	0.74	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Forklifts	0.0624	0.5570	0.4657	6.0000e-004		0.0432	0.0432		0.0397	0.0397	0.0000	53.5375	53.5375	0.0169	0.0000	53.8932
Generator Sets	5.6000e-004	4.7300e-003	4.6600e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	0.7079	0.7079	4.0000e-005	0.0000	0.7089
Total	**0.0629**	**0.5618**	**0.4704**	**6.1000e-004**		**0.0434**	**0.0434**		**0.0400**	**0.0400**	**0.0000**	**54.2454**	**54.2454**	**0.0170**	**0.0000**	**54.6020**

10.0 Vegetation

Planning Commission - Exhibit 1 - Development Review Committee Staff Report
Development Review Committee - Exhibit 7 - CEQA Documents

Center Street Warehouse

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	308.00	1000sqft	7.07	308,000.00	0
Other Non-Asphalt Surfaces	101.59	1000sqft	2.33	101,590.00	0
Parking Lot	6.23	Acre	6.23	271,378.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2019
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Demolition -

Architectural Coating - Use of Low-VOC Paints

Vehicle Trips -

Vehicle Emission Factors - Fleet Mix Per Traffic Study

Vehicle Emission Factors - Fleet Mix Per Traffic Study

Vehicle Emission Factors - Fleet Mix Per SCAQMD Recommendation

Water And Wastewater - Include Landscape Water Demand using State Water Budget Worksheet

Solid Waste - 50% Mandatory Recycling Requirement

Construction Off-road Equipment Mitigation - Water 3 times daily

Operational Off-Road Equipment - Assume Forklifts and Generator Set Equipment per ERG/ARB 2005 Survey
Generators Operatiosn Based on SCE Outage Data

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	37.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	37.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	12.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	1.67
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	3.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblSolidWaste	SolidWasteGenerationRate	381.92	190.96
tblVehicleEF	HHD	0.03	0.13
tblVehicleEF	HHD	0.03	0.13
tblVehicleEF	LDA	0.51	0.74
tblVehicleEF	LDA	0.51	0.74
tblVehicleEF	LDA	0.51	0.74
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00

tblVehicleEF	LHD1	0.04	0.08
tblVehicleEF	LHD1	0.04	0.08
tblVehicleEF	LHD1	0.04	0.09
tblVehicleEF	LHD2	6.6660e-003	0.00
tblVehicleEF	LHD2	6.6660e-003	0.00
tblVehicleEF	LHD2	6.6660e-003	0.00
tblVehicleEF	MCY	4.3770e-003	0.00
tblVehicleEF	MCY	4.3770e-003	0.00
tblVehicleEF	MCY	4.3770e-003	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MH	2.1280e-003	0.00
tblVehicleEF	MH	2.1280e-003	0.00
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	SBUS	5.8200e-004	0.00
tblVehicleEF	SBUS	5.8200e-004	0.00
tblVehicleEF	UBUS	2.4960e-003	0.00
tblVehicleEF	UBUS	2.4960e-003	0.00
tblVehicleEF	UBUS	2.4960e-003	0.00
tblWater	AerobicPercent	87.46	97.79

tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	OutdoorWaterUseRate	0.00	2,591,811.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.1740	69.6860	47.9791	0.0917	18.2675	3.3190	21.0233	9.9840	3.0535	12.5194	0.0000	8,316.0820	8,316.0820	1.9457	0.0000	8,356.9409
2018	72.1298	32.6138	42.7975	0.0916	3.8970	1.6522	5.5491	1.0472	1.5501	2.5974	0.0000	8,124.1481	8,124.1481	0.8050	0.0000	8,141.0521
Total	**78.3038**	**102.2998**	**90.7766**	**0.1832**	**22.1645**	**4.9711**	**26.5724**	**11.0313**	**4.6036**	**15.1168**	**0.0000**	**16,440.2301**	**16,440.2301**	**2.7506**	**0.0000**	**16,497.9930**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.1740	69.6860	47.9791	0.0917	7.2470	3.3190	10.0029	3.9263	3.0535	6.4617	0.0000	8,316.0820	8,316.0820	1.9457	0.0000	8,356.9409
2018	72.1298	32.6138	42.7975	0.0916	3.8970	1.6522	5.5491	1.0472	1.5501	2.5974	0.0000	8,124.1481	8,124.1481	0.8050	0.0000	8,141.0521
Total	**78.3038**	**102.2998**	**90.7766**	**0.1832**	**11.1440**	**4.9711**	**15.5520**	**4.9736**	**4.6036**	**9.0591**	**0.0000**	**16,440.2301**	**16,440.2301**	**2.7506**	**0.0000**	**16,497.9930**

	ROG	NOx	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	49.72	0.00	41.47	54.91	0.00	40.07	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	16.1396	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0962
Energy	0.3030	2.7541	2.3134	0.0165		0.2093	0.2093		0.2093	0.2093		3,304.8574	3,304.8574	0.0633	0.0606	3,324.9702
Mobile	3.8982	29.0779	52.2474	0.1877	11.2164	0.5031	11.7195	3.0090	0.4632	3.4722		15,825.3325	15,825.3325	0.3507		15,832.6981
Offroad	0.5725	5.0736	4.3598	5.9500e-003		0.3791	0.3791		0.3525	0.3525		584.0197	584.0197	0.1519		587.2089
Total	**20.9133**	**36.9059**	**58.9634**	**0.2102**	**11.2164**	**1.0917**	**12.3081**	**3.0090**	**1.0252**	**4.0342**		**19,714.3005**	**19,714.3005**	**0.5662**	**0.0606**	**19,744.9734**

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	16.1396	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0962
Energy	0.3030	2.7541	2.3134	0.0165		0.2093	0.2093		0.2093	0.2093		3,304.8574	3,304.8574	0.0633	0.0606	3,324.9702
Mobile	3.8982	29.0779	52.2474	0.1877	11.2164	0.5031	11.7195	3.0090	0.4632	3.4722		15,825.3325	15,825.3325	0.3507		15,832.6981
Offroad	0.5725	5.0736	4.3598	5.9500e-003		0.3791	0.3791		0.3525	0.3525		584.0197	584.0197	0.1519		587.2089
Total	**20.9133**	**36.9059**	**58.9634**	**0.2102**	**11.2164**	**1.0917**	**12.3081**	**3.0090**	**1.0252**	**4.0342**		**19,714.3005**	**19,714.3005**	**0.5662**	**0.0606**	**19,744.9734**

	ROG	NOx	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	2.74	13.75	7.39	2.83	0.00	34.73	3.08	0.00	34.39	8.74	0.00	2.96	2.96	26.82	0.00	2.97

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	5	10	
3	Grading	Grading	2/11/2017	3/24/2017	5	30	
4	Building Construction	Building Construction	3/25/2017	5/18/2018	5	300	
5	Paving	Paving	5/19/2018	6/15/2018	5	20	
6	Architectural Coating	Architectural Coating	6/16/2018	7/13/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 626,597; Non-Residential Outdoor: 208,866 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38

Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	733.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	286.00	112.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Architectural Coating	1	57.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**		**2.1252**	**2.1252**		**1.9797**	**1.9797**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5973	9.3086	6.8405	0.0270	0.6386	0.1436	0.7822	0.1749	0.1321	0.3070		2,682.2557	2,682.2557	0.0192		2,682.6579
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.6086	171.6086	8.4400e-003		171.7859
Total	**0.6534**	**9.3791**	**7.7210**	**0.0292**	**0.8062**	**0.1450**	**0.9512**	**0.2193**	**0.1334**	**0.3527**		**2,853.8643**	**2,853.8643**	**0.0276**		**2,854.4439**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**		**2.1252**	**2.1252**		**1.9797**	**1.9797**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5973	9.3086	6.8405	0.0270	0.6386	0.1436	0.7822	0.1749	0.1321	0.3070		2,682.2557	2,682.2557	0.0192		2,682.6579
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.6086	171.6086	8.4400e-003		171.7859
Total	**0.6534**	**9.3791**	**7.7210**	**0.0292**	**0.8062**	**0.1450**	**0.9512**	**0.2193**	**0.1334**	**0.3527**		**2,853.8643**	**2,853.8643**	**0.0276**		**2,854.4439**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0674	0.0846	1.0567	2.5500e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		205.9304	205.9304	0.0101		206.1431
Total	**0.0674**	**0.0846**	**1.0567**	**2.5500e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**205.9304**	**205.9304**	**0.0101**		**206.1431**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**7.0458**	**2.7542**	**9.8001**	**3.8730**	**2.5339**	**6.4069**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0674	0.0846	1.0567	2.5500e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		205.9304	205.9304	0.0101		206.1431
Total	**0.0674**	**0.0846**	**1.0567**	**2.5500e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**205.9304**	**205.9304**	**0.0101**		**206.1431**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**8.6733**	**3.3172**	**11.9905**	**3.5965**	**3.0518**	**6.6483**		**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0749	0.0940	1.1741	2.8300e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		228.8115	228.8115	0.0113		229.0479
Total	**0.0749**	**0.0940**	**1.1741**	**2.8300e-003**	**0.2236**	**1.8000e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**228.8115**	**228.8115**	**0.0113**		**229.0479**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**3.3826**	**3.3172**	**6.6998**	**1.4026**	**3.0518**	**4.4545**	**0.0000**	**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0749	0.0940	1.1741	2.8300e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		228.8115	228.8115	0.0113		229.0479
Total	**0.0749**	**0.0940**	**1.1741**	**2.8300e-003**	**0.2236**	**1.8000e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**228.8115**	**228.8115**	**0.0113**		**229.0479**

3.3 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8576	8.8566	10.5067	0.0244	0.7002	0.1409	0.8411	0.1994	0.1296	0.3291		2,404.2722	2,404.2722	0.0170		2,404.6282
Worker	1.0704	1.3447	16.7892	0.0405	3.1968	0.0257	3.2225	0.8478	0.0237	0.8715		3,272.0046	3,272.0046	0.1610		3,275.3848
Total	**1.9280**	**10.2013**	**27.2959**	**0.0648**	**3.8970**	**0.1667**	**4.0636**	**1.0472**	**0.1534**	**1.2006**		**5,676.2767**	**5,676.2767**	**0.1779**		**5,680.0130**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8576	8.8566	10.5067	0.0244	0.7002	0.1409	0.8411	0.1994	0.1296	0.3291		2,404.2722	2,404.2722	0.0170		2,404.6282
Worker	1.0704	1.3447	16.7892	0.0405	3.1968	0.0257	3.2225	0.8478	0.0237	0.8715		3,272.0046	3,272.0046	0.1610		3,275.3848
Total	**1.9280**	**10.2013**	**27.2959**	**0.0648**	**3.8970**	**0.1667**	**4.0636**	**1.0472**	**0.1534**	**1.2006**		**5,676.2767**	**5,676.2767**	**0.1779**		**5,680.0130**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8045	8.1330	10.0102	0.0243	0.7002	0.1328	0.8330	0.1994	0.1222	0.3216		2,363.9547	2,363.9547	0.0169		2,364.3086
Worker	0.9650	1.2199	15.2546	0.0405	3.1968	0.0250	3.2218	0.8478	0.0232	0.8710		3,150.2545	3,150.2545	0.1494		3,153.3918
Total	**1.7694**	**9.3529**	**25.2648**	**0.0648**	**3.8970**	**0.1579**	**4.0549**	**1.0472**	**0.1454**	**1.1926**		**5,514.2091**	**5,514.2091**	**0.1663**		**5,517.7004**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Vendor	0.8045	8.1330	10.0102	0.0243	0.7002	0.1328	0.8330	0.1994	0.1222	0.3216		2,363.9547	2,363.9547	0.0169		2,364.3086
Worker	0.9650	1.2199	15.2546	0.0405	3.1968	0.0250	3.2218	0.8478	0.0232	0.8710		3,150.2545	3,150.2545	0.1494		3,153.3918
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**1.7694**	**9.3529**	**25.2648**	**0.0648**	**3.8970**	**0.1579**	**4.0549**	**1.0472**	**0.1454**	**1.1926**		**5,514.2091**	**5,514.2091**	**0.1663**		**5,517.7004**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.8161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4275**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0506	0.0640	0.8001	2.1200e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		165.2231	165.2231	7.8400e-003		165.3877
Total	**0.0506**	**0.0640**	**0.8001**	**2.1200e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**165.2231**	**165.2231**	**7.8400e-003**		**165.3877**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.8161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4275**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0506	0.0640	0.8001	2.1200e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		165.2231	165.2231	7.8400e-003		165.3877
Total	**0.0506**	**0.0640**	**0.8001**	**2.1200e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**165.2231**	**165.2231**	**7.8400e-003**		**165.3877**

3 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.6389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**71.9375**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1923	0.2431	3.0403	8.0700e-003	0.6371	4.9900e-003	0.6421	0.1690	4.6200e-003	0.1736		627.8479	627.8479	0.0298		628.4732
Total	**0.1923**	**0.2431**	**3.0403**	**8.0700e-003**	**0.6371**	**4.9900e-003**	**0.6421**	**0.1690**	**4.6200e-003**	**0.1736**		**627.8479**	**627.8479**	**0.0298**		**628.4732**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.6389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**71.9375**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1923	0.2431	3.0403	8.0700e-003	0.6371	4.9900e-003	0.6421	0.1690	4.6200e-003	0.1736		627.8479	627.8479	0.0298		628.4732
Total	**0.1923**	**0.2431**	**3.0403**	**8.0700e-003**	**0.6371**	**4.9900e-003**	**0.6421**	**0.1690**	**4.6200e-003**	**0.1736**		**627.8479**	**627.8479**	**0.0298**		**628.4732**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Mitigated	3.8982	29.0779	52.2474	0.1877	11.2164	0.5031	11.7195	3.0090	0.4632	3.4722		15,825.3325	15,825.3325	0.3507		15,832.6981
Unmitigated	3.8982	29.0779	52.2474	0.1877	11.2164	0.5031	11.7195	3.0090	0.4632	3.4722		15,825.3325	15,825.3325	0.3507		15,832.6981

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Manufacturing	1,176.56	458.92	190.96	4,132,646	4,132,646
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	1,176.56	458.92	190.96	4,132,646	4,132,646

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
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

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

1.744000	0.000000	0.000000	0.000000	0.084000	0.000000	0.046000	0.126000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3030	2.7541	2.3134	0.0165		0.2093	0.2093		0.2093	0.2093		3,304.8574	3,304.8574	0.0633	0.0606	3,324.9702
NaturalGas Unmitigated	0.3030	2.7541	2.3134	0.0165		0.2093	0.2093		0.2093	0.2093		3,304.8574	3,304.8574	0.0633	0.0606	3,324.9702

5.7 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					
Manufacturing	28091.3	0.3030	2.7541	2.3134	0.0165		0.2093	0.2093		0.2093	0.2093		3,304.8574	3,304.8574	0.0633	0.0606	3,324.9702
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.3030**	**2.7541**	**2.3134**	**0.0165**		**0.2093**	**0.2093**		**0.2093**	**0.2093**		**3,304.8574**	**3,304.8574**	**0.0633**	**0.0606**	**3,324.9702**

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					
Manufacturing	28.0913	0.3030	2.7541	2.3134	0.0165		0.2093	0.2093		0.2093	0.2093		3,304.8574	3,304.8574	0.0633	0.0606	3,324.9702
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.3030**	**2.7541**	**2.3134**	**0.0165**		**0.2093**	**0.2093**		**0.2093**	**0.2093**		**3,304.8574**	**3,304.8574**	**0.0633**	**0.0606**	**3,324.9702**

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	16.1396	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0962
Unmitigated	16.1396	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0962

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	2.6523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.4832					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0962
Total	**16.1396**	**4.0000e-004**	**0.0429**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0910**	**0.0910**	**2.5000e-004**		**0.0962**

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	2.6523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.4832					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0962
Total	**16.1396**	**4.0000e-004**	**0.0429**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0910**	**0.0910**	**2.5000e-004**		**0.0962**

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
Forklifts	3	8.00	260	89	0.20	CNG
Generator Sets	1	1.67	12	84	0.74	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.4799	4.2849	3.5826	4.5800e-003		0.3320	0.3320		0.3054	0.3054		453.9612	453.9612	0.1436		456.9774
Generator Sets	0.0927	0.7886	0.7772	1.3700e-003		0.0471	0.0471		0.0471	0.0471		130.0585	130.0585	8.2400e-003		130.2315
Total	**0.5725**	**5.0736**	**4.3598**	**5.9500e-003**		**0.3791**	**0.3791**		**0.3525**	**0.3525**		**584.0197**	**584.0197**	**0.1519**		**587.2089**

10.0 Vegetation

Planning Commission - Exhibit 1 - Development Review Committee Staff Report
Development Review Committee - Exhibit 7 - CEQA Documents

Center Street Warehouse

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	308.00	1000sqft	7.07	308,000.00	0
Other Non-Asphalt Surfaces	101.59	1000sqft	2.33	101,590.00	0
Parking Lot	6.23	Acre	6.23	271,378.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2019
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Demolition -

Architectural Coating - Use of Low-VOC Paints

Vehicle Trips -

Vehicle Emission Factors - Fleet Mix Per Traffic Study

Vehicle Emission Factors - Fleet Mix Per Traffic Study

Vehicle Emission Factors - Fleet Mix Per SCAQMD Recommendation

Water And Wastewater - Include Landscape Water Demand using State Water Budget Worksheet

Solid Waste - 50% Mandatory Recycling Requirement

Construction Off-road Equipment Mitigation - Water 3 times daily

Operational Off-Road Equipment - Assume Forklifts and Generator Set Equipment per ERG/ARB 2005 Survey
Generators Operatiosn Based on SCE Outage Data

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	37.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	37.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	12.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	1.67
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	3.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblSolidWaste	SolidWasteGenerationRate	381.92	190.96
tblVehicleEF	HHD	0.03	0.13
tblVehicleEF	HHD	0.03	0.13
tblVehicleEF	LDA	0.51	0.74
tblVehicleEF	LDA	0.51	0.74
tblVehicleEF	LDA	0.51	0.74
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00

tblVehicleEF	LHD1	0.04	0.04	0.08
tblVehicleEF	LHD1	0.04	0.04	0.08
tblVehicleEF	LHD1	0.04	0.04	0.09
tblVehicleEF	LHD2	6.6660e-003	6.6660e-003	0.00
tblVehicleEF	LHD2	6.6660e-003	6.6660e-003	0.00
tblVehicleEF	LHD2	6.6660e-003	6.6660e-003	0.00
tblVehicleEF	MCY	4.3770e-003	4.3770e-003	0.00
tblVehicleEF	MCY	4.3770e-003	4.3770e-003	0.00
tblVehicleEF	MCY	4.3770e-003	4.3770e-003	0.00
tblVehicleEF	MDV	0.14	0.14	0.00
tblVehicleEF	MDV	0.14	0.14	0.00
tblVehicleEF	MDV	0.14	0.14	0.00
tblVehicleEF	MH	2.1280e-003	2.1280e-003	0.00
tblVehicleEF	MH	2.1280e-003	2.1280e-003	0.00
tblVehicleEF	MHD	0.02	0.02	0.05
tblVehicleEF	MHD	0.02	0.02	0.05
tblVehicleEF	MHD	0.02	0.02	0.05
tblVehicleEF	OBUS	1.9400e-003	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	1.9400e-003	0.00
tblVehicleEF	SBUS	5.8200e-004	5.8200e-004	0.00
tblVehicleEF	SBUS	5.8200e-004	5.8200e-004	0.00
tblVehicleEF	UBUS	2.4960e-003	2.4960e-003	0.00
tblVehicleEF	UBUS	2.4960e-003	2.4960e-003	0.00
tblVehicleEF	UBUS	2.4960e-003	2.4960e-003	0.00
tblWater	AerobicPercent	87.46	87.46	97.79

tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	OutdoorWaterUseRate	0.00	2,591,811.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.1755	69.6953	47.8835	0.0889	18.2675	3.3190	21.0233	9.9840	3.0535	12.5194	0.0000	8,092.2198	8,092.2198	1.9457	0.0000	8,133.0787
2018	72.1332	32.9295	43.7048	0.0889	3.8970	1.6534	5.5504	1.0472	1.5513	2.5985	0.0000	7,907.7589	7,907.7589	0.8055	0.0000	7,924.6743
Total	**78.3087**	**102.6248**	**91.5883**	**0.1778**	**22.1645**	**4.9724**	**26.5737**	**11.0313**	**4.6048**	**15.1179**	**0.0000**	**15,999.9787**	**15,999.9787**	**2.7512**	**0.0000**	**16,057.7530**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.1755	69.6953	47.8835	0.0889	7.2470	3.3190	10.0029	3.9263	3.0535	6.4617	0.0000	8,092.2198	8,092.2198	1.9457	0.0000	8,133.0787
2018	72.1332	32.9295	43.7048	0.0889	3.8970	1.6534	5.5504	1.0472	1.5513	2.5985	0.0000	7,907.7589	7,907.7589	0.8055	0.0000	7,924.6743
Total	**78.3087**	**102.6248**	**91.5883**	**0.1778**	**11.1440**	**4.9724**	**15.5533**	**4.9736**	**4.6048**	**9.0602**	**0.0000**	**15,999.9787**	**15,999.9787**	**2.7512**	**0.0000**	**16,057.7530**

	ROG	NOx	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	49.72	0.00	41.47	54.91	0.00	40.07	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	16.1396	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0962
Energy	0.3030	2.7541	2.3134	0.0165		0.2093	0.2093		0.2093	0.2093		3,304.8574	3,304.8574	0.0633	0.0606	3,324.9702
Mobile	4.0536	30.2464	55.1822	0.1820	11.2199	0.5055	11.7254	3.0104	0.4654	3.4757		15,410.3488	15,410.3488	0.3529		15,417.7594
Offroad	0.5725	5.0736	4.3598	5.9500e-003		0.3791	0.3791		0.3525	0.3525		584.0197	584.0197	0.1519		587.2089
Total	**21.0686**	**38.0744**	**61.8982**	**0.2045**	**11.2199**	**1.0940**	**12.3139**	**3.0104**	**1.0274**	**4.0377**		**19,299.3168**	**19,299.3168**	**0.5684**	**0.0606**	**19,330.0346**

Mitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Area	16.1396	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0962
Energy	0.3030	2.7541	2.3134	0.0165		0.2093	0.2093		0.2093	0.2093		3,304.8574	3,304.8574	0.0633	0.0606	3,324.9702
Mobile	4.0536	30.2464	55.1822	0.1820	11.2199	0.5055	11.7254	3.0104	0.4654	3.4757		15,410.3488	15,410.3488	0.3529		15,417.7594
Offroad	0.5725	5.0736	4.3598	5.9500e-003		0.3791	0.3791		0.3525	0.3525		584.0197	584.0197	0.1519		587.2089
Total	**21.0686**	**38.0744**	**61.8982**	**0.2045**	**11.2199**	**1.0940**	**12.3139**	**3.0104**	**1.0274**	**4.0377**		**19,299.3168**	**19,299.3168**	**0.5684**	**0.0606**	**19,330.0346**

	ROG	NOx	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	2.72	13.33	7.04	2.91	0.00	34.65	3.08	0.00	34.31	8.73	0.00	3.03	3.03	26.72	0.00	3.04

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	5	10	
3	Grading	Grading	2/11/2017	3/24/2017	5	30	
4	Building Construction	Building Construction	3/25/2017	5/18/2018	5	300	
5	Paving	Paving	5/19/2018	6/15/2018	5	20	
6	Architectural Coating	Architectural Coating	6/16/2018	7/13/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 626,597; Non-Residential Outdoor: 208,866 (Architectural Coating – sqft)

Off Road Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38

Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	733.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	286.00	112.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Architectural Coating	1	57.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**		**2.1252**	**2.1252**		**1.9797**	**1.9797**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6283	9.6450	7.8877	0.0270	0.6386	0.1439	0.7825	0.1749	0.1324	0.3073		2,675.8805	2,675.8805	0.0194		2,676.2883
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9269	160.9269	8.4400e-003		161.1042
Total	**0.6856**	**9.7224**	**8.6965**	**0.0290**	**0.8062**	**0.1453**	**0.9515**	**0.2193**	**0.1336**	**0.3530**		**2,836.8074**	**2,836.8074**	**0.0279**		**2,837.3925**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**		**2.1252**	**2.1252**		**1.9797**	**1.9797**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6283	9.6450	7.8877	0.0270	0.6386	0.1439	0.7825	0.1749	0.1324	0.3073		2,675.8805	2,675.8805	0.0194		2,676.2883
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9269	160.9269	8.4400e-003		161.1042
Total	**0.6856**	**9.7224**	**8.6965**	**0.0290**	**0.8062**	**0.1453**	**0.9515**	**0.2193**	**0.1336**	**0.3530**		**2,836.8074**	**2,836.8074**	**0.0279**		**2,837.3925**

3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0687	0.0929	0.9706	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1123	193.1123	0.0101		193.3250
Total	**0.0687**	**0.0929**	**0.9706**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1123**	**193.1123**	**0.0101**		**193.3250**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**7.0458**	**2.7542**	**9.8001**	**3.8730**	**2.5339**	**6.4069**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0687	0.0929	0.9706	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1123	193.1123	0.0101		193.3250
Total	**0.0687**	**0.0929**	**0.9706**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1123**	**193.1123**	**0.0101**		**193.3250**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**8.6733**	**3.3172**	**11.9905**	**3.5965**	**3.0518**	**6.6483**		**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0764	0.1033	1.0784	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5692	214.5692	0.0113		214.8056
Total	**0.0764**	**0.1033**	**1.0784**	**2.6500e-003**	**0.2236**	**1.8000e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.5692**	**214.5692**	**0.0113**		**214.8056**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**3.3826**	**3.3172**	**6.6998**	**1.4026**	**3.0518**	**4.4545**	**0.0000**	**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0764	0.1033	1.0784	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5692	214.5692	0.0113		214.8056
Total	**0.0764**	**0.1033**	**1.0784**	**2.6500e-003**	**0.2236**	**1.8000e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.5692**	**214.5692**	**0.0113**		**214.8056**

3.3 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9367	9.0751	12.7296	0.0242	0.7002	0.1423	0.8425	0.1994	0.1309	0.3303		2,384.0753	2,384.0753	0.0175		2,384.4425
Worker	1.0918	1.4767	15.4217	0.0379	3.1968	0.0257	3.2225	0.8478	0.0237	0.8715		3,068.3392	3,068.3392	0.1610		3,071.7194
Total	**2.0285**	**10.5518**	**28.1513**	**0.0621**	**3.8970**	**0.1680**	**4.0650**	**1.0472**	**0.1546**	**1.2019**		**5,452.4145**	**5,452.4145**	**0.1784**		**5,456.1619**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9367	9.0751	12.7296	0.0242	0.7002	0.1423	0.8425	0.1994	0.1309	0.3303		2,384.0753	2,384.0753	0.0175		2,384.4425
Worker	1.0918	1.4767	15.4217	0.0379	3.1968	0.0257	3.2225	0.8478	0.0237	0.8715		3,068.3392	3,068.3392	0.1610		3,071.7194
Total	**2.0285**	**10.5518**	**28.1513**	**0.0621**	**3.8970**	**0.1680**	**4.0650**	**1.0472**	**0.1546**	**1.2019**		**5,452.4145**	**5,452.4145**	**0.1784**		**5,456.1619**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8757	8.3294	12.2153	0.0241	0.7002	0.1341	0.8343	0.1994	0.1234	0.3228		2,344.0544	2,344.0544	0.0174		2,344.4197
Worker	0.9820	1.3393	13.9568	0.0379	3.1968	0.0250	3.2218	0.8478	0.0232	0.8710		2,953.7655	2,953.7655	0.1494		2,956.9028
Total	**1.8576**	**9.6687**	**26.1721**	**0.0621**	**3.8970**	**0.1591**	**4.0561**	**1.0472**	**0.1465**	**1.1938**		**5,297.8199**	**5,297.8199**	**0.1668**		**5,301.3225**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8757	8.3294	12.2153	0.0241	0.7002	0.1341	0.8343	0.1994	0.1234	0.3228		2,344.0544	2,344.0544	0.0174		2,344.4197
Worker	0.9820	1.3393	13.9568	0.0379	3.1968	0.0250	3.2218	0.8478	0.0232	0.8710		2,953.7655	2,953.7655	0.1494		2,956.9028
Total	**1.8576**	**9.6687**	**26.1721**	**0.0621**	**3.8970**	**0.1591**	**4.0561**	**1.0472**	**0.1465**	**1.1938**		**5,297.8199**	**5,297.8199**	**0.1668**		**5,301.3225**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.8161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4275**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0515	0.0702	0.7320	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9178	154.9178	7.8400e-003		155.0823
Total	**0.0515**	**0.0702**	**0.7320**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9178**	**154.9178**	**7.8400e-003**		**155.0823**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.8161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4275**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0515	0.0702	0.7320	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9178	154.9178	7.8400e-003		155.0823
Total	**0.0515**	**0.0702**	**0.7320**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9178**	**154.9178**	**7.8400e-003**		**155.0823**

3 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.6389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**71.9375**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1957	0.2669	2.7816	7.5600e-003	0.6371	4.9900e-003	0.6421	0.1690	4.6200e-003	0.1736		588.6875	588.6875	0.0298		589.3128
Total	**0.1957**	**0.2669**	**2.7816**	**7.5600e-003**	**0.6371**	**4.9900e-003**	**0.6421**	**0.1690**	**4.6200e-003**	**0.1736**		**588.6875**	**588.6875**	**0.0298**		**589.3128**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.6389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**71.9375**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1957	0.2669	2.7816	7.5600e-003	0.6371	4.9900e-003	0.6421	0.1690	4.6200e-003	0.1736		588.6875	588.6875	0.0298		589.3128
Total	**0.1957**	**0.2669**	**2.7816**	**7.5600e-003**	**0.6371**	**4.9900e-003**	**0.6421**	**0.1690**	**4.6200e-003**	**0.1736**		**588.6875**	**588.6875**	**0.0298**		**589.3128**

4.0 Operational Detail - Mobile

4.2 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Mitigated	4.0536	30.2464	55.1822	0.1820	11.2199	0.5055	11.7254	3.0104	0.4654	3.4757		15,410.3488	15,410.3488	0.3529		15,417.7594
Unmitigated	4.0536	30.2464	55.1822	0.1820	11.2199	0.5055	11.7254	3.0104	0.4654	3.4757		15,410.3488	15,410.3488	0.3529		15,417.7594

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Manufacturing	1,176.56	458.92	190.96	4,132,646	4,132,646
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	1,176.56	458.92	190.96	4,132,646	4,132,646

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
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

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

1.744000	0.000000	0.000000	0.000000	0.086000	0.000000	0.046000	0.126000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3030	2.7541	2.3134	0.0165		0.2093	0.2093		0.2093	0.2093		3,304.8574	3,304.8574	0.0633	0.0606	3,324.9702
NaturalGas Unmitigated	0.3030	2.7541	2.3134	0.0165		0.2093	0.2093		0.2093	0.2093		3,304.8574	3,304.8574	0.0633	0.0606	3,324.9702

5.7 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
Manufacturing	28091.3	0.3030	2.7541	2.3134	0.0165		0.2093	0.2093		0.2093	0.2093		3,304.8574	3,304.8574	0.0633	0.0606	3,324.9702
Total		**0.3030**	**2.7541**	**2.3134**	**0.0165**		**0.2093**	**0.2093**		**0.2093**	**0.2093**		**3,304.8574**	**3,304.8574**	**0.0633**	**0.0606**	**3,324.9702**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Manufacturing	28.0913	0.3030	2.7541	2.3134	0.0165		0.2093	0.2093		0.2093	0.2093		3,304.8574	3,304.8574	0.0633	0.0606	3,324.9702
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
Total		**0.3030**	**2.7541**	**2.3134**	**0.0165**		**0.2093**	**0.2093**		**0.2093**	**0.2093**		**3,304.8574**	**3,304.8574**	**0.0633**	**0.0606**	**3,324.9702**

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	16.1396	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0962
Unmitigated	16.1396	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0962

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	2.6523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.4832					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0962
Total	**16.1396**	**4.0000e-004**	**0.0429**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0910**	**0.0910**	**2.5000e-004**		**0.0962**

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	2.6523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.4832					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0600e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0962
Total	**16.1396**	**4.0000e-004**	**0.0429**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0910**	**0.0910**	**2.5000e-004**		**0.0962**

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
Forklifts	3	8.00	260	89	0.20	CNG
Generator Sets	1	1.67	12	84	0.74	Diesel

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.4799	4.2849	3.5826	4.5800e-003		0.3320	0.3320		0.3054	0.3054		453.9612	453.9612	0.1436		456.9774
Generator Sets	0.0927	0.7886	0.7772	1.3700e-003		0.0471	0.0471		0.0471	0.0471		130.0585	130.0585	8.2400e-003		130.2315
Total	**0.5725**	**5.0736**	**4.3598**	**5.9500e-003**		**0.3791**	**0.3791**		**0.3525**	**0.3525**		**584.0197**	**584.0197**	**0.1519**		**587.2089**

10.0 Vegetation

Appendix B
EMFAC2014 Results

Planning Commission - Exhibit 1 - Development Review Committee Staff Report
Development Review Committee - Exhibit 7 - CEQA Documents

PM10 Running

HHDT

	Baseline	Mitigated	Delta	%
2018	0.19	0.01	-0.19	0.96
2045	0.12	0.01	-0.11	0.95

MHDT

	Baseline	Mitigated	Delta	%
2018	0.21	0.00	-0.21	0.98
2045	0.10	0.00	-0.10	0.96

PM10 Idling

HHDT

	Baseline	Mitigated	Delta	%
2018	0.55	0.00	-0.54	0.99
2045	0.35	0.00	-0.34	0.99

MHDT

	Baseline	Mitigated	Delta	%
2018	0.11	0.00	-0.11	1.00
2045	0.06	0.00	-0.06	1.00

PM10 Running

HHDT

	Baseline	Mitigated	Delta	%
2018	193.37	8.21	-185.16	0.96
2045	117.60	5.43	-112.17	0.95

MHDT

	Baseline	Mitigated	Delta	%
2018	214.74	4.06	-210.68	0.98
2045	100.42	3.62	-96.80	0.96

PM10 Idling

HHDT

	Baseline	Mitigated	Delta	%
2018	548.56	3.59	-544.97	0.99
2045	346.03	2.44	-343.58	0.99

MHDT

	Baseline	Mitigated	Delta	%
2018	107.82	0.13	-107.69	1.00
2045	61.56	0.13	-61.43	1.00

EMFAC2014 (v1.0.7) Emission Rates
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2018
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

Region	CalYr	VehClass	MdlYr	Speed	Fuel	PM10_RUNEX	PM10_IDLEX
Riverside (SC)	2018	HHDT	1974	Aggregated	DSL	0.339580421	1.424784096
Riverside (SC)	2018	HHDT	1975	Aggregated	DSL	0.309086943	1.33948867
Riverside (SC)	2018	HHDT	1976	Aggregated	DSL	0.070516539	1.17619745
Riverside (SC)	2018	HHDT	1977	Aggregated	DSL	0.347934822	1.278258022
Riverside (SC)	2018	HHDT	1978	Aggregated	DSL	0.17163622	1.224488441
Riverside (SC)	2018	HHDT	1979	Aggregated	DSL	0.3014317	1.294006823
Riverside (SC)	2018	HHDT	1980	Aggregated	DSL	0.248428206	1.262562289
Riverside (SC)	2018	HHDT	1981	Aggregated	DSL	0.377117006	1.31575757
Riverside (SC)	2018	HHDT	1982	Aggregated	DSL	0.433743328	1.306282124
Riverside (SC)	2018	HHDT	1983	Aggregated	DSL	0.510976964	1.333317735
Riverside (SC)	2018	HHDT	1984	Aggregated	DSL	0.405367111	1.30735173
Riverside (SC)	2018	HHDT	1985	Aggregated	DSL	0.457076901	1.301139528
Riverside (SC)	2018	HHDT	1986	Aggregated	DSL	0.466260428	1.309037489
Riverside (SC)	2018	HHDT	1987	Aggregated	DSL	0.54716514	0.689737443
Riverside (SC)	2018	HHDT	1988	Aggregated	DSL	0.521168979	0.677700322
Riverside (SC)	2018	HHDT	1989	Aggregated	DSL	0.430455919	0.661397826
Riverside (SC)	2018	HHDT	1990	Aggregated	DSL	0.500132437	0.672770518
Riverside (SC)	2018	HHDT	1991	Aggregated	DSL	0.18479219	0.510553182
Riverside (SC)	2018	HHDT	1992	Aggregated	DSL	0.211736292	0.524432801
Riverside (SC)	2018	HHDT	1993	Aggregated	DSL	0.253676216	0.550167661
Riverside (SC)	2018	HHDT	1994	Aggregated	DSL	0.158664339	0.403569209
Riverside (SC)	2018	HHDT	1995	Aggregated	DSL	0.175724325	0.412735104
Riverside (SC)	2018	HHDT	1996	Aggregated	DSL	0.1188319	0.358206615
Riverside (SC)	2018	HHDT	1997	Aggregated	DSL	0.128985295	0.352930817
Riverside (SC)	2018	HHDT	1998	Aggregated	DSL	0.125104923	0.263449851
Riverside (SC)	2018	HHDT	1999	Aggregated	DSL	0.09761396	0.247813889
Riverside (SC)	2018	HHDT	2000	Aggregated	DSL	0.087724922	0.232812823
Riverside (SC)	2018	HHDT	2001	Aggregated	DSL	0.084771721	0.2447187
Riverside (SC)	2018	HHDT	2002	Aggregated	DSL	0.084263892	0.277696831
Riverside (SC)	2018	HHDT	2003	Aggregated	DSL	0.101677873	0.220178436
Riverside (SC)	2018	HHDT	2004	Aggregated	DSL	0.126205815	0.262411559
Riverside (SC)	2018	HHDT	2005	Aggregated	DSL	0.125939213	0.241892715
Riverside (SC)	2018	HHDT	2006	Aggregated	DSL	0.123446535	0.231465057
Riverside (SC)	2018	HHDT	2007	Aggregated	DSL	0.086577964	0.235455895
Riverside (SC)	2018	HHDT	2008	Aggregated	DSL	0.055123223	0.050600678
Riverside (SC)	2018	HHDT	2009	Aggregated	DSL	0.044034238	0.002589372
Riverside (SC)	2018	HHDT	2010	Aggregated	DSL	0.037630318	0.002762422
Riverside (SC)	2018	HHDT	2011	Aggregated	DSL	0.012881023	0.002922484
Riverside (SC)	2018	HHDT	2012	Aggregated	DSL	0.006284406	0.003842831
Riverside (SC)	2018	HHDT	2013	Aggregated	DSL	0.00536237	0.003175574
Riverside (SC)	2018	HHDT	2014	Aggregated	DSL	0.004322408	0.003441434
Riverside (SC)	2018	HHDT	2015	Aggregated	DSL	0.003845544	0.003548693
Riverside (SC)	2018	HHDT	2016	Aggregated	DSL	0.003497027	0.003575278
Riverside (SC)	2018	HHDT	2017	Aggregated	DSL	0.003144231	0.003684579
Riverside (SC)	2018	HHDT	2018	Aggregated	DSL	0.00276489	0.003495803
Riverside (SC)	2018	HHDT	2019	Aggregated	DSL	0.002360264	0.005480458
						0.193371008	0.548562801

Region	CalYr	VehClass	MdlYr	Speed	Fuel	PM10_RUNEX	PM10_IDLEX
Riverside (SC)	2018	MHDT	1974	Aggregated	DSL	0.60143572	0.452585847
Riverside (SC)	2018	MHDT	1975	Aggregated	DSL	0.299540436	0.224260932
Riverside (SC)	2018	MHDT	1976	Aggregated	DSL	0.202093502	0.162952946
Riverside (SC)	2018	MHDT	1977	Aggregated	DSL	0.2600571	0.189436712
Riverside (SC)	2018	MHDT	1978	Aggregated	DSL	0.413111396	0.297032154
Riverside (SC)	2018	MHDT	1979	Aggregated	DSL	1.079067223	0.719076004
Riverside (SC)	2018	MHDT	1980	Aggregated	DSL	0.207016538	0.163409698
Riverside (SC)	2018	MHDT	1981	Aggregated	DSL	0.181984875	0.150689313
Riverside (SC)	2018	MHDT	1982	Aggregated	DSL	0.204528238	0.167495445
Riverside (SC)	2018	MHDT	1983	Aggregated	DSL	0.203546894	0.169141288
Riverside (SC)	2018	MHDT	1984	Aggregated	DSL	0.366080564	0.293059458
Riverside (SC)	2018	MHDT	1985	Aggregated	DSL	0.241742808	0.202686108
Riverside (SC)	2018	MHDT	1986	Aggregated	DSL	0.218756888	0.187754647
Riverside (SC)	2018	MHDT	1987	Aggregated	DSL	0.204953986	0.077337411
Riverside (SC)	2018	MHDT	1988	Aggregated	DSL	0.215711089	0.08348071
Riverside (SC)	2018	MHDT	1989	Aggregated	DSL	0.245502164	0.096269365
Riverside (SC)	2018	MHDT	1990	Aggregated	DSL	0.21319018	0.084508973
Riverside (SC)	2018	MHDT	1991	Aggregated	DSL	0.085033603	0.049146305
Riverside (SC)	2018	MHDT	1992	Aggregated	DSL	0.110170817	0.06335547
Riverside (SC)	2018	MHDT	1993	Aggregated	DSL	0.120055563	0.070818441
Riverside (SC)	2018	MHDT	1994	Aggregated	DSL	0.087060167	0.061036333
Riverside (SC)	2018	MHDT	1995	Aggregated	DSL	0.08036678	0.056176196
Riverside (SC)	2018	MHDT	1996	Aggregated	DSL	0.084722606	0.063264387
Riverside (SC)	2018	MHDT	1997	Aggregated	DSL	0.090398824	0.070096423
Riverside (SC)	2018	MHDT	1998	Aggregated	DSL	0.086331296	0.041787915
Riverside (SC)	2018	MHDT	1999	Aggregated	DSL	0.336026464	0.099767195
Riverside (SC)	2018	MHDT	2000	Aggregated	DSL	0.315405174	0.093941476
Riverside (SC)	2018	MHDT	2001	Aggregated	DSL	0.308171261	0.093668087
Riverside (SC)	2018	MHDT	2002	Aggregated	DSL	0.294798078	0.090566637
Riverside (SC)	2018	MHDT	2003	Aggregated	DSL	0.521233655	0.075795832
Riverside (SC)	2018	MHDT	2004	Aggregated	DSL	0.534383821	0.079764769
Riverside (SC)	2018	MHDT	2005	Aggregated	DSL	0.523750289	0.080051853
Riverside (SC)	2018	MHDT	2006	Aggregated	DSL	0.504808288	0.079101261
Riverside (SC)	2018	MHDT	2007	Aggregated	DSL	0.345594347	0.065885984
Riverside (SC)	2018	MHDT	2008	Aggregated	DSL	0.029559247	0.002806113
Riverside (SC)	2018	MHDT	2009	Aggregated	DSL	0.021266349	0.000132354
Riverside (SC)	2018	MHDT	2010	Aggregated	DSL	0.01785778	0.000132354
Riverside (SC)	2018	MHDT	2011	Aggregated	DSL	0.006096323	0.000132354
Riverside (SC)	2018	MHDT	2012	Aggregated	DSL	0.002933926	0.000132354
Riverside (SC)	2018	MHDT	2013	Aggregated	DSL	0.00266385	0.000132354
Riverside (SC)	2018	MHDT	2014	Aggregated	DSL	0.002245171	0.000132354
Riverside (SC)	2018	MHDT	2015	Aggregated	DSL	0.002045193	0.000132354
Riverside (SC)	2018	MHDT	2016	Aggregated	DSL	0.001900339	0.000132354
Riverside (SC)	2018	MHDT	2017	Aggregated	DSL	0.001753631	0.000132354
Riverside (SC)	2018	MHDT	2018	Aggregated	DSL	0.001608018	0.000132354
Riverside (SC)	2018	MHDT	2019	Aggregated	DSL	0.001462138	0.000132354
						0.214739622	0.107818774

EMFAC2014 (v1.0.7) Emission Rates
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2018
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

Region	CalYr	VehClass	MdlYr	Speed	Fuel	PM10_RUNEX	PM10_IDLEX
Riverside (S	2018	HHDT	2010	Aggregated	DSL	0.037630318	0.002762422
Riverside (S	2018	HHDT	2011	Aggregated	DSL	0.012881023	0.002922484
Riverside (S	2018	HHDT	2012	Aggregated	DSL	0.006284406	0.003842831
Riverside (S	2018	HHDT	2013	Aggregated	DSL	0.00536237	0.003175574
Riverside (S	2018	HHDT	2014	Aggregated	DSL	0.004322408	0.003441434
Riverside (S	2018	HHDT	2015	Aggregated	DSL	0.003845544	0.003548693
Riverside (S	2018	HHDT	2016	Aggregated	DSL	0.003497027	0.003575278
Riverside (S	2018	HHDT	2017	Aggregated	DSL	0.003144231	0.003684579
Riverside (S	2018	HHDT	2018	Aggregated	DSL	0.00276489	0.003495803
Riverside (S	2018	HHDT	2019	Aggregated	DSL	0.002360264	0.005480458
						0.008209248	0.003592956

Region	CalYr	VehClass	MdlYr	Speed	Fuel	PM10_RUNEX	PM10_IDLEX
Riverside (SC)	2018	MHDT	2010	Aggregated	DSL	0.01785778	0.000132354
Riverside (SC)	2018	MHDT	2011	Aggregated	DSL	0.006096323	0.000132354
Riverside (SC)	2018	MHDT	2012	Aggregated	DSL	0.002933926	0.000132354
Riverside (SC)	2018	MHDT	2013	Aggregated	DSL	0.00266385	0.000132354
Riverside (SC)	2018	MHDT	2014	Aggregated	DSL	0.002245171	0.000132354
Riverside (SC)	2018	MHDT	2015	Aggregated	DSL	0.002045193	0.000132354
Riverside (SC)	2018	MHDT	2016	Aggregated	DSL	0.001900339	0.000132354
Riverside (SC)	2018	MHDT	2017	Aggregated	DSL	0.001753631	0.000132354
Riverside (SC)	2018	MHDT	2018	Aggregated	DSL	0.001608018	0.000132354
Riverside (SC)	2018	MHDT	2019	Aggregated	DSL	0.001462138	0.000132354
						0.004056637	0.000132354

EMFAC2014 (v1.0.7) Emission Rates
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2045
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

Region	CalYr	VehClass	MdlYr	Speed	Fuel	PM10_RUNEX	PM10_IDLEX
Riverside (S	2018	HHDT	1974	Aggregated	DSL	0.339580421	1.424784096
Riverside (S	2018	HHDT	1975	Aggregated	DSL	0.309086943	1.33948867
Riverside (S	2018	HHDT	1976	Aggregated	DSL	0.070516539	1.17619745
Riverside (S	2018	HHDT	1977	Aggregated	DSL	0.347934822	1.278258022
Riverside (S	2018	HHDT	1978	Aggregated	DSL	0.17163622	1.224488441
Riverside (S	2018	HHDT	1979	Aggregated	DSL	0.3014317	1.294006823
Riverside (S	2018	HHDT	1980	Aggregated	DSL	0.248428206	1.262562289
Riverside (S	2018	HHDT	1981	Aggregated	DSL	0.377117006	1.31575757
Riverside (S	2018	HHDT	1982	Aggregated	DSL	0.433743328	1.306282124
Riverside (S	2018	HHDT	1983	Aggregated	DSL	0.510976964	1.333317735
Riverside (S	2018	HHDT	1984	Aggregated	DSL	0.405367111	1.30735173
Riverside (S	2018	HHDT	1985	Aggregated	DSL	0.457076901	1.301139528
Riverside (S	2018	HHDT	1986	Aggregated	DSL	0.466260428	1.309037489
Riverside (S	2018	HHDT	1987	Aggregated	DSL	0.54716514	0.689737443
Riverside (S	2018	HHDT	1988	Aggregated	DSL	0.521168979	0.677700322
Riverside (S	2018	HHDT	1989	Aggregated	DSL	0.430455919	0.661397826
Riverside (S	2018	HHDT	1990	Aggregated	DSL	0.500132437	0.672770518
Riverside (S	2018	HHDT	1991	Aggregated	DSL	0.18479219	0.510553182
Riverside (S	2018	HHDT	1992	Aggregated	DSL	0.211736292	0.524432801
Riverside (S	2018	HHDT	1993	Aggregated	DSL	0.253676216	0.550167661
Riverside (S	2018	HHDT	1994	Aggregated	DSL	0.158664339	0.403569209
Riverside (S	2018	HHDT	1995	Aggregated	DSL	0.175724325	0.412735104
Riverside (S	2018	HHDT	1996	Aggregated	DSL	0.1188319	0.358206615
Riverside (S	2018	HHDT	1997	Aggregated	DSL	0.128985295	0.352930817
Riverside (S	2018	HHDT	1998	Aggregated	DSL	0.125104923	0.263449851
Riverside (S	2018	HHDT	1999	Aggregated	DSL	0.09761396	0.247813889
Riverside (S	2018	HHDT	2000	Aggregated	DSL	0.087724922	0.232812823
Riverside (S	2045	HHDT	2001	Aggregated	DSL	0.035435204	0.248298366
Riverside (S	2045	HHDT	2002	Aggregated	DSL	0.042730957	0.293269047
Riverside (S	2045	HHDT	2003	Aggregated	DSL	0.057747584	0.209689408
Riverside (S	2045	HHDT	2004	Aggregated	DSL	0.074448533	0.244159924
Riverside (S	2045	HHDT	2005	Aggregated	DSL	0.0616017	0.223800916
Riverside (S	2045	HHDT	2006	Aggregated	DSL	0.048927059	0.211635735
Riverside (S	2045	HHDT	2007	Aggregated	DSL	0.038398217	0.267812674
Riverside (S	2045	HHDT	2008	Aggregated	DSL	0.027488716	0.038075872
Riverside (S	2045	HHDT	2009	Aggregated	DSL	0.016000227	0.001795764
Riverside (S	2045	HHDT	2010	Aggregated	DSL	0.010939172	0.00179486
Riverside (S	2045	HHDT	2011	Aggregated	DSL	0.00441977	0.001793505
Riverside (S	2045	HHDT	2012	Aggregated	DSL	0.007674	0.001781295
Riverside (S	2045	HHDT	2013	Aggregated	DSL	0.007315117	0.00143459
Riverside (S	2045	HHDT	2014	Aggregated	DSL	0.006091599	0.001756711
Riverside (S	2045	HHDT	2015	Aggregated	DSL	0.005827247	0.001629336
Riverside (S	2045	HHDT	2016	Aggregated	DSL	0.005759388	0.001829322
Riverside (S	2045	HHDT	2017	Aggregated	DSL	0.00582758	0.0018337
Riverside (S	2045	HHDT	2018	Aggregated	DSL	0.005611642	0.001740459
Riverside (S	2045	HHDT	2019	Aggregated	DSL	0.00558994	0.001720289
Riverside (S	2045	HHDT	2020	Aggregated	DSL	0.005588417	0.001706976
Riverside (S	2045	HHDT	2021	Aggregated	DSL	0.00558363	0.001678615
Riverside (S	2045	HHDT	2022	Aggregated	DSL	0.005621675	0.001686608
Riverside (S	2045	HHDT	2023	Aggregated	DSL	0.005613629	0.001691297
Riverside (S	2045	HHDT	2024	Aggregated	DSL	0.005597044	0.00169657
Riverside (S	2045	HHDT	2025	Aggregated	DSL	0.005599477	0.00171768
Riverside (S	2045	HHDT	2026	Aggregated	DSL	0.005606957	0.001752632
Riverside (S	2045	HHDT	2027	Aggregated	DSL	0.005618639	0.001807955
Riverside (S	2045	HHDT	2028	Aggregated	DSL	0.005625613	0.001888678
Riverside (S	2045	HHDT	2029	Aggregated	DSL	0.005639891	0.001976009
Riverside (S	2045	HHDT	2030	Aggregated	DSL	0.005657294	0.002072636
Riverside (S	2045	HHDT	2031	Aggregated	DSL	0.005673914	0.002161786
Riverside (S	2045	HHDT	2032	Aggregated	DSL	0.005681137	0.002260572
Riverside (S	2045	HHDT	2033	Aggregated	DSL	0.005690356	0.002365316
Riverside (S	2045	HHDT	2034	Aggregated	DSL	0.005692275	0.002475435
Riverside (S	2045	HHDT	2035	Aggregated	DSL	0.005590931	0.002595989
Riverside (S	2045	HHDT	2036	Aggregated	DSL	0.005464408	0.002727849
Riverside (S	2045	HHDT	2037	Aggregated	DSL	0.00533664	0.002884562
Riverside (S	2045	HHDT	2038	Aggregated	DSL	0.005134355	0.003081722
Riverside (S	2045	HHDT	2039	Aggregated	DSL	0.0049104	0.003341645
Riverside (S	2045	HHDT	2040	Aggregated	DSL	0.004642747	0.003659059
Riverside (S	2045	HHDT	2041	Aggregated	DSL	0.004306081	0.003798251
Riverside (S	2045	HHDT	2042	Aggregated	DSL	0.003959495	0.003968424
Riverside (S	2045	HHDT	2043	Aggregated	DSL	0.003564188	0.003815205
Riverside (S	2045	HHDT	2044	Aggregated	DSL	0.00320201	0.004184393
Riverside (S	2045	HHDT	2045	Aggregated	DSL	0.002808033	0.004311138
Riverside (S	2045	HHDT	2046	Aggregated	DSL	0.002372991	0.005807099
						0.117596568	0.346026245

Region	CalYr	VehClass	MdlYr	Speed	Fuel	PM10_RUNEX	PM10_IDLEX
Riverside (SC)	2018	MHDT	1974	Aggregated	DSL	0.60143572	0.452585847
Riverside (SC)	2018	MHDT	1975	Aggregated	DSL	0.299540436	0.224260932
Riverside (SC)	2018	MHDT	1976	Aggregated	DSL	0.202093502	0.162952946
Riverside (SC)	2018	MHDT	1977	Aggregated	DSL	0.2600571	0.189436712
Riverside (SC)	2018	MHDT	1978	Aggregated	DSL	0.413111396	0.297032154
Riverside (SC)	2018	MHDT	1979	Aggregated	DSL	1.079067223	0.719076004
Riverside (SC)	2018	MHDT	1980	Aggregated	DSL	0.207016538	0.163409698
Riverside (SC)	2018	MHDT	1981	Aggregated	DSL	0.181984875	0.150689313
Riverside (SC)	2018	MHDT	1982	Aggregated	DSL	0.204528238	0.167495445
Riverside (SC)	2018	MHDT	1983	Aggregated	DSL	0.203546894	0.169141288
Riverside (SC)	2018	MHDT	1984	Aggregated	DSL	0.366080564	0.293059458
Riverside (SC)	2018	MHDT	1985	Aggregated	DSL	0.241742808	0.202686108
Riverside (SC)	2018	MHDT	1986	Aggregated	DSL	0.218756888	0.187754647
Riverside (SC)	2018	MHDT	1987	Aggregated	DSL	0.204953986	0.077337411
Riverside (SC)	2018	MHDT	1988	Aggregated	DSL	0.215711089	0.08348071
Riverside (SC)	2018	MHDT	1989	Aggregated	DSL	0.245502164	0.096269365
Riverside (SC)	2018	MHDT	1990	Aggregated	DSL	0.21319018	0.084508973
Riverside (SC)	2018	MHDT	1991	Aggregated	DSL	0.085033603	0.049146305
Riverside (SC)	2018	MHDT	1992	Aggregated	DSL	0.110170817	0.06335547
Riverside (SC)	2018	MHDT	1993	Aggregated	DSL	0.120055563	0.070818441
Riverside (SC)	2018	MHDT	1994	Aggregated	DSL	0.087060167	0.061036333
Riverside (SC)	2018	MHDT	1995	Aggregated	DSL	0.08036678	0.056176196
Riverside (SC)	2018	MHDT	1996	Aggregated	DSL	0.084722606	0.063264387
Riverside (SC)	2018	MHDT	1997	Aggregated	DSL	0.090398824	0.070096423
Riverside (SC)	2018	MHDT	1998	Aggregated	DSL	0.086331296	0.041787915
Riverside (SC)	2018	MHDT	1999	Aggregated	DSL	0.336026464	0.099767195
Riverside (SC)	2018	MHDT	2000	Aggregated	DSL	0.315405174	0.093941476
Riverside (SC)	2045	MHDT	2001	Aggregated	DSL	0.038794895	0.015983116
Riverside (SC)	2045	MHDT	2002	Aggregated	DSL	0.038549873	0.015983116
Riverside (SC)	2045	MHDT	2003	Aggregated	DSL	0.068482784	0.013043803
Riverside (SC)	2045	MHDT	2004	Aggregated	DSL	0.068172151	0.013043803
Riverside (SC)	2045	MHDT	2005	Aggregated	DSL	0.0678726	0.013043803
Riverside (SC)	2045	MHDT	2006	Aggregated	DSL	0.067598993	0.013043803
Riverside (SC)	2045	MHDT	2007	Aggregated	DSL	0.048408897	0.011401834
Riverside (SC)	2045	MHDT	2008	Aggregated	DSL	0.025726474	0.002806113
Riverside (SC)	2045	MHDT	2009	Aggregated	DSL	0.019371098	0.000132354
Riverside (SC)	2045	MHDT	2010	Aggregated	DSL	0.017167795	0.000132354
Riverside (SC)	2045	MHDT	2011	Aggregated	DSL	0.006037911	0.000132354
Riverside (SC)	2045	MHDT	2012	Aggregated	DSL	0.004862532	0.000132354
Riverside (SC)	2045	MHDT	2013	Aggregated	DSL	0.004707631	0.000132354
Riverside (SC)	2045	MHDT	2014	Aggregated	DSL	0.003923612	0.000132354
Riverside (SC)	2045	MHDT	2015	Aggregated	DSL	0.003741706	0.000132354
Riverside (SC)	2045	MHDT	2016	Aggregated	DSL	0.003744844	0.000132354
Riverside (SC)	2045	MHDT	2017	Aggregated	DSL	0.003741489	0.000132354
Riverside (SC)	2045	MHDT	2018	Aggregated	DSL	0.003722217	0.000132354
Riverside (SC)	2045	MHDT	2019	Aggregated	DSL	0.003723805	0.000132354
Riverside (SC)	2045	MHDT	2020	Aggregated	DSL	0.003724806	0.000132354
Riverside (SC)	2045	MHDT	2021	Aggregated	DSL	0.00372634	0.000132354
Riverside (SC)	2045	MHDT	2022	Aggregated	DSL	0.003727916	0.000132354
Riverside (SC)	2045	MHDT	2023	Aggregated	DSL	0.003729168	0.000132354
Riverside (SC)	2045	MHDT	2024	Aggregated	DSL	0.003671005	0.000132354
Riverside (SC)	2045	MHDT	2025	Aggregated	DSL	0.003610344	0.000132354
Riverside (SC)	2045	MHDT	2026	Aggregated	DSL	0.003548234	0.000132354
Riverside (SC)	2045	MHDT	2027	Aggregated	DSL	0.003486108	0.000132354
Riverside (SC)	2045	MHDT	2028	Aggregated	DSL	0.003423401	0.000132354
Riverside (SC)	2045	MHDT	2029	Aggregated	DSL	0.003360276	0.000132354
Riverside (SC)	2045	MHDT	2030	Aggregated	DSL	0.003296751	0.000132354
Riverside (SC)	2045	MHDT	2031	Aggregated	DSL	0.003234969	0.000132354
Riverside (SC)	2045	MHDT	2032	Aggregated	DSL	0.003162808	0.000132354
Riverside (SC)	2045	MHDT	2033	Aggregated	DSL	0.003082384	0.000132354
Riverside (SC)	2045	MHDT	2034	Aggregated	DSL	0.002995432	0.000132354
Riverside (SC)	2045	MHDT	2035	Aggregated	DSL	0.002902062	0.000132354
Riverside (SC)	2045	MHDT	2036	Aggregated	DSL	0.002802618	0.000132354
Riverside (SC)	2045	MHDT	2037	Aggregated	DSL	0.002696898	0.000132354
Riverside (SC)	2045	MHDT	2038	Aggregated	DSL	0.002584151	0.000132354
Riverside (SC)	2045	MHDT	2039	Aggregated	DSL	0.002464535	0.000132354
Riverside (SC)	2045	MHDT	2040	Aggregated	DSL	0.002337577	0.000132354
Riverside (SC)	2045	MHDT	2041	Aggregated	DSL	0.002203536	0.000132354
Riverside (SC)	2045	MHDT	2042	Aggregated	DSL	0.002063076	0.000132354
Riverside (SC)	2045	MHDT	2043	Aggregated	DSL	0.001917658	0.000132354
Riverside (SC)	2045	MHDT	2044	Aggregated	DSL	0.001769533	0.000132354
Riverside (SC)	2045	MHDT	2045	Aggregated	DSL	0.001621893	0.000132354
Riverside (SC)	2045	MHDT	2046	Aggregated	DSL	0.001474756	0.000132354
						0.100422746	0.061560904

EMFAC2014 (v1.0.7) Emission Rates
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2045
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

Region	CalYr	VehClass	MdlYr	Speed	Fuel	PM10_RUNEX	PM10_IDLEX
Riverside (S	2045	HHDT	2010	Aggregated	DSL	0.010939172	0.00179486
Riverside (S	2045	HHDT	2011	Aggregated	DSL	0.00441977	0.001793505
Riverside (S	2045	HHDT	2012	Aggregated	DSL	0.00767415	0.001781295
Riverside (S	2045	HHDT	2013	Aggregated	DSL	0.007315117	0.00143459
Riverside (S	2045	HHDT	2014	Aggregated	DSL	0.006091599	0.001756711
Riverside (S	2045	HHDT	2015	Aggregated	DSL	0.005827247	0.001629336
Riverside (S	2045	HHDT	2016	Aggregated	DSL	0.005759388	0.001829322
Riverside (S	2045	HHDT	2017	Aggregated	DSL	0.00582758	0.0018337
Riverside (S	2045	HHDT	2018	Aggregated	DSL	0.005611642	0.001740459
Riverside (S	2045	HHDT	2019	Aggregated	DSL	0.00558994	0.001720289
Riverside (S	2045	HHDT	2020	Aggregated	DSL	0.005588417	0.001706976
Riverside (S	2045	HHDT	2021	Aggregated	DSL	0.00558363	0.001678615
Riverside (S	2045	HHDT	2022	Aggregated	DSL	0.005621675	0.001686608
Riverside (S	2045	HHDT	2023	Aggregated	DSL	0.005613629	0.001691297
Riverside (S	2045	HHDT	2024	Aggregated	DSL	0.005597044	0.00169657
Riverside (S	2045	HHDT	2025	Aggregated	DSL	0.005599477	0.00171768
Riverside (S	2045	HHDT	2026	Aggregated	DSL	0.005606957	0.001752632
Riverside (S	2045	HHDT	2027	Aggregated	DSL	0.005618639	0.001807955
Riverside (S	2045	HHDT	2028	Aggregated	DSL	0.005625613	0.001888678
Riverside (S	2045	HHDT	2029	Aggregated	DSL	0.005639891	0.001976009
Riverside (S	2045	HHDT	2030	Aggregated	DSL	0.005657294	0.002072636
Riverside (S	2045	HHDT	2031	Aggregated	DSL	0.005673914	0.002161786
Riverside (S	2045	HHDT	2032	Aggregated	DSL	0.005681137	0.002260572
Riverside (S	2045	HHDT	2033	Aggregated	DSL	0.005690356	0.002365316
Riverside (S	2045	HHDT	2034	Aggregated	DSL	0.005692275	0.002475435
Riverside (S	2045	HHDT	2035	Aggregated	DSL	0.005590931	0.002595989
Riverside (S	2045	HHDT	2036	Aggregated	DSL	0.005464408	0.002727849
Riverside (S	2045	HHDT	2037	Aggregated	DSL	0.00533664	0.002884562
Riverside (S	2045	HHDT	2038	Aggregated	DSL	0.005134355	0.003081722
Riverside (S	2045	HHDT	2039	Aggregated	DSL	0.0049104	0.003341645
Riverside (S	2045	HHDT	2040	Aggregated	DSL	0.004642747	0.003659059
Riverside (S	2045	HHDT	2041	Aggregated	DSL	0.004306081	0.003798251
Riverside (S	2045	HHDT	2042	Aggregated	DSL	0.003959495	0.003968424
Riverside (S	2045	HHDT	2043	Aggregated	DSL	0.003564188	0.003815205
Riverside (S	2045	HHDT	2044	Aggregated	DSL	0.00320201	0.004184393
Riverside (S	2045	HHDT	2045	Aggregated	DSL	0.002808033	0.004311138
Riverside (S	2045	HHDT	2046	Aggregated	DSL	0.002372991	0.005807099
						0.005428049	0.002444005

Region	CalYr	VehClass	MdlYr	Speed	Fuel	PM10_RUNEX	PM10_IDLEX
Riverside (SC)	2045	MHDT	2010	Aggregated	DSL	0.017167795	0.000132354
Riverside (SC)	2045	MHDT	2011	Aggregated	DSL	0.006037911	0.000132354
Riverside (SC)	2045	MHDT	2012	Aggregated	DSL	0.004862532	0.000132354
Riverside (SC)	2045	MHDT	2013	Aggregated	DSL	0.004707631	0.000132354
Riverside (SC)	2045	MHDT	2014	Aggregated	DSL	0.003923612	0.000132354
Riverside (SC)	2045	MHDT	2015	Aggregated	DSL	0.003741706	0.000132354
Riverside (SC)	2045	MHDT	2016	Aggregated	DSL	0.003744844	0.000132354
Riverside (SC)	2045	MHDT	2017	Aggregated	DSL	0.003741489	0.000132354
Riverside (SC)	2045	MHDT	2018	Aggregated	DSL	0.003722217	0.000132354
Riverside (SC)	2045	MHDT	2019	Aggregated	DSL	0.003723805	0.000132354
Riverside (SC)	2045	MHDT	2020	Aggregated	DSL	0.003724806	0.000132354
Riverside (SC)	2045	MHDT	2021	Aggregated	DSL	0.00372634	0.000132354
Riverside (SC)	2045	MHDT	2022	Aggregated	DSL	0.003727916	0.000132354
Riverside (SC)	2045	MHDT	2023	Aggregated	DSL	0.003729168	0.000132354
Riverside (SC)	2045	MHDT	2024	Aggregated	DSL	0.003671005	0.000132354
Riverside (SC)	2045	MHDT	2025	Aggregated	DSL	0.003610344	0.000132354
Riverside (SC)	2045	MHDT	2026	Aggregated	DSL	0.003548234	0.000132354
Riverside (SC)	2045	MHDT	2027	Aggregated	DSL	0.003486108	0.000132354
Riverside (SC)	2045	MHDT	2028	Aggregated	DSL	0.003423401	0.000132354
Riverside (SC)	2045	MHDT	2029	Aggregated	DSL	0.003360276	0.000132354
Riverside (SC)	2045	MHDT	2030	Aggregated	DSL	0.003296751	0.000132354
Riverside (SC)	2045	MHDT	2031	Aggregated	DSL	0.003234969	0.000132354
Riverside (SC)	2045	MHDT	2032	Aggregated	DSL	0.003162808	0.000132354
Riverside (SC)	2045	MHDT	2033	Aggregated	DSL	0.003082384	0.000132354
Riverside (SC)	2045	MHDT	2034	Aggregated	DSL	0.002995432	0.000132354
Riverside (SC)	2045	MHDT	2035	Aggregated	DSL	0.002902062	0.000132354
Riverside (SC)	2045	MHDT	2036	Aggregated	DSL	0.002802618	0.000132354
Riverside (SC)	2045	MHDT	2037	Aggregated	DSL	0.002696898	0.000132354
Riverside (SC)	2045	MHDT	2038	Aggregated	DSL	0.002584151	0.000132354
Riverside (SC)	2045	MHDT	2039	Aggregated	DSL	0.002464535	0.000132354
Riverside (SC)	2045	MHDT	2040	Aggregated	DSL	0.002337577	0.000132354
Riverside (SC)	2045	MHDT	2041	Aggregated	DSL	0.002203536	0.000132354
Riverside (SC)	2045	MHDT	2042	Aggregated	DSL	0.002063076	0.000132354
Riverside (SC)	2045	MHDT	2043	Aggregated	DSL	0.001917658	0.000132354
Riverside (SC)	2045	MHDT	2044	Aggregated	DSL	0.001769533	0.000132354
Riverside (SC)	2045	MHDT	2045	Aggregated	DSL	0.001621893	0.000132354
Riverside (SC)	2045	MHDT	2046	Aggregated	DSL	0.001474756	0.000132354
						0.003621399	0.000132354

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Planning Commission - Exhibit 1 - Development Review Committee Staff Report
Development Review Committee - Exhibit 7 - CEQA Documents