Moreno Valley Logistics Center

GREENHOUSE GAS ANALYSIS

CITY OF MORENO VALLEY

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LIST OF ABBREVIATED TERMS

(1)	Reference
ARB	California Air Resources Board
AQIA	Air Quality Impact Analysis
CAA	Federal Clean Air Act
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resource Board
CAT	Climate Action Team
CBSC	California Building Standards Commission
CEC	California Energy Commission
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFC	Chlorofluorocarbons
CFR	Code of Federal Regulations
CH4	Methane
CO	Carbon Monoxide
CO2	Carbon Dioxide
CO2e	Carbon Dioxide Equivalent
CPUC	California Public Utilities Commission
EPA	Environmental Protection Agency
EPS	Emission Performance Standard
GCC	Global Climate Change
GHGA	Greenhouse Gas Analysis
GWP	Global Warming Potential
HFC	Hydrofluorocarbons
LCA	Life-Cycle Analysis
MMs	Mitigation Measures
MMTCO2e	Million Metric Ton of Carbon Dioxide Equivalent
MTCO2e	Metric Ton of Carbon Dioxide Equivalent
N20	Nitrogen Dioxide
NIOSH	National Institute for Occupational Safety and Health
NOx	Oxides of Nitrogen
PFC	Perfluorocarbons
PM10	Particulate Matter 10 microns in diameter or less
PM2.5	Particulate Matter 2.5 microns in diameter or less

PPM	Parts Per Million
Project	Moreno Valley Logistics Center
RTP	Regional Transportation Plan
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
UNFCCC	United Nations' Framework Convention on Climate Change
VOC	Volatile Organic Compounds

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EXECUTIVE SUMMARY

For informational purposes herein, the Project's GHG emissions are evaluated to determine if they fall 28.5% or more below BAU, in accordance with the goals of AB 32. The total amount of Project-related GHG emissions for BAU without accounting for any project design features or regulatory developments that would reduce GHG emissions from direct and indirect sources combined would total 56,466.71 MMTCO2e.

The total amount of Project-related GHG emissions when accounting for applicable regulatory developments, project design features, and mitigation measures that would reduce GHG emissions from direct and indirect sources combined would total 42,404.68 MMTCO2e. This results in a 24.90% reduction from BAU, thus with implementation of the Project's design features and regulatory developments, the Project's GHG reduction would not meet the AB 32 reduction target of 28.5% as shown on Table 1-1 (1). Both of these quantities are above the significance criterion used herein of 10,000 MTCO2e per year. Thus, GHG emissions is a significant cumulatively considerable impact of the proposed Project.

TABLE 1-1: SUMMARY OF GHG EMISSIONS FOR BAU VS PROJECT

Emission Source	CO2e Emissions Levels by Year (Metric Tons Per Year)	
	BAU	**Project**
Annual Construction-related emissions amortized over 30 years	206.75	206.75
Area	0.10	0.10
Energy Use	6,286.00	4,482.91
Mobile Sources	48,644.03	36,497.57
Off-road	430.74	358.25
Waste	795.64	795.64
Water Usage	103.45	63.46
Total	56,466.71	42,404.68
Project Improvement over BAU	**24.90%**	
Project Minimum Improvement	**28.5%**	
Meets Requirement?	**NO**	

INCREMENTAL PROJECT GHG EMISSIONS ARE CUMULATIVELY CONSIDERABLE

The City of Moreno Valley does not have an adopted threshold of significance for GHG emissions. For CEQA purposes, the City has discretion to select an appropriate significance criterion, based on substantial evidence. The AQMD's adopted numerical threshold of 10,000 MTCO2e per year for industrial stationary source emissions is selected as the significance criterion. The AQMD-adopted industrial threshold was selected by the City because the proposed Project is analogous to an industrial use much more closely than any other land use

such as commercial or residential in terms of its expected operating characteristics. The Project proposes large buildings with loading bays and fenced truck courts that are expected to house businesses that serve mid- stream functions in the goods movement chain between manufacturers and consumers, characteristic of an industrial operation. Further, analysis of the Project's traffic generation in this EIR is based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, 2012 for industrial and warehouse uses. Also, 10,000 MTCO2e has been used as the significance threshold by many local government lead agencies for logistics projects throughout the SCAG region since the AQMD adopted this threshold for its own use. Further, to ensure that the threshold is conservative in its application, although the AQMD uses their adopted 10,000 MTCO2e threshold to determine the significance of stationary source emissions for industrial projects, the 10,000 MTCO2e threshold used in this EIR is applied to all sources of Project-related GHG emissions whether stationary source, mobile source, area source, or other.

Use of this threshold is also consistent with guidance provided in the CAPCOA *CEQA and Climate Change* handbook, as such the City has opted to use a non-zero threshold approach based on Approach 2 of the handbook. 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. This threshold is based on the review of 711 CEQA projects.

The Project will result in approximately 5,548.86 MTCO2e per year from construction, area, energy, waste, and water usage. In addition, the Project has the potential to result in an additional 36,855.82 MTCO2e per year from mobile sources if the assumption is made that all of the vehicle trips to and from the Project are "new" trips resulting from the development of the Project. As such, the Project has the potential to generate a total of approximately 42,404.68 MTCO2e per year. As such, the Project would exceed the SCAQMD's numeric threshold of 10,000 MTCO2e if it were applied. Thus, the Project has the potential to result in a cumulatively considerable impact with respect to GHG emissions.

1 INTRODUCTION

This report presents the results of the greenhouse gas analysis (GHGA) prepared by Urban Crossroads, Inc., for the proposed Moreno Valley Logistics Center ("Project"). The purpose of this GHGA is to evaluate Project-related construction and operational emissions and determine the level of greenhouse gas (GHG) impacts as a result of constructing and operating the proposed Project.

1.1 SITE LOCATION

The proposed Moreno Valley Logistics Center site is located south of Krameria Avenue between Heacock Street and Indian Street in the City of Moreno Valley, as shown on Exhibit 1-A. The Project site is currently vacant. Under existing conditions, the Project site is surrounded to the north and south by a mixture of industrial warehouse buildings and a few undeveloped and underutilized parcels that are designated by the Moreno Valley Industrial Area Plan (MVIAP) for future industrial development; to the west by March Air Reserve Base, and to the east by a single-family residential neighborhood. The Perris Valley Storm Drain Channel transects the Project site in a northwest to southeast direction. Approximately 15.3 acres of the Project site are located west of the Perris Valley Storm Drain Channel and approximately 74.1 acres of the Project site are located east of the Perris Valley Storm Drain Channel. (2) The Interstate 215 (I-215) Freeway is located approximately 1.3 miles west of the Project site.

1.2 PROJECT DESCRIPTION

The Project is proposed to consist of 1,351,770 square feet (sf) of high-cube warehouse use/distribution center within a single building (Building 1). Building 2, located on the southwest corner of Cosmos Street and Krameria Avenue, is proposed to consist of 122,516 sf of general light industrial use; Building 3, located at the eastern terminus of Cardinal Avenue, is proposed to consist of 97,222 sf of general light industrial use; and Building 4, located on the east of Heacock Street and south of Krameria Avenue (North), is proposed to consist of 166,010 sf of general light industrial use, as shown on Exhibit 1-B[1]. This analysis accounts for emissions and impacts associated with tenants that require cold storage (refrigeration). For analytical purposes, a maximum of 10% cold storage is proposed and analyzed. The Project is anticipated to be constructed and occupied by Year 2017.

The Project also includes an alternate site plan that would omit Building 2 and construct a 166-space truck trailer parking lot in its place. In the event the alternate site plan is implemented, the truck trailer parking lot will be utilized as overflow parking for Building 1. The alternative site plan would not involve any changes to the intensity of use, size, location, configuration, or design of proposed Buildings 1, 3, or 4.

As part of the Project's design, all on-site outdoor cargo handling equipment (CHE) (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) will be

[1] This report analyzes a slightly higher general light industrial square footage (385,748 square feet compared to 384,417 square feet) than what was analyzed in the EIR. As such, the report represents a more conservative estimate of emissions.

powered by diesel fueled engines that comply with the California Air Resources Board (CARB)/U.S. EPA Tier IV Engine standards for off-road vehicles or better (defined as less than or equal to 0.015 g/bhp-hr for PM10) and all on-site indoor forklifts shall be powered by electricity, compressed natural gas, or propane.

EXHIBIT 1-A: LOCATION MAP

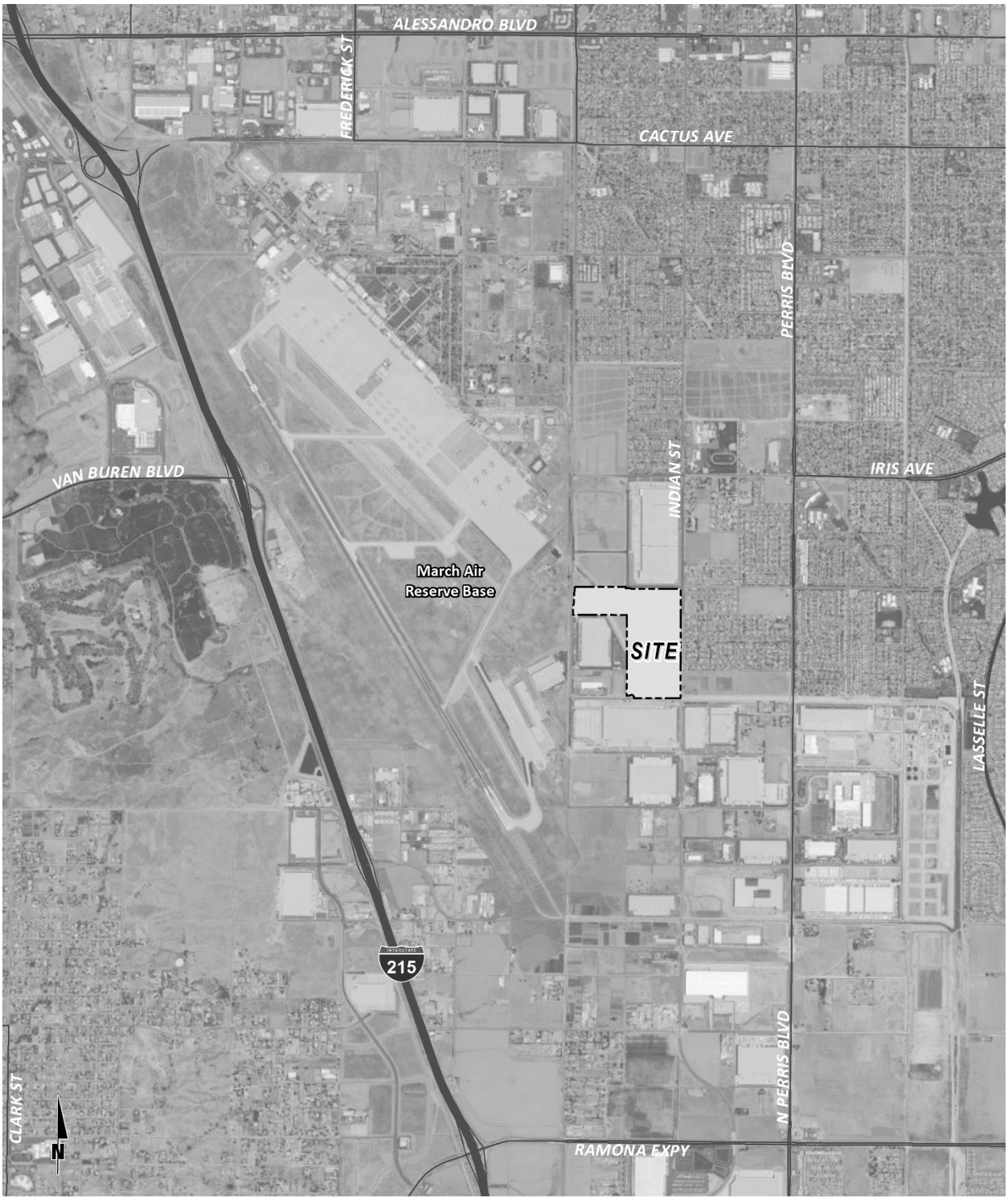
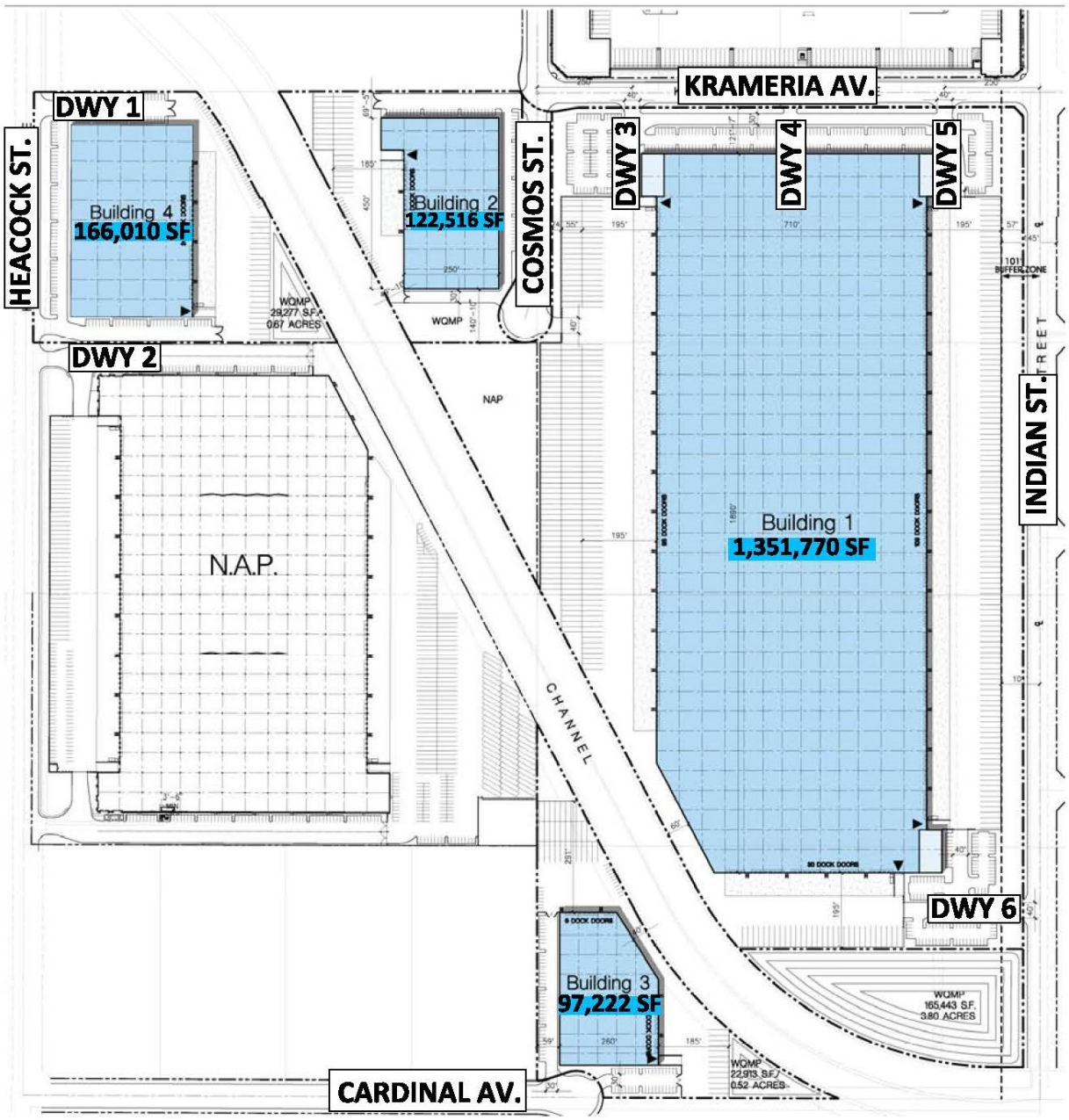


EXHIBIT 1-B: SITE PLAN



2 CLIMATE CHANGE SETTING

2.1 INTRODUCTION TO GLOBAL CLIMATE CHANGE

Global Climate Change (GCC) is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. GCC is currently one of the most controversial environmental issues in the United States, and much debate exists within the scientific community about whether or not GCC is occurring naturally or as a result of human activity. Some data suggests that GCC has occurred in the past over the course of thousands or millions of years. These historical changes to the Earth's climate have occurred naturally without human influence, as in the case of an ice age. However, many scientists believe that the climate shift taking place since the industrial revolution (1900) is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of greenhouse gases in the earth's atmosphere, including carbon dioxide, methane, nitrous oxide, and fluorinated gases. Many scientists believe that this increased rate of climate change is the result of greenhouse gases resulting from human activity and industrialization over the past 200 years.

An individual project like the proposed Project evaluated in this GHGA cannot generate enough greenhouse gas emissions to effect a discernible change in global climate. However, the proposed Project may participate in the potential for GCC by its incremental contribution of greenhouse gasses combined with the cumulative increase of all other sources of greenhouse gases, which when taken together constitute potential influences on GCC. Because these changes may have serious environmental consequences, Section 3.0 will evaluate the potential for the proposed Project to have a significant effect upon the environment as a result of its potential contribution to the greenhouse effect.

2.2 GREENHOUSE GAS EMISSIONS INVENTORIES

Global

Worldwide anthropogenic (man-made) GHG emissions are tracked by the Intergovernmental Panel on Climate Change for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Man-made GHG emissions data for Annex I nations are available through 2011. For the Year 2011 the sum of these emissions totaled approximately 25,285,543 gigagrams (Gg) $CO2e$[2] (3) (4). The GHG emissions in more recent years may differ from the inventories presented in Table 2-1; however, the data is representative of currently available inventory data.

[2] The global emissions are the sum of Annex I and non-Annex I countries, without counting Land-Use, Land-Use Change and Forestry (LULUCF). For countries without 2005 data, the UNFCCC data for the most recent year were used. United Nations Framework Convention on Climate Change, "Annex I Parties – GHG total without LULUCF,"

United States

As noted in Table 2-1, the United States, as a single country, was the number two producer of GHG emissions in 2012. The primary greenhouse gas emitted by human activities in the United States was CO2, representing approximately 83 percent of total greenhouse gas emissions (5). Carbon dioxide from fossil fuel combustion, the largest source of US greenhouse gas emissions, accounted for approximately 78 percent of the GHG emissions.

TABLE 2-1: TOP GHG PRODUCER COUNTRIES AND THE EUROPEAN UNION [3]

Emitting Countries	GHG Emissions (Gg CO2e)
China	10,975,500
United States	6,665,700
European Union (28 member countries)	4,544,224
India	3,013,770
Russian Federation	2,322,220
Japan	1,344,580
Total	**28,865,994**

State of California

CARB compiles GHG inventories for the State of California. CARB GHG inventory data indicates that in 2013 (the most recent inventory of record) California GHG emissions totaled approximately 459.3 Million Metric Tons of Carbon Dioxide Equivalent ($MMTCO_2e$).[4] "In 2010, California accounted for 6.8 percent of all emissions in the country [United States], and ranked second highest among the states with total emissions of 453 $MMTCO_2e$, only behind Texas with 763 $MMTCO_2e$. From a per capita standpoint, California has the 45th lowest emissions with 12.1 $MMTCO_2e$ /person in 2010."[5]

2.3 GLOBAL CLIMATE CHANGE DEFINED

Global Climate Change (GCC) refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO2 (Carbon Dioxide), N2O (Nitrous Oxide), CH4 (Methane), hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the Earth's atmosphere, but prevent radioactive heat from escaping, thus warming the Earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages. According to the California Air Resources Board (CARB), the

[3] Used http://unfccc.int data for Annex I countries. Consulted the CAIT Climate Data Explorer in http://www.wri.org site to reference Non-Annex I countries such as China and India.

4 Cal EPA. "California Greenhouse Gas Emission Inventory - 2015 Edition." California's Greenhouse Gas Emission Inventory. Cal EPA, n.d. Web. 29 Oct. 2015.

5 California Environmental Protection Agency. Air Resources Board. California's Greenhouse Gas Emission Inventory - 2014 Edition (May 2014), p. 28.

climate change since the industrial revolution differs from previous climate changes in both rate and magnitude (6).

Gases that trap heat in the atmosphere are often referred to as greenhouse gases. Greenhouse gases are released into the atmosphere by both natural and anthropogenic (human) activity. Without the natural greenhouse gas effect, the Earth's average temperature would be approximately 61° Fahrenheit (F) cooler than today's current condition. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

Although California's rate of growth of greenhouse gas emissions is slowing, the state is still a substantial contributor to the U.S. emissions inventory total. In 2004, California is estimated to have produced 492 million gross metric tons of carbon dioxide equivalent (CO2e) greenhouse gas emissions. Despite a population increase of 16 percent between 1990 and 2004, California has significantly slowed the rate of growth of greenhouse gas emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls (7).

2.4 GREENHOUSE GASES

For the purposes of this analysis, emissions of carbon dioxide, methane, and nitrous oxide were evaluated (see Table 3-4 later in this report) because these gasses are the primary contributors to GCC from development projects. Although other substances such as fluorinated gases also contribute to GCC, sources of fluorinated gases are not well-defined and no accepted emissions factors or methodology exist to accurately calculate these gases.

Greenhouse gases have varying global warming potential (GWP) values; GWP values represent the potential of a gas to trap heat in the atmosphere. Carbon dioxide is utilized as the reference gas for GWP, and thus has a GWP of 1.

The atmospheric lifetime and GWP of selected greenhouse gases are summarized at Table 2-2. As shown in the table below, GWP for the SAR range from 1 for carbon dioxide to 23,900 for sulfur hexafluoride and GWP for the AR4 range from 1 for carbon dioxide to 22,800 for sulfur hexafluoride.

TABLE 2-2: GLOBAL WARMING POTENTIAL AND ATMOSPHERIC LIFETIME OF SELECT GHGS

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100 year time horizon)	
		Second Assessment Report (SAR)	4th Assessment Report (AR4)
Carbon Dioxide	50-200	1	1
Methane	12 ± 3	21	25
Nitrous Oxide	120	310	298
HFC-23	264	11,700	14,800
HFC-134a	14.6	1,300	1,430
HFC-152a	1.5	140	124
Sulfur Hexafluoride (SF6)	3,200	23,900	22,800

Source: Table 2.14 of the IPCC Fourth Assessment Report, 2007

Water Vapor: Water vapor (H20) is the most abundant, important, and variable greenhouse gas in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. A climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which water is involved is critically important to projecting future climate change.

As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop will continue is unknown as there are also dynamics that hold the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it will eventually also condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the Earth's surface and heat it up).

There are no human health effects from water vapor itself; however, when some pollutants come in contact with water vapor, they can dissolve and the water vapor can then act as a pollutant-carrying agent. The main source of water vapor is evaporation from the oceans (approximately 85 percent). Other sources include: evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.

Carbon Dioxide: Carbon dioxide (CO2) is an odorless and colorless GHG. Outdoor levels of carbon dioxide are not high enough to result in negative health effects. Carbon dioxide is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. Carbon dioxide is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks (8).

Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. As an example, prior to the industrial revolution, CO2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30 percent. Left unchecked, the concentration of carbon dioxide in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources (9).

Methane: Methane (CH4) is an extremely effective absorber of radiation, though its atmospheric concentration is less than carbon dioxide and its lifetime in the atmosphere is brief (10-12 years), compared to other GHGs.

Methane has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropocentric sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide: Nitrous oxide (N2O), also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage) (10).

Concentrations of nitrous oxide also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb). Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant, i.e., in whipped cream bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. Nitrous oxide can be transported into the stratosphere, be deposited on the Earth's surface, and be converted to other compounds by chemical reaction

Chlorofluorocarbons: Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C2H6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs are no longer being used; therefore, it is not likely that health

effects would be experienced. Nonetheless, in confined indoor locations, working with CFC-113 or other CFCs is thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.

CFCs have no natural source, but were first synthesized in 1928. They were used for refrigerants, aerosol propellants and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

Hydrofluorocarbons: Hydrofluorocarbons (HFCs) are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the greenhouse gases, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF3), HFC-134a (CF3CH2F), and HFC-152a (CH3CHF2). Prior to 1990, the only significant emissions were of HFC-23. HFC-134a emissions are increasing due to its use as a refrigerant. The U.S. EPA estimates that concentrations of HFC-23 and HFC-134a are now about 10 parts per trillion (ppt) each; and that concentrations of HFC-152a are about 1 ppt (11). No health effects are known to result from exposure to HFCs, which are manmade for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons: Perfluorocarbons (PFCs) have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above Earth's surface, are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF4) and hexafluoroethane (C2F6). The U.S. EPA estimates that concentrations of CF4 in the atmosphere are over 70 ppt.

No health effects are known to result from exposure to PFCs. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur Hexafluoride: Sulfur hexafluoride (SF6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (22,800). The U.S. EPA indicates that concentrations in the 1990s were about 4 ppt. In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing.

Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

2.5 EFFECTS OF CLIMATE CHANGE IN CALIFORNIA

Public Health

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35 percent under the lower warming range (3-5.5°F) to 75 to 85 percent under the medium warming range (5.5-8°F). In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55 percent more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming range scenario (8-10.5°F), there could be up to 100 more days per year with temperatures above 90oF in Los Angeles and 95oF in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

Agriculture

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25 percent of the water supply they need. Although higher CO2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate O3 pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts.

In addition, continued global climate change could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued global climate change could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Global climate change has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. In contrast, wildfires in northern California could increase by up to 90 percent due to decreased precipitation.

Moreover, continued global climate change has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80 percent by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of global climate change.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with salt water, accelerate coastal erosion, threaten vital levees and

inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches.

2.6 HUMAN HEALTH EFFECTS

The potential health effects related directly to the emissions of carbon dioxide, methane, and nitrous oxide as they relate to development projects such as the proposed Project are still being debated in the scientific community. Their cumulative effects to global climate change have the potential to cause adverse effects to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport that higher ambient temperatures would increase disease survival rates and result in more widespread disease. Climate change will likely cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas (12). Exhibit 2-A presents the potential impacts of global warming.

Water Vapor: There are no known direct health effects related to water vapor at this time. It should be noted however that when some pollutants react with water vapor, the reaction forms a transport mechanism for some of these pollutants to enter the human body through water vapor.

Carbon Dioxide: According to the National Institute for Occupational Safety and Health (NIOSH) high concentrations of carbon dioxide can result in health effects such as: headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted that current concentrations of carbon dioxide in the earth's atmosphere are estimated to be approximately 370 parts per million (ppm), the actual reference exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour workweek and short-term reference exposure levels of 30,000 ppm averaged over a 15 minute period (13).

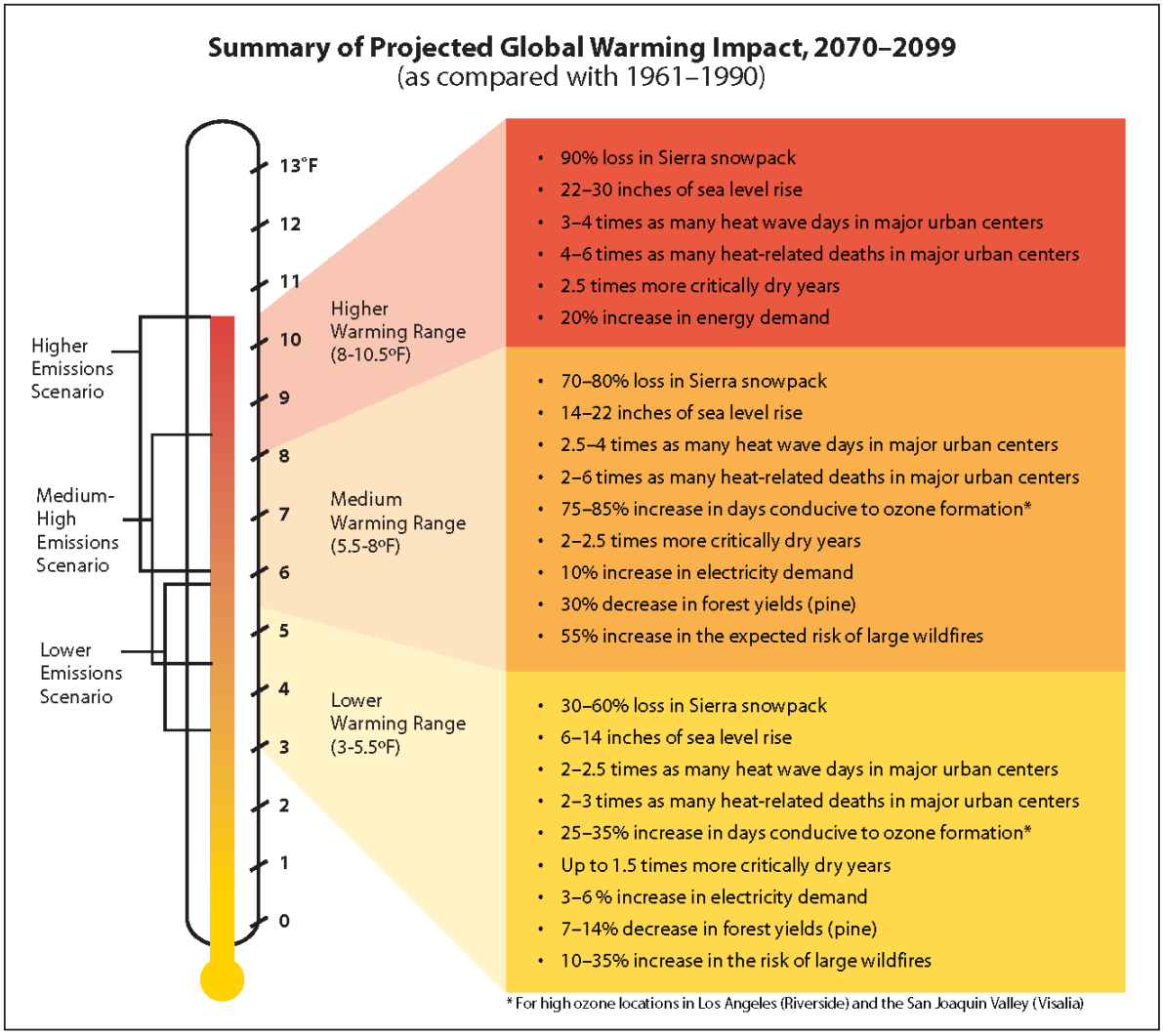
Specific health effects associated with directly emitted GHG emissions are as follows:

Methane: Methane is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Methane is also an asphyxiant and may displace oxygen in an enclosed space (14).

Nitrous Oxide: Nitrous Oxide is often referred to as laughing gas; it is a colorless greenhouse gas. The health effects associated with exposure to elevated concentrations of nitrous oxide include dizziness, euphoria, slight hallucinations, and in extreme cases of elevated concentrations nitrous oxide can also cause brain damage (14).

Fluorinated Gases: High concentrations of fluorinated gases can also result in adverse health effects such as asphyxiation, dizziness, headache, cardiovascular disease, cardiac disorders, and in extreme cases, increased mortality (13).

EXHIBIT 2-A: SUMMARY OF PROJECTED GLOBAL WARMING IMPACT



Aerosols: The health effects of aerosols are similar to that of other fine particulate matter. Thus aerosols can cause elevated respiratory and cardiovascular diseases as well as increased mortality (15).

2.7 REGULATORY SETTING

International Regulation and the Kyoto Protocol:

In 1988, the United Nations established the Intergovernmental Panel on Climate Change to evaluate the impacts of global warming and to develop strategies that nations could implement to curtail global climate change. In 1992, the United States joined other countries around the world in signing the United Nations' Framework Convention on Climate Change (UNFCCC) agreement with the goal of controlling greenhouse gas emissions. As a result, the Climate Change Action Plan was developed to address the reduction of GHGs in the United States. The Plan currently consists of more than 50 voluntary programs for member nations to adopt.

The Kyoto protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. Some have estimated that if the commitments outlined in the Kyoto protocol are met, global GHG emissions could be reduced an estimated five percent from 1990 levels during the first commitment period of 2008-2012. Notably, while the United States is a signatory to the Kyoto protocol, Congress has not ratified the Protocol and the United States is not bound by the Protocol's commitments. In December 2009, international leaders from 192 nations met in Copenhagen to address the future of international climate change commitments post-Kyoto.

2015 United Nations Paris Climate Change Conference

On December 12, 2015, which marks the 11th meeting of the Parties to the Kyoto Protocol, 195 nations, including the United States and China, agreed upon a strategy for combatting global climate change to be in effect in 2020. This historic meeting, known as the 21st annual Conference of the Parties (COP21), focused on five key elements: mitigation, a transparency system and global stock-take, adaptation, loss and damage, and support.

In mitigating global climate change, COP 21 participating nations agreed upon a universal long-term goal of keeping the global temperature to well below 2°C or 3.6°F well above pre-industrial levels. The agreement also encouraged participating nations to limit temperature increases even further to 1.5°C or 2.7°F above pre-industrial levels. In addition to that, nations agreed to peak their GHG emissions as soon as possible, with the recognition that developing countries may take longer than developed countries. Thereafter, nations are to undergo rapid reductions in accordance to best available technological advances. The nations are to submit national climate action plans that detail future objectives to address climate change.

In supporting a transparency system and global stock-take, the participating nations agreed to meet every 5 years to set more ambitious targets on global climate change as technologically feasible. The nations are to report to each other and to the public on their progress towards implementing targets and goals through a transparency and accountability system.

In adaptation, participating nations are to strengthen the ability of nations to deal with climate impacts and provide continued international support for adaptation to developing countries.

In supporting loss and damage, participating nations understand the importance of minimizing and addressing the loss and damage associated with adverse effects of global climate change. These nations acknowledge the need to corporate with each other and support each other through safeguards, such as early warning systems, emergency preparedness, and risk insurance.

Participating nations are to support each other in their efforts to fight against global climate change. Developed countries within the COP21 are to continue their existing collective goal of utilizing 100 billion per year in support of the poorest and most vulnerable participating nations, known as climate finance, until 2025, when a new collective goal will be set. (16) (17)

Federal Regulation and the Clean Air Act:

Coinciding 2009 meeting in Copenhagen, on December 7, 2009, the U.S. Environmental Protection Agency (EPA) issued an Endangerment Finding under Section 202(a) of the Clean Air Act, opening the door to federal regulation of GHGs. The Endangerment Finding notes that GHGs threaten public health and welfare and are subject to regulation under the Clean Air Act. To date, the EPA has not promulgated regulations on GHG emissions, but it has already begun to develop them.

Previously the EPA had not regulated GHGs under the Clean Air Act (18) because it asserted that the Act did not authorize it to issue mandatory regulations to address global climate change and that such regulation would be unwise without an unequivocally established causal link between GHGs and the increase in global surface air temperatures. In Massachusetts v. Environmental Protection Agency et al. (127 S. Ct. 1438 (2007), however, the U.S. Supreme Court held that GHGs are pollutants under the Clean Air Act and directed the EPA to decide whether the gases endangered public health or welfare. The EPA had also not moved aggressively to regulate GHGs because it expected Congress to make progress on GHG legislation, primarily from the standpoint of a cap-and-trade system. However, proposals circulated in both the House of Representative and Senate have been controversial and it may be some time before the U.S. Congress adopts major climate change legislation. The EPA's Endangerment Finding paves the way for federal regulation of GHGs with or without Congress.

Although global climate change did not become an international concern until the 1980s, efforts to reduce energy consumption began in California in response to the oil crisis in the 1970s, resulting in the unintended reduction of greenhouse gas emissions. In order to manage the state's energy needs and promote energy efficiency, AB 1575 created the California Energy Commission (CEC) in 1975.

Title 24 Energy Standards:

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (19) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods. The Energy Commission's most recent standard, 2013 Building Energy Efficiency Standard, is 25 percent more efficient than previous standards for residential construction and 30 percent better for nonresidential construction. The Standards, which took effect on July 1, 2014, offer builders better windows, insulation, lighting, ventilation systems and other features that reduce energy consumption in homes and businesses. Some improved measures in the Standards include:

Residential:

- Solar-ready roofs to allow homeowners to add solar photovoltaic panels at a future date
- More efficient windows to allow increased sunlight, while decreasing heat gain

- Insulated hot water pipes, to save water and energy and reduce the time it takes to deliver hot water
- Whole house fans to cool homes and attics with evening air reducing the need for air conditioning load
- Air conditioner installation verification to insure efficient operation

Nonresidential:

- High performance windows, sensors and controls that allow buildings to use "daylighting"
- Efficient process equipment in supermarkets, computer data centers, commercial kitchens, laboratories, and parking garages
- Advanced lighting controls to synchronize light levels with daylight and building occupancy, and provide demand response capability
- Solar-ready roofs to allow businesses to add solar photovoltaic panels at a future date
- Cool roof technologies

CALGreen:

Part 11 of the Title 24 Building Standards Code is referred to as the California Green Building Standards Code (CALGreen Code) (20). The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality." The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). The CBSC has released the 2010 California Green Building Standards Code on its Web site. Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code.

CALGreen contains both mandatory and voluntary measures, for Non-Residential land uses there are 39 mandatory measures including, but not limited to: exterior light pollution reduction, wastewater reduction by 20%, and commissioning of projects over 10,000 sf. There are two tiers of voluntary measures for Non-Residential land uses for a total of 36 additional elective measures.

The 2013 CALGreen includes additions and amendments to the water efficiency standards for non residential buildings in order to comply with the reduced flow rate table. The 2013 CALGreen has also been rewritten to clarify and definitively identify the requirements and applicability for residential and nonresidential buildings.

California Assembly Bill No. 1493 (AB 1493):

AB 1493 requires CARB to develop and adopt the nation's first greenhouse gas emission standards for automobiles. The Legislature declared in AB 1493 that global warming was a

matter of increasing concern for public health and environment in California (21). Further, the legislature stated that technological solutions to reduce greenhouse gas emissions would stimulate the California economy and provide jobs.

To meet the requirements of AB 1493, ARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California's existing motor vehicle emission standards in 2004. Amendments to CCR Title 13 Sections 1900 (CCR 13 1900) and 1961 (CCR 13 1961) and adoption of Section 1961.1 (CCR 13 1961.1) require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. Emission limits are further reduced each model year through 2016.

In December 2004 a group of car dealerships, automobile manufacturers, and trade groups representing automobile manufacturers filed suit against ARB to prevent enforcement of CCR 13 1900 and CCR 13 1961 as amended by AB 1493 and CCR 13 1961.1 (Central Valley Chrysler-Jeep et al. v. Catherine E. Witherspoon, in her official capacity as Executive Director of the California Air Resources Board, et al.). The suit, heard in the U.S. District Court for the Eastern District of California, contended that California's implementation of regulations that in effect regulate vehicle fuel economy violates various federal laws, regulations, and policies. In January 2007, the judge hearing the case accepted a request from the State Attorney General's office that the trial be postponed until a decision is reached by the U.S. Supreme Court on a separate case addressing GHGs. In the Supreme Court Case, Massachusetts vs. EPA, the primary issue in question is whether the federal CAA provides authority for USEPA to regulate CO2 emissions. In April 2007, the U.S. Supreme Court ruled in Massachusetts' favor, holding that GHGs are air pollutants under the CAA. On December 11, 2007, the judge in the Central Valley Chrysler-Jeep case rejected each plaintiff's arguments and ruled in California's favor. On December 19, 2007, the USEPA denied California's waiver request. California filed a petition with the Ninth Circuit Court of Appeals challenging USEPA's denial on January 2, 2008.

The Obama administration subsequently directed the USEPA to re-examine their decision. On May 19, 2009, challenging parties, automakers, the State of California, and the federal government reached an agreement on a series of actions that would resolve these current and potential future disputes over the standards through model year 2016. In summary, the USEPA and the U.S. Department of Transportation agreed to adopt a federal program to reduce GHGs and improve fuel economy, respectively, from passenger vehicles in order to achieve equivalent or greater greenhouse gas benefits as the AB 1493 regulations for the 2012–2016 model years. Manufacturers agreed to ultimately drop current and forego similar future legal challenges, including challenging a waiver grant, which occurred on June 30, 2009. The State of California committed to (1) revise its standards to allow manufacturers to demonstrate compliance with the fleet-average GHG emission standard by "pooling" California and specified State vehicle sales; (2) revise its standards for 2012–2016 model year vehicles so that compliance with USEPA-adopted GHG standards would also comply with California's standards; and (3) revise its standards, as necessary, to allow manufacturers to use emissions data from the federal CAFE program to demonstrate compliance with the AB 1493 regulations (CARB 2009,

http://www.arb.ca.gov/regact/2009/ghgpv09/ghgpvisor.pdf) both of these programs are aimed at light-duty auto and light-duty trucks.

Executive Order S-3-05:

Executive Order S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change (22). It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total greenhouse gas emission targets. Specifically, emissions are to be reduced to the 1990 level by 2020, and to 80% below the 1990 level by 2050. The Executive Order directed the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce greenhouse gas emissions to the target levels. The Secretary also is required to submit biannual reports to the Governor and state Legislature describing: (1) progress made toward reaching the emission targets; (2) impacts of global warming on California's resources; and (3) mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the Secretary of the CalEPA created a Climate Action Team (CAT) made up of members from various state agencies and commission. CAT released its first report in March 2006. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government and community actions, as well as through state incentive and regulatory programs.

California Assembly Bill 32 (AB 32):

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by the year 2020 (1). This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that CARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. AB 32 also includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

In November 2007, CARB completed its estimates of 1990 GHG levels. Net emission 1990 levels were estimated at 427 MMTs (emission sources by sector were: transportation – 35 percent; electricity generation – 26 percent; industrial – 24 percent; residential – 7 percent; agriculture – 5 percent; and commercial – 3 percent). Accordingly, 427 MMTs of CO2 equivalent was established as the emissions limit for 2020. For comparison, CARB's estimate for baseline GHG

emissions was 473 MMT for 2000 and 532 MMT for 2010. "Business as usual" conditions (without the 28.4 percent reduction to be implemented by CARB regulations) for 2020 were projected to be 596 MMTs.

In December 2007, CARB approved a regulation for mandatory reporting and verification of GHG emissions for major sources. This regulation covered major stationary sources such as cement plants, oil refineries, electric generating facilities/providers, and co-generation facilities, which comprise 94 percent of the point source CO2 emissions in the State.

On December 11, 2008, CARB adopted a scoping plan to reduce GHG emissions to 1990 levels. The Scoping Plan's recommendations for reducing GHG emissions to 1990 levels by 2020 include emission reduction measures, including a cap-and-trade program linked to Western Climate Initiative partner jurisdictions, green building strategies, recycling and waste-related measures, as well as Voluntary Early Actions and Reductions. Implementation of individual measures must begin no later than January 1, 2012, so that the emissions reduction target can be fully achieved by 2020.

Table 2-3 shows the proposed reductions from regulations and programs outlined in the Scoping Plan. While local government operations were not accounted for in achieving the 2020 emissions reduction, local land use changes are estimated to result in a reduction of 5 MMTons of CO2e, which is approximately 3 percent of the 2020 GHG emissions reduction goal. In recognition of the critical role local governments will play in successful implementation of AB 32, CARB is recommending GHG reduction goals of 15 percent of 2006 levels by 2020 to ensure that municipal and community-wide emissions match the state's reduction target. According to the Measure Documentation Supplement to the Scoping Plan, local government actions and targets are anticipated to reduce vehicle miles by approximately 2 percent through land use planning, resulting in a potential GHG reduction of 2 MMTons tons of CO2e (or approximately 1.2 percent of the GHG reduction target).

Overall, CARB determined that achieving the 1990 emission level in 2020 would require a reduction in GHG emissions of approximately 28.5 percent in the absence of new laws and

TABLE 2-3: SCOPING PLAN GHG REDUCTION MEASURES TOWARDS 2020 TARGET

Recommended Reduction Measures	*Reductions Counted toward 2020 Target of 169 MMT CO2e*	*Percentage of Statewide 2020 Target*
Cap and Trade Program and Associated Measures		
California Light-Duty Vehicle GHG Standards	31.7	19%
Energy Efficiency	26.3	16%
Renewable Portfolio Standard (33 percent by 2020)	21.3	13%
Low Carbon Fuel Standard	15	9%
Regional Transportation-Related GHG Targets[1]	5	3%
Vehicle Efficiency Measures	4.5	3%
Goods Movement	3.7	2%
Million Solar Roofs	2.1	1%
Medium/Heavy Duty Vehicles	1.4	1%
High Speed Rail	1.0	1%
Industrial Measures	0.3	0%
Additional Reduction Necessary to Achieve Cap	34.4	20%
Total Cap and Trade Program Reductions	146.7	87%
Uncapped Sources/Sectors Measures		
High Global Warming Potential Gas Measures	20.2	12%
Sustainable Forests	5	3%
Industrial Measures (for sources not covered under cap and trade program)	1.1	1%
Recycling and Waste (landfill methane capture)	1	1%
Total Uncapped Sources/Sectors Reductions	27.3	16%
Total Reductions Counted toward 2020 Target	174	100%
Other Recommended Measures – Not Counted toward 2020 Target		
State Government Operations	1.0 to 2.0	1%
Local Government Operations	To Be Determined[2]	NA
Green Buildings	26	15%
Recycling and Waste	9	5%
Water Sector Measures	4.8	3%
Methane Capture at Large Dairies	1	1%
Total Other Recommended Measures – Not Counted toward 2020 Target	42.8	NA

Source: CARB. 2008, MMTons CO2e: million metric tons of CO2e

[1]Reductions represent an estimate of what may be achieved from local land use changes. It is not the SB 375 regional target.

[2]According to the Measure Documentation Supplement to the Scoping Plan, local government actions and targets are anticipated to reduce vehicle miles by approximately 2 percent through land use planning, resulting in a potential GHG reduction of 2 million metric tons of CO2e (or approximately 1.2 percent of the GHG reduction target). However, these reductions were not included in the Scoping Plan reductions to achieve the 2020 Target

regulations (referred to as "Business-As-Usual" [BAU]). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and California Climate Action Team early actions and additional GHG reduction measures, identifies additional measures to be pursued as regulations, and outlines the role of the cap-and-trade program.

In connection with its preparation of the August 2011 Final Supplement to the Scoping Plan's Functional Equivalent Document, CARB released revised estimates of the 2020 emissions level projection in light of the economic recession and the availability of updated information from development of measure-specific regulations. Based on the new economic data, CARB determined the 2020 emissions level projection in the BAU condition would be reduced from 596 metric tons of CO2 equivalent (MTCO2e) to 545 MTCO2e. (23) Under this scenario, achieving the 1990 emissions level in 2020 would require a reduction of GHG emissions of 118 MTCO2e, or 21.7 percent (down from 28.5 percent), from the BAU condition.

When the 2020 emissions level projection also was updated to account for implemented regulatory measures, including Pavley (vehicle model-years 2009 - 2016) and the renewable portfolio standard (12% - 20%), the 2020 projection in the BAU condition was reduced further to 507 MTCO2e. As a result, based on the updated economic and regulatory data, CARB determined that achieving the 1990 emissions level in 2020 would now only require a reduction of GHG emissions of 80 MTCO2e, or approximately 16 percent (down from 28.5 percent), from the BAU condition. (23) (24)

On February 10, 2014, CARB released a Draft Proposed First Update of the Scoping Plan. The draft recalculates 1990 GHG emissions using new global warming potentials identified in the IPCC Fourth Assessment Report released in 2007. Using those GWPs, the 427 MTCO2e 1990 emissions level and 2020 GHG emissions limit identified in the 2008 Scoping Plan would be slightly higher, at 431 MTCO2e. (25) Based on the revised 2020 emissions level projection identified in the 2011 Final Supplement and the updated 1990 emissions levels identified in the discussion draft of the First Update, achieving the 1990 emissions level in 2020 would require a reduction of 78 MTCO2e (down from 509 MTCO2e), or approximately 15.3 percent (down from 28.5 percent), from the BAU condition. (23) (24) (25)

Although CARB has released an update to the Scoping Plan and reduction targets from BAU, it is still appropriate to utilize the previous 28.5% reduction from BAU since the modeling tools available are not able to easily segregate the inclusion of the renewable portfolio standards, and Pavley requirements that are now included in the revised BAU scenario.

California Senate Bill No. 1368 (SB 1368):

In 2006, the State Legislature adopted Senate Bill 1368 ("SB 1368"), which was subsequently signed into law by the Governor (26). SB 1368 directs the California Public Utilities Commission ("CPUC") to adopt a greenhouse gas emission performance standard ("EPS") for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Due to the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants.

Accordingly, the new law will effectively prevent California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of

the State. Thus, SB 1368 will lead to dramatically lower greenhouse gas emissions associated with California energy demand, as SB 1368 will effectively prohibit California utilities from purchasing power from out of state producers that cannot satisfy the EPS standard required by SB 1368.

CEQA Guidelines

CEQA Guideline § 15064.4(a)"A lead agency shall have discretion to determine, in the context of a particular project, whether to: 1. Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use . . .; or 2. Rely on a qualitative analysis or performance based standards."

Also amended were CEQA Guidelines Sections 15126.4 and 15130, which address mitigation measures and cumulative impacts respectively. Greenhouse gas mitigation measures are referenced in general terms, but no specific measures are championed. The revision to the cumulative impact discussion requirement (Section 15130) simply directs agencies to analyze greenhouse gas emissions in an EIR when a Project's incremental contribution of emissions may be cumulatively considerable, however it does not answer the question of when emission are cumulatively considerable.

Section 15183.5 permits programmatic greenhouse gas analysis and later project-specific tiering, as well as the preparation of Greenhouse Gas Reduction Plans. Compliance with such plans can support determination that a Project's cumulative effect is not cumulatively considerable, according to proposed Section 15183.5(b).

CEQA emphasizes that the effects of greenhouse gas emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis. (See CEQA Guidelines Section 15130(f)).

Section 15064.4(b) of the CEQA Guidelines provides direction for lead agencies for assessing the significance of impacts of greenhouse gas emissions:

1. The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; or
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

Executive Order S-01-07:

On January 18, 2007 California Governor Arnold Schwarzenegger, through Executive Order S-01-07, mandated a statewide goal to reduce the carbon intensity of California's transportation fuel by at least ten percent by 2020 (27). The order also requires that a California specific Low Carbon Fuel Standard be established for transportation fuels.

Senate Bills 1078 and 107 and Executive Order S-14-08:

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20% of their supply from renewable sources by 2017 (28). SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010 (27). In November 2008 Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Energy Standard to 33% renewable power by 2020 (29).

Executive Order B-30-15:

In January 2015, Governor Brown, in his inaugural address and annual report to the Legislature, established supplementary goals which would further reduce GHG emissions over the next 15 years. These goals include an increase in California's renewable energy portfolio from 33% to 50%, a reduction in vehicle petroleum use for cars and trucks by up to 50% measures to double the efficiency of existing buildings, and decreasing emissions associated with heating fuels.

On April 29, 2015 California Governor Jerry Brown, through Executive Order B-30-15 ("BEO") states a new statewide policy goal to reduce GHG emissions 40 percent below their 1990 levels by 2030.

The BEO sets an ambitious new Statewide GHG emissions reduction target of 40% below 1990 levels by 2030 as a "mid-term" benchmark needed to achieve the 80% below 1990 levels by 2050. It should be noted however that this target has not been formally enacted by the Legislature or even CARB. As such, the BEO does not appear to constitute a new regulation or requirement adopted to implement a statewide, regional or local plan for the reduction of GHG emissions within the context of CEQA.

The Project reduces its GHG emissions to the maximum extent feasible as discussed in this document. At this time, no further analysis is necessary or required by CEQA as it pertains to Executive Order B-30-15.

Additionally, as described previously, the project applicant would not actively interfere with any future City-mandated, state-mandated, or federally-mandated retrofit obligations enacted or promulgated to legally require development City-wide, state-wide, or nation-wide to assist in meeting state-adopted greenhouse gas emissions reduction targets, including that established under Executive Order S-3-05 or Executive Order B-30-15.

Based on the foregoing, the Project does not interfere with the state's implementation of (i) Executive Order B-30-15's target of reducing statewide GHG emissions to 40% below 1990 levels by 2030 or (ii) Executive Order S-3-05's target of reducing statewide GHG emissions to

80% below 1990 levels by 2050 because it does not interfere with the state's implementation of GHG reduction plans described in the CARB's Updated Scoping Plan, including the state providing for 12,000 MW of renewable distributed generation by 2020, the California Building Commission mandating net zero energy homes in the building code after 2020, or existing building retrofits under AB 758. Therefore, the project's impacts on greenhouse gas emissions in the 2030 and 2050 horizon years are less than significant.

Senate Bill 375:

SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires metropolitan planning organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will prescribe land use allocation in that MPO's regional transportation plan. ARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035.

These reduction targets will be updated every 8 years but can be updated every 4 years if advancements in emissions technologies affect the reduction strategies to achieve the targets. ARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects will not be eligible for funding programmed after January 1, 2012.

This law also extends the minimum time period for the regional housing needs allocation cycle from 5 years to 8 years for local governments located within an MPO that meets certain requirements. City or county land use policies (including general plans) are not required to be consistent with the regional transportation plan (and associated SCS or APS). However, new provisions of CEQA would incentivize (through streamlining and other provisions) qualified projects that are consistent with an approved SCS or APS, categorized as "transit priority projects."

The Southern California Association of Governments (SCAG) is required by law to update the Southern California Regional Transportation Plan (RTP) every four years. The 2012 draft plan has been released, this draft plan differs from past plans because it includes development of a SCS. The RTP/SCS incorporates land use and housing policies to meet the greenhouse gas emissions targets established by the California Air Resource Board (CARB) for 2020 (8% reduction) and 2035 (13% reduction). On April 4, 2012, the Regional Council of the Southern California Association of Governments (SCAG) adopted the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Towards a Sustainable Future.

South Coast Air Quality Management District Recommendations for Significance Thresholds:

In April 2008, the South Coast Air Quality Management District (SCAQMD), in order to provide guidance to local lead agencies on determining the significance of GHG emissions identified in CEQA documents, convened a "GHG CEQA Significance Threshold Working Group." The goal of the working group is to develop and reach consensus on an acceptable CEQA significance threshold for GHG emissions that would be utilized on an interim basis until CARB (or some

other state agency) develops statewide guidance on assessing the significance of GHG emissions under CEQA.

Initially, SCAQMD staff presented the working group with a significance threshold that could be applied to various types of projects—residential; non-residential; industrial; etc (30). However, the threshold is still under development. In December 2008, staff presented the SCAQMD Governing Board with a significance threshold for stationary source projects where it is the lead agency. This threshold uses a tiered approach to determine a project's significance, with 10,000 metric tons of carbon dioxide equivalent (MTCO2e) as a screening numerical threshold for stationary sources. More importantly it should be noted that when setting the 10,000 MTCO2e threshold, the SCAQMD did not consider mobile sources (vehicular travel), rather the threshold is based mainly on stationary source generators such as boilers, refineries, power plants, etc. Therefore it would be misleading to apply a threshold that was developed without consideration for mobile sources to a Project where the majority of emissions are related to mobile sources.

In September 2010 (31), the Working Group released additional revisions that consist of the following recommended tiered approach:

- Tier 1 consists of evaluating whether or not the Project qualifies for applicable CEQA exemptions.
- Tier 2 consists of determining whether or not a Project is consistent with a greenhouse gas reduction plan. If a Project is consistent with a greenhouse gas reduction plan, it would not have a significant impact.
- Tier 3 consists of screening values at the discretion of the lead agency; however they should be consistent for all projects within its jurisdiction. Project-related construction emissions should be amortized over 30 years and should be added back the Project's operational emissions. The following thresholds are proposed for consideration:
    - 3,000 MTCO2e per year for all land use types

      or
    - 3,500 MTCO2e per year for residential; 1,400 MTCO2e per year for commercial; or 3,000 MTCO2e per year for mixed-use projects
- Tier 4 has the following options:
    - Option 1: Reduce emissions from business as usual by a certain percentage (currently undefined)
    - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
    - Option 3: A project-level efficiency target of 4.8 MTCO2e per service population as a 2020 target and 3.0 MTCO2e per service population as a 2035 target. The recommended plan-level target for 2020 is 6.6 MTCO2e and the plan level target for 2035 is 4.1 MTCO2e
- Tier 5 involves mitigation offsets to achieve target significance thresholds

The SCAQMD has also adopted Rules 2700, 2701, and 2702 that address GHG reductions. However, these rules address boilers and process heater, forestry, and manure management projects, none of which are required by the Project

2.8 SCAG REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

The 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for the SCAG region was prepared to ensure that the Southern California region attains the per capita vehicle miles targets for passenger vehicles identified by CARB, as required by Senate Bill 375 (32). The Project would be consistent with the plan for integrating the transportation network and related strategies with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. The Project's consistency with the proposed RTP strategies would therefore not conflict with GHG reduction goals set forth in the SAG 2012 RTP/SCS.

2.9 CITY OF MORENO VALLEY GENERAL PLAN MEASURES

Although the City of Moreno Valley General Plan does not identify specific GHG or climate change policies or goal, a number of the measures identified in the General Plan's Air Quality Element act to reduce or control criteria pollutant emissions and peripherally reduce GHG emissions. The proposed Project has been evaluated for consistency with the City's General Plan Air Quality Element, as shown on Table 2-4.

TABLE 2-4: CITY OF MORENO VALLEY GENERAL PLAN CONSISTENCY

Objective 6.6: Promote land use patterns that reduce daily automotive trips and reduce trip distance for work, shopping, school, and recreation.	**Consistent.** *The Project site is providing employment opportunities to Moreno Valley and the surrounding area.*
Objective 6.7: Reduce mobile and stationary source air pollutant emissions.	**Consistent.** *The Project site is located proximate to existing and proposed major roadways, acting to generally reduce vehicle trip lengths, thereby reducing mobile source emissions. The Project will further reduce mobile source emissions by creating local employment opportunities, reducing commuter vehicle miles traveled (VMT) within the region. Additionally, the Project will implement energy efficient designs and operational programs meeting or surpassing California Code of Regulations (CCR) Title 24 Building Standards, including but not limited to compliance with or betterment of, energy conservation requirements identified at CCR Title 24, Part 6, Energy Code. Energy efficient designs and programs implemented by the Project reduce resources consumption with correlating reductions in stationary-source emissions.*
Policy 6.7.5: Require grading activities to comply with South Coast Air Quality Management District's Rule 403 regarding the control of fugitive dust.	**Consistent.** *The Project will be required to implement fugitive dust control measures consistent with SCAQMD Rule 403.*
Policy 6.7.6: Require building construction to comply with the energy conservation requirements of Title 24 of the California Administrative Code [California Code of Regulations].	**Consistent.** *Pursuant to City and State Building Code requirements, the Project will meet or surpass applicable CCR Title 24 energy conservation requirements.*

Source: City of Moreno Valley General Plan, Safety Element

2.10 CITY OF MORENO VALLEY ENERGY EFFICIENCY AND CLIMATE ACTION STRATEGY

The City of Moreno Valley released an Energy Efficiency and Climate Action Strategy (CAS) as well as a Greenhouse Gas Analysis for public review on May 8, 2012. The documents were approved on October 9, 2012. The CAS identifies ways that the City can reduce energy and water consumption and greenhouse gas emissions as an organization (its employees and the operation of its facilities) and outlines the actions that the City can encourage and community members can employ to reduce their own energy and water consumption and greenhouse gas emissions. The policies in the document are to reduce greenhouse gas emissions in 2010 by 15 percent by 2020. The following consists of an analysis of project consistency with the policies in the CAS.

- R2-T1: Land Use Based Trips and VMT Reduction Policies. Encourage the development of Transit Priority Projects along High Quality Transit Corridors identified in the SCAG Sustainable Communities Plan, to allow a reduction in vehicle miles traveled.

  Project consistency: Not applicable.

- R2-T3: Employment-Based Trip Reductions. Require a Transportation Demand Management (TDM) program for new development to reduce automobile travel by encouraging ride-sharing, carpooling, and alternative modes of transportation.

  Project consistency: Consistent with implementation of MM AQ-5.

- R2-E1: New Construction Residential Energy Efficiency Requirements. Require energy efficient design for all new residential buildings to be 10 percent beyond the current Title 24 standards. (Reach Code)

  Project consistency: Not applicable; this measure applies to residential projects.

- R2-E2: New Construction Residential Renewable Energy. Facilitate the use of renewable energy (such as solar (photovoltaic) panels or small wind turbines) for new residential developments. Alternative approach would be the purchase of renewable energy resources offsite.

  Project consistency: Not applicable; this measure applies to residential projects.

- R2-E5: New Construction Commercial Energy Efficiency Requirements. Require energy efficient design for all new commercial buildings to be 10% beyond the 2008 Title 24 standards (which were in effect at the time the CAP was adopted). (Reach Code)

  Project consistency: Consistent; Current 2013 Title 24 requirements would achieve greater reduction than envisioned by the City's Climate Action Strategy. Further, the Project would be required to comply with any adopted municipal code requirements set forth by the City of Moreno Valley. As such the Project would be consistent with R2-E5

- R3-E1: Energy Efficient Development, and Renewable Energy Deployment Facilitation and Streamlining. Updating of codes and zoning requirements and guidelines to further implement green building practices. This could include incentives for energy efficient projects.

- Project consistency: Not applicable on a project-level.

- R3-L2: Heat Island Plan. Develop measures that address "heat islands." Potential measures include using strategically placed shade trees, using paving materials with a Solar Reflective Index of at least 29, an open grid pavement system, or covered parking.

  Project consistency: Consistent; the Project will comply with the City of Moreno Valley's landscaping requirements.

- R2-W1: Water Use Reduction Initiative. Consider adopting a per capita water use reduction goal, which mandates the reduction of water use of 20 percent per capita with requirements applicable to new development and with cooperative support of the water agencies.

  Project consistency: Consistent. California Green Building Standards Code, Chapter 5, Division 5.3, Section 5.303.2 requires that indoor water use be reduced by 20 percent. Section 5.304.3 requires irrigation controllers and sensors. MM AQ-4 also requires water conservation.

- R3-W1: Water Efficiency Training and Education. Work with EMWD and local water companies to implement a public information and education program that promotes water conservation.

  Project consistency: Not applicable at a project-level.

- R2-S1: City Diversion Program. For Solid Waste, consider a target of increasing the waste diverted from the landfill to a total of 75 percent by 2020.

  Project consistency: Consistent; the Project will comply with the City of Moreno Valley's citywide goal of solid waste reduction. Additionally the Project will be compliant with the City of Moreno Valley's Municipal Code 8.80.030 by implementing a Waste Management Plan.

As shown above and in Appendix 3.2, Project Consistency with Moreno Valley Energy Efficiency and Climate Action Strategy, of this report, many of the measures are not applicable to the project.

2.11 CONSISTENCY WITH CARB SCOPING PLAN

Table 2-5 below, presents the 39 Recommended Actions (qualitative measures) identified to date by CARB in its Climate Change Proposed Scoping Plan. Of the 39 measures identified, those that would be considered to be applicable to the Project would primarily be those actions related to transportation, electricity and natural gas use, green building design and industrial uses. Consistency of the Project with these measures is evaluated by each source-type measure below. Table 3-5 identifies which CARB Recommended Actions apply to the Project, and of those, whether the Project is consistent therewith. A discussion of how the Project is consistent with each applicable CARB Recommended Action is set forth after Table 2-5.

TABLE 2-5: RECOMMENDED ACTIONS FOR CLIMATE CHANGED PROPOSED SCOPING PLAN

ID #	Sector	Strategy Name	Applicable to Project?	Will Project Conflict With Implementation?
T-1	Transportation	Pavley I and II – Light-Duty Vehicle GHG Standards	NO	NO
T-2	Transportation	Low Carbon Fuel Standard (Discrete Early Action)	NO	NO
T-3	Transportation	Regional Transportation-Related GHG Targets	NO	NO
T-4	Transportation	Vehicle Efficiency Measures	NO	NO
T-5	Transportation	Ship Electrification at Ports (Discrete Early Action)	NO	NO
T-6	Transportation	Goods-movement Efficiency Measures	NO	NO
T-7	Transportation	Heavy Duty Vehicle Greenhouse Gas Emission Reduction Measure – Aerodynamic Efficiency (Discrete Early Action)	NO	NO
T-8	Transportation	Medium and Heavy-Duty Vehicle Hybridization	NO	NO
T-9	Transportation	High Speed Rail	NO	NO
E-1	Electricity and Natural Gas	Increased Utility Energy efficiency programs More stringent Building and Appliance Standards	YES	NO
E-2	Electricity and Natural Gas	Increase Combined Heat and Power Use by 30,000GWh	NO	NO
E-3	Electricity and Natural Gas	Renewable Portfolio Standard	NO	NO
E-4	Electricity and Natural Gas	Million Solar Roofs	YES	NO
CR-1	Electricity and Natural Gas	Energy Efficiency	YES	NO
CR-2	Electricity and Natural Gas	Solar Water Heating	NO	NO
GB-1	Green Buildings	Green Buildings	YES	NO
W-1	Water	Water Use Efficiency	YES	NO
W-2	Water	Water Recycling	NO	NO
W-3	Water	Water System Energy Efficiency	YES	NO
W-4	Water	Reuse Urban Runoff	NO	NO
W-5	Water	Increase Renewable Energy Production	NO	NO
W-6	Water	Public Goods Charge (Water)	NO	NO
I-1	Industry	Energy Efficiency and Co-benefits Audits for Large Industrial Sources	YES	NO
I-2	Industry	Oil and Gas Extraction GHG Emission Reduction	NO	NO
I-3	Industry	GHG Leak Reduction from Oil and Gas Transmission	NO	NO
I-4	Industry	Refinery Flare Recovery Process Improvements	NO	NO
I-5	Industry	Removal of Methane Exemption from Existing Refinery Regulations	NO	NO
RW-1	Recycling and Waste Management	Landfill Methane Control (Discrete Early Action)	NO	NO
RW-2	Recycling and Waste Management	Additional Reductions in Landfill Methane – Capture Improvements	NO	NO
RW-3	Recycling and Waste Management	High Recycling/Zero Waste	NO	NO
F-1	Forestry	Sustainable Forest Target	NO	NO
H-1	High Global Warming Potential Gases	Motor Vehicle Air Conditioning Systems (Discrete Early Action)	NO	NO
H-2	High Global Warming Potential Gases	SF_6 Limits in Non-Utility and Non-Semiconductor Applications (Discrete Early Action)	NO	NO
H-3	High Global Warming Potential Gases	Reduction in Perfluorocarbons in Semiconductor Manufacturing (Discrete Early Action)	NO	NO
H-4	High Global Warming Potential Gases	Limit High GWP Use in Consumer Products (Discrete Early Action, Adopted June 2008)	NO	NO
H-5	High Global Warming Potential Gases	High GWP Reductions from Mobile Sources	NO	NO
H-6	High Global Warming Potential Gases	High GWP Reductions from Stationary Sources	NO	NO
H-7	High Global Warming Potential Gases	Mitigation Fee on High GWP Gases	NO	NO
A-1	Agriculture	Methane Capture at Large Dairies	NO	NO

SOURCE: CARB, 2008.

Discussion of the applicability of each measure and Project consistency with or support of its implementation follows. It also noted that certain measures and enforcement actions listed below are beyond the scope of control of the Project. Notwithstanding implementation and enforcement of these measures by the State or other responsible entity will act to reduce areawide GHG emissions.

Transportation

CARB's Scoping Plan identifies nine transportation-related recommended actions. Action T-1 concerns improvements to light-duty vehicle technology for the purposes of reducing GHG emissions. This action focuses on legislating improved controls for vehicle manufacturers and would not generally be considered applicable to the proposed Project. Implementation of the Pavley standards is dependent on implementation by the State on vehicle fuel economy standards.

Implementation of such a standard is not within the purview of this Project. Therefore, the proposed Project would not conflict with measures concerning the Pavley standards.

Action T-2 concerns implementation of a low carbon fuel standard. To reduce the carbon intensity of transportation fuels, CARB is developing a Low Carbon Fuel Standard (LCFS), which would reduce the carbon intensity of California's transportation fuels by at least ten percent by 2020 as called for by Governor Schwarzenegger in Executive Order S-01-07. LCFS will incorporate compliance mechanisms that provide flexibility to fuel providers in how they meet the requirements to reduce greenhouse gas emissions.

Implementation of such a standard is not within the purview of this Project. Therefore, the proposed Project would not conflict with measures concerning the use of low carbon fuels.

Action T-3 addressees regional transportation targets for reducing GHG emissions. SB 375 requires CARB to develop, in consultation with metropolitan planning organizations (MPOs), passenger vehicle greenhouse gas emissions reduction targets for 2020 and 2035. It sets forth a collaborative process to establish these targets, including the appointment by CARB of a Regional Targets Advisory Committee to recommend factors to be considered and methodologies for setting greenhouse gas emissions reduction targets. SB 375 also provides incentives – relief from certain California Environmental Quality Act (CEQA) requirements for development projects that are consistent with regional plans that achieve the targets.

Implementation of such a standard is not within the purview of this Project. Therefore, the proposed Project would not conflict with measures concerning SB375.

Action T-4 is concerned with vehicle efficiency measures. The California Integrated Waste Management Board (CIWMB) with various partners continues to conduct a public awareness campaign to promote sustainable tire practices. CARB is pursuing a regulation to ensure that tires are properly inflated when vehicles are serviced. In addition, CEC in consultation with CIWMB is developing an efficient tire program focusing first on data gathering and outreach, then on potential adoption of minimum fuel-efficient tire standards, and lastly on the development of consumer information requirements for replacing tires. CARB is also pursuing

ways to reduce engine load via lower friction oil and reducing the need for air conditioner use. ARB is actively engaged in the regulatory development process for the tire inflation component of this measure.

Implementation of such a standard is not within the purview of this Project. Therefore, the proposed Project would not conflict with applicable measures.

Action T-5 addresses electrification of ships at ports and is not applicable to the proposed Project.

Action T-6 also primarily addresses port operations and is not applicable to the proposed Project.

Action T-7 requires existing trucks/trailers to be retrofitted with the best available technology and/or CARB-approved technology.

Implementation of such a standard is not within the purview of the proposed Project since various trucks fleets from numerous commercial entities may access the site. Therefore, the proposed Project would not conflict with this measure.

Action T-8 focuses on hybridization of medium- and heavy-duty vehicles. The implementation approach to Action T-8 is to adopt a regulation and/or incentive program that reduces GHG emissions by encouraging hybrid technology as applied to vocational applications that have significant urban, stop-and-go driving, idling, and power take-off operations in their duty cycle. Such applications include parcel delivery trucks and vans.

Implementation of such a standard is not within the purview of the proposed Project since various trucks fleets from numerous commercial entities may access the site. Therefore, the proposed Project would not conflict with this measure.

Action T-9 concerns implementation of a high speed rail system. This measure is not applicable to the Project.

Electricity and Natural Gas

Action E-1/CR-1, together with Action GB-1 (Green Building), aims to reduce electricity demand by increased efficiency of Utility Energy Programs and adoption of more stringent building and appliance standards.

The Project will comply with or surpass incumbent Title 24 Energy Efficiency Standards.. Therefore, the proposed Project would not conflict with this measure.

Action E-2 encourages an increase in the use of combined heat and power (CHP) use, or co-generation, facilities. California has supported CHP for many years, but market and other barriers continue to keep CHP from reaching its full market potential. Increasing the deployment of efficient CHP will require a multi-pronged approach that includes addressing significant barriers and instituting incentives or mandates where appropriate.

Implementation of such a standard is not within the purview of the proposed Project; therefore, the proposed Project would not conflict with this measure.

Action E-3 concerns Renewable Portfolio Standards for utilities and does not apply to development projects.

Action E-4 strives to promote solar generated electricity.

Project building designs will accommodate renewable energy sources, such as photovoltaic solar electricity systems, appropriate to their architectural design(s). The Project would therefore not conflict with the recommended measure.

Action CR-2 strives to promote solar water heaters (SWH). The ARB recommends that California pursue approaches with the goal of developing a viable SWH industry for 2020 and beyond.

Implementation of such a standard is not within the purview of the Project; therefore, the proposed Project would not conflict with this measure.

Water Use

Implementation of all but two of the Recommended Actions related to water use are not within the purview of the proposed Project. The two measures that apply are measures W-1 (Water Use Efficiency) and W-3 (Water System Energy Efficiency). However, since the proposed Project would not exceed the audit threshold of 25,000 MT CO_2 (33) from on-site combustion and related activities, the proposed Project is consistent with and would not obstruct the recommended actions.

Industrial Use

All but one of the Recommended Actions related to industrial use are specific to oil and gas extraction, refining and transmission and are not applicable to the proposed Project. The one other Action I-1 targets large emitters of GHGs (in excess of 0.5 million metric tons (MMT)/year of CO_2E (equivalent)) for auditing[6] (34). Because the proposed Project would not exceed the audit threshold, as set forth in Section 3.0, the proposed Project is consistent with and would not obstruct the recommended actions.

[6] Certain "covered sectors" of activities in California account for 85% of GHG emissions. Each source in these sectors will be subject to a system of declining GHG emissions allowances issued by CARB under a total emissions cap, as well as an allowance trading system. The Plan's lynch-pin is a cap-and-trade program that would apply to the electricity sector, the transportation sector, the commercial and residential sector, and large industrial sources (those emitting more than 0.5 million metric tons per year of carbon dioxide ("CO2") equivalents).

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3 PROJECT GREENHOUSE GAS IMPACT

3.1 INTRODUCTION

The Project has been evaluated to determine if it will result in a significant greenhouse gas impact. The significance of these potential impacts is described in the following section.

3.2 STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related greenhouse gas impacts are taken from the Initial Study Checklist in Appendix G of the State CEQA Guidelines (14 California Code of Regulations §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to air quality if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

For informational purposes, the SCAQMD's Tier 4 Option 1 approach is utilized within this greenhouse gas analysis in order to evaluate if the Project GHG emissions fall 28.5% or more below BAU in accordance with the goals of AB 32.

The City of Moreno Valley does not have an adopted threshold of significance for GHG emissions. For CEQA purposes, the City has discretion to select an appropriate significance criterion, based on substantial evidence. The AQMD's adopted numerical threshold of 10,000 MTCO2e per year for industrial stationary source emissions is selected as the significance criterion. The AQMD-adopted industrial threshold was selected by the City because the proposed Project is analogous to an industrial use much more closely than any other land use such as commercial or residential in terms of its expected operating characteristics. The Project proposes large buildings with loading bays and fenced truck courts that are expected to house businesses that serve mid- stream functions in the goods movement chain between manufacturers and consumers, characteristic of an industrial operation. Further, analysis of the Project's traffic generation in this EIR is based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, 2012 for industrial and warehouse uses. Also, 10,000 MTCO2e has been used as the significance threshold by many local government lead agencies for logistics projects throughout the SCAG region since the AQMD adopted this threshold for its own use. Further, to ensure that the threshold is conservative in its application, although the AQMD uses their adopted 10,000 MTCO2e threshold to determine the significance of stationary source emissions for industrial projects, the 10,000 MTCO2e threshold used in this EIR is applied to all sources of Project-related GHG emissions whether stationary source, mobile source, area source, or other.

Use of this threshold is also consistent with guidance provided in the CAPCOA *CEQA and Climate Change* handbook, as such the City has opted to use a non-zero threshold approach based on Approach 2 of the handbook. 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. This threshold is based on the review of 711 CEQA projects.

3.3 PROJECT RELATED GREENHOUSE GAS EMISSIONS

CEQA Guidelines 15064.4 (b) (1) states that a lead agency may use a model or methodology to quantify greenhouse gas emissions associated with a project (35).

On October 2, 2013, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) released the latest version of the California Emissions Estimator Model™ (CalEEMod™) v2013.2.2. The purpose of this model is to more accurately calculate construction-source and operational-source criteria pollutant (NO_x, VOC, PM_{10}, $PM_{2.5}$, SO_x, and CO) and greenhouse gas (GHG) emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (36). Accordingly, the latest version of CalEEMod™ has been used for this Project to determine construction and operational air quality impacts. Output from the model runs for both construction and operational activity are provided in Appendix 3.1

3.4 CONSTRUCTION AND OPERATIONAL LIFE-CYCLE ANALYSIS

A full life-cycle analysis (LCA) for construction and operational activity is not included in this analysis due to the lack of consensus guidance on LCA methodology at this time. Life-cycle analysis (i.e., assessing economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the project development, infrastructure and on-going operations) depends on emission factors or econometric factors that are not well established for all processes. At this time a LCA would be extremely speculative and thus has not been prepared.

Additionally, the SCAQMD recommends analyzing direct and indirect project GHG emissions generated within California and not life-cycle emissions because the life-cycle effects from a project could occur outside of California, might not be very well understood or documented, and would be challenging to mitigate (37). Additionally, the science to calculate life cycle emissions is not yet established or well defined, therefore SCAQMD has not recommended, and is not requiring, life-cycle emissions analysis.

3.5 CONSTRUCTION EMISSIONS

Construction activities associated with the proposed Project will result in emissions of CO2 and CH4 from construction activities.

The report Moreno Valley Logistics Center Air Quality Impact Analysis Report, Urban Crossroads, Inc. (2016) contains detailed information regarding construction activity (38).

For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total greenhouse gas emissions for the construction activities, dividing it by the a 30 year project life then adding that number to the annual operational phase GHG emissions (39). As such, construction emissions were amortized over a 30 year period and added to the annual operational phase GHG emissions.

3.6 OPERATIONAL EMISSIONS

Operational activities associated with the proposed Project will result in emissions of CO2, CH4, and N2O from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions
- Solid Waste
- Water Supply, Treatment and Distribution
- On-Site Equipment Emissions

3.6.1 AREA SOURCE EMISSIONS

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in the CalEEMod model.

3.6.2 ENERGY SOURCE EMISSIONS

Combustion Emissions Associated with Natural Gas and Electricity

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Unless otherwise noted, CalEEMod™ default parameters were used.

3.6.3 MOBILE SOURCE EMISSIONS

Vehicles

GHG emissions will also result from mobile sources associated with the Project. These mobile source emissions will result from the typical daily operation of motor vehicles by visitors, employees, and customers.

Project operational (vehicular) impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the Project. The Project related operational air quality impacts derive primarily from vehicle trips generated by the Project. Neither the Project Applicant nor the City has any regulatory control over these tail pipe emissions. Rather, vehicle tail pipe source emissions are regulated by CARB and USEPA. As summarized previously herein, as the result of CARB and USEPA actions, Basin-wide vehicular-source emissions have been reduced dramatically over the past years and are expected to further decline as clean vehicle and fuel technologies improve.

Project mobile source air quality impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the Project. The Project related operational air quality impacts derive primarily from vehicle trips generated by the Project. Trip characteristics available from the report, Moreno Valley Logistics Center Traffic Impact Analysis (Urban Crossroads) 2016 were utilized in this analysis (40). It should be noted that the Project's traffic study presents the total Project vehicle trips in terms of Passenger Car Equivalents (PCEs) in an effort to recognize and acknowledge the effects of heavy vehicles at the study area intersections. Notwithstanding, for purposes of the air quality study, the PCE trips were not used. Rather, to more accurately estimate and model vehicular-source emissions, the actual number of vehicles, by vehicle classification (e.g., passenger cars (including light trucks), heavy trucks) were used in the analysis.

For purposes of this analysis, the following ITE land use codes and vehicle mixes have been utilized:

- ITE land use code 110 (General Light Industrial) has been used to derive site specific trip generation estimates for Buildings 2 through 4. The ITE Trip Generation manual includes very limited data regarding the types of vehicles that are generated for general light industrial uses (passenger cars and various sizes of trucks). As such, data regarding the vehicle mix has been obtained from a separate report; the City of Fontana Truck Trip Generation Study (August 2003) for the general light industrial uses proposed as part of the Project. Buildings 2 through 4 have been identified as light industrial. The "Light Industrial" vehicle mix data has been utilized for all 3 buildings. As identified in the Project's TIA, 78.6% of the fleet mix consists of passenger cars and 21.4% of the fleet mix consists of trucks. The following truck fleet mix was utilized for the purposes of estimating the truck trip generation for the light industrial land uses: 37.40% of the total trucks as 2-axle trucks, 18.23% of the total trucks as 3-axle trucks, and 44.37% of the total trucks as 4+-axle trucks.
- ITE land use code 152 (High-Cube Warehousing) has been used to derive site specific trip generation estimates for Building 1. Total vehicle mix percentages were also obtained from the ITE Trip Generation manual in conjunction with the South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type (41). The SCAQMD is currently recommending the use of the ITE Trip Generation manual in conjunction with their truck mix by axle-type to better quantify trip rates associated with local warehouse and distribution projects, as truck emission represent more than 90 percent of air quality impacts from these projects. This recommended procedure has been utilized for the purposes of this analysis in effort to be consistent with other technical studies being prepared for the Project. The percentage of trucks

has been determined from the table shown on page 267 of the ITE Trip Generation manual. As shown on page 267, the truck trip generation rate for weekday daily traffic is 0.64 or 38.1% of the total traffic. As identified in the Project's TIA, 61.9% of the fleet mix consists of passenger cars and 31.8% of the fleet mix consists of trucks. Trip generation for heavy trucks was further broken down by truck type (or axle type). The total truck percentage is comprised of 3 different truck types: 2-axle, 3-axle, and 4+-axle trucks. For the purposes of this analysis, the percentage of trucks, by axle type, was obtained from the SCAQMD interim recommended truck mix. The SCAQMD has recently performed surveys of existing facilities and compiled the data to provide interim guidance on the mix of heavy trucks for these types of high-cube warehousing/distribution facilities. Based on this interim guidance from the SCAQMD, the following truck fleet mix was utilized for the purposes of estimating the truck trip generation for the high-cube warehouse land uses: 22.0% of the total trucks as 2-axle trucks, 17.7% of the total trucks as 3-axle trucks, and 60.3% of the total trucks as 4+-axle trucks.

3.6.3.1 Trip Length

Background

A technical deficiency inherent in calculating the projected vehicle emissions associated with any project is related to the estimation of trip length and vehicle miles traveled (VMT). VMT for a given project is calculated by the total number of vehicle trips to/from the Project x average trip length. This method of estimating VMT for use in calculating vehicle emissions likely results in the over-estimation and double-counting of emissions because, for a distribution warehouse center such as the Project, the land use is likely to attract (divert) existing vehicle trips that are already on the circulation system as opposed to generating new trips. In this regard, the Project would, to a large extent, redistribute existing mobile-source emissions rather than generate additional emissions within the Basin. As such, the estimation of the Fontana Commerce Development Project's vehicular-source emissions is likely overstated in that no credit for, or reduction in, emissions is assumed based on diversion of existing trips.

Provided below is a summary of the VMT recommendations of the SCAQMD and SCAG, followed by a description of the methodology used to calculate the VMT rates used in this GHGA.

SCAQMD Recommendation

In the last five years, the SCAQMD has provided numerous comments on the trip length for warehouse/distribution and industrial land use projects (42). The SCAQMD asserts that the model-default trip length in CalEEMod™ and the URBan EMISsions (URBEMIS) 2007 model (version 9.2.4) would underestimate emissions. The SCAQMD asserts that for warehouse, distribution center, and industrial land use projects, most of the heavy-duty trucks would be hauling consumer goods, often from the Ports of Long Beach and Los Angeles (POLA and POLB) and/or to destinations outside of California. The SCAQMD states that for this reason, the CalEEMod™ and the URBan EMISsions model default trip length (approximately 12.6 miles) would not be representative of activities at like facilities. The SCAQMD generally recommends the use of a 40-mile one-way trip length.

Southern California Association of Government (SCAG) Heavy Duty Truck Model

SCAG is comprised of six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 190 cities in Southern California, and is the organization charged with addressing and resolving short- and long-term regional policy issues. The SCAG region also consists of 14 subregional entities recognized by the Regional Council as partners in the regional policy planning process. The SCAG region has more than 19 million residents and encompasses more than 38,000 square miles, representing the largest and most diverse region in the country.

SCAG maintains a regional transportation model. In its most recent (2008) transportation validation for the 2003 Regional Model, SCAG indicates the average internal truck trip length for the SCAG region is 5.92 miles for Light Duty Trucks, 13.06 miles for Medium Duty Trucks, and 24.11 miles for Heavy Duty Trucks.

Approach for Analysis of the Project

Trip lengths and VMT estimates employed in this GHG report generate vehicular-source emissions that would represent a maximum impact scenario. Other Environmental Impact Reports (EIRs) for similar land use projects within the region have utilized these same or similar estimates. Though the VMT analyzed in this analysis may differ from the Project's traffic impact analysis, to maintain analytic consistency and establish the maximum impact scenario noted above, the following approach has been utilized in calculating emissions associated with vehicles accessing the Project. This approach is consistent with professional industry practice (43) (44) (45).

For passenger car trips, the San Bernardino County CalEEMod default for a one-way trip length of 16.6 miles was assumed. For heavy duty trucks, an average trip length was derived from distances from the Project site to the far edges of the South Coast Air Basin (SCAB) as follows.

- Project site to the Port of Los Angeles/Long Beach: 80 miles;
- Project site to East on State Route 60: 30 miles;
- Project site to San Diego County line: 60 miles;
- Project site to Inland Empire: 50 miles;
- Project site to Perris destinations: 10 miles;
- Project site to Moreno Valley destinations: 10 miles;

Assuming that 50% of all delivery trips will travel to and from the Project and the Port of Los Angeles/Long Beach, 10% go East on the State Route 60, 20% go to San Diego, 10% go to the Inland Empire, 5% go to Perris destinations and the remainder as Moreno Valley destinations. The average truck trip length is calculated as 61 miles.

For each land use (High-Cube Warehouse and General Light Industrial Warehouse), two separate model runs were utilized in order to more accurately model emissions resulting from vehicle operations. The first run analyzed passenger car emissions, which incorporated a default trip length of 16.6 miles for passenger cars and a fleet mix of 100% Light-Duty-Auto

vehicles (LDA). The second run analyzed truck emissions, which incorporated an average truck trip length of 61 miles. A fleet mix of 22.03% LHD, 17.66% MHD, and 60.31% HHD was used for High-Cube Warehouse and a fleet mix of 37.40% LHD, 18.23% MHD, and 44.37% HHD was used for General Light Industrial Warehouse. The estimated emissions resulting from vehicle operations are summarized in Table 3-7 (presented later in this report.) Detailed emission calculations are provided in Appendix 3.2.

3.6.4 SOLID WASTE

Industrial land uses will result in the generation and disposal of solid waste. A large percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the proposed Project were calculated by the CalEEMod™ model using default parameters.

3.6.5 WATER SUPPLY, TREATMENT AND DISTRIBUTION

Indirect GHG emissions result from the production of electricity used to convey, treat and distribute water and wastewater. The amount of electricity required to convey, treat and distribute water depends on the volume of water as well as the sources of the water. Water demand rates from the Moreno Valley WSA were utilized. The WSA determined a 550 gallons per day per acre (gpd/ac), which is equivalent to approximately 0.62 AFY[7].

3.6.6 ON-SITE EQUIPMENT EMISSIONS

It is common for an industrial warehouse project to require cargo handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. The most common type of cargo handling equipment is the yard truck which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. Yard trucks have a horsepower (hp) range of approximately 175 hp to 200 hp (46). Based on the latest available information from SCAQMD (47); high-cube warehouse projects typically have 3.6 yard trucks per million square feet of building space. For this particular Project, on-site modeled operational equipment includes seven 200 hp yard tractors operating at 4 hours a day (48) for 365 days of the year[8]. In addition to the use of yard trucks operating at the Project site, forklifts are a common piece of equipment used in warehouse operations. The Project includes seven 89 hp yard forklifts operating at 4 hours a day for 365 days of the year interior to the

7 At the time the GHGA was prepared, a Water Supply Assessment (WSA) for the Project was unavailable. Water demand rates from Eastern Municipal Water District (EMWD) for a similar project in the City of Moreno Valley, Modular Logistics, was utilized. EMWD provided a 0.75 demand per unit of acre-feet per year (AFY). As such, the water demand utilized in the report is more conservative than the water demand determined by the Moreno Valley Logistics Center WSA.

8 4 hour daily on-site operation of the yard trucks is based on the Southern California International Gateway Recirculated Draft EIR. Table C1.2-BL-17 Activity Data for Existing Business CHE – 2010 Baseline indicates that the average annual hours of operation for all diesel Container Handling Equipment, Forklifts, and Yard Tractors totaled 72,187 annual operating hours. The total number of pieces of equipment equals 52. As such, 72,187/52 = 1,388 annual hours per piece of equipment. 1,388 annual hours per piece of equipment/365 days = an average of 3.80 hours per day per piece of equipment. As a conservative measure this is rounded up to 4 hours for analytical purposes.

building. However for purposes of the GHGA forklifts are not included in the health risk calculations since there is no diesel exhaust associated with the forklifts as they are assumed to be non-diesel consistent with industry standards.

As part of the Project's design, all on-site outdoor cargo handling equipment (CHE) (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) will be powered by diesel fueled diesel fueled engines that comply with the California Air Resources Board (CARB)/U.S. EPA Tier IV Engine standards for off-road vehicles or better (defined as less than or equal to 0.015 g/bhp-hr for PM10) and all on-site indoor forklifts shall be powered by electricity, compressed natural gas, or propane.

3.7 EMISSIONS SUMMARY

The total amount of Project-related GHG emissions for BAU without accounting for any project design features or regulatory developments that would reduce GHG emissions from direct and indirect sources combined would total 56,466.71 MMTCO2e as shown on Table 3-2.

The total amount of Project-related GHG emissions when accounting for applicable regulatory developments, project design features, and mitigation measures that would reduce GHG emissions from direct and indirect sources combined would total 42,404.68 MMTCO2e as shown on Table 3-3. This results in a 24.90% reduction from BAU, thus with implementation of the Project's design features and regulatory developments, the Project's GHG reduction would not meet the AB 32 reduction target of 28.5% (1). Both of these quantities are above the significance criterion used herein of 10,000 MTCO2e per year. Thus, GHG emissions is a significant cumulatively considerable impact of the proposed Project.

TABLE 3-1: "BUSINESS AS USUAL" GREENHOUSE GAS EMISSIONS

Emission Source	Emissions (metric tons per year)			
	CO_2	**CH_4**	**N_2O**	**Total CO_2E**
Annual construction-related emissions amortized over 30 years	206.07	3.00E-02	--	206.75
High-Cube				
Area	0.07	3.20E-04	--	0.07
Energy	4,137.95	0.16	0.04	4,154.67
Mobile Sources (Trucks)	25,834.35	1.00	--	25,855.27
Mobile Sources (Passenger Cars)	3103.59	0.26	--	3,109.00
On-site Emissions	307.00	0.03	--	307.67
Waste	257.93	15.24	--	578.04
Water Usage	61.60	0.47	0.01	75.05
Light Industrial				
Area	0.02	1.20E-04	--	0.03
Energy	2,121.86	0.07	0.03	2,131.33
Mobile Sources (Trucks)	14,992.75	0.58	--	15,004.87
Mobile Sources (Passenger Cars)	4666.75	0.39	--	4,674.89
On-site Emissions	122.80	0.01	--	123.07
Waste	97.10	5.74	--	217.60
Water Usage	23.31	0.18	4.37E-03	28.40
Total CO_2E (All Sources)	**56,466.71**			

Source: CalEEMod™ model output, See Appendix 3.1 for detailed model outputs.
Note: Totals obtained from CalEEMod™ and may not total 100% due to rounding.

Table results include scientific notation. *e* is used to represent *times ten raised to the power of* (which would be written as x 10^{b}") and is followed by the value of the exponent

TABLE 3-2: 2020 GREENHOUSE GAS EMISSIONS WITH APPLICABLE REGULATORY DEVELOPMENTS, DESIGN FEATURES AND MITIGATION MEASURES

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total CO_2E
Annual construction-related emissions amortized over 30 years	206.07	3.00E-02	--	206.75
High-Cube				
Area	0.07	1.80E-04	--	0.07
Energy	2,927.08	0.16	0.04	2,943.02
Mobile Sources (Trucks)	20,351.64	0.13	--	20,354.46
Mobile Sources (Passenger Cars)	1,773.78	0.06	--	1,775.09
On-site Emissions	254.16	0.08		255.89
Waste	257.93	15.24	--	578.04
Water Usage	35.29	0.38	9.22E-03	46.04
Light Industrial				
Area	0.02	7.00E-05	--	0.03
Energy	1,930.01	0.07	0.02	1,539.89
Mobile Sources (Trucks)	11,697.12	0.07	0.02	11,698.88
Mobile Sources (Passenger Cars)	2,667.17	0.09	--	2,669.14
On-site Emissions	101.67	0.03		102.36
Waste	97.10	5.74	--	217.60
Water Usage	13.35	0.14	3.49E-03	17.42
Total CO_2E (All Sources)	**42,404.68**			

Source: CalEEMod™ model output, See Appendix 3.1 for detailed model outputs.
Note: Totals obtained from CalEEMod™ and may not total 100% due to rounding.

Table results include scientific notation. *e* is used to represent *times ten raised to the power of* (which would be written as x 10^{b}") and is followed by the value of the exponent

ALTERNATE SITE PLAN GHG IMPACTS

As previously discussed, the alternate site plan omits Building 2 with the addition of truck trailer parking in its place, thus decreasing total building area and operational capacity. Should the alternate site plan be implemented, greenhouse gas impacts would not exceed the level of greenhouse gas impacts analyzed within the current Project scenario. As such, the Project scenario analysis represents a "worst-case" analysis scenario.

INCREMENTAL PROJECT GHG EMISSIONS ARE CUMULATIVELY CONSIDERABLE

The City of Moreno Valley does not have an adopted threshold of significance for GHG emissions. For CEQA purposes, the City has discretion to select an appropriate significance criterion, based on substantial evidence. The AQMD's adopted numerical threshold of 10,000 MTCO2e per year for industrial stationary source emissions is selected as the significance criterion. The AQMD-adopted industrial threshold was selected by the City because the proposed Project is analogous to an industrial use much more closely than any other land use such as commercial or residential in terms of its expected operating characteristics. The Project proposes large buildings with loading bays and fenced truck courts that are expected to house businesses that serve mid- stream functions in the goods movement chain between manufacturers and consumers, characteristic of an industrial operation. Further, analysis of the Project's traffic generation in this EIR is based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, 2012 for industrial and warehouse uses. Also, 10,000 MTCO2e has been used as the significance threshold by many local government lead agencies for logistics projects throughout the SCAG region since the AQMD adopted this threshold for its own use. Further, to ensure that the threshold is conservative in its application, although the AQMD uses their adopted 10,000 MTCO2e threshold to determine the significance of stationary source emissions for industrial projects, the 10,000 MTCO2e threshold used in this EIR is applied to all sources of Project-related GHG emissions whether stationary source, mobile source, area source, or other.

Use of this threshold is also consistent with guidance provided in the CAPCOA *CEQA and Climate Change* handbook, as such the City has opted to use a non-zero threshold approach based on Approach 2 of the handbook. 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. This threshold is based on the review of 711 CEQA projects.

The Project will result in approximately 5,548.86 MTCO2e per year from construction, area, energy, waste, and water usage. In addition, the Project has the potential to result in an additional 36,855.82 MTCO2e per year from mobile sources if the assumption is made that all of the vehicle trips to and from the Project are "new" trips resulting from the development of the Project. As such, the Project has the potential to generate a total of approximately 42,404.68 MTCO2e per year. As such, the Project would exceed the SCAQMD's numeric threshold of 10,000 MTCO2e if it were applied. Thus, the Project has the potential to result in a cumulatively considerable impact with respect to GHG emissions.

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4 FINDINGS & CONCLUSIONS

The total amount of Project-related GHG emissions for BAU without accounting for any project design features or regulatory developments that would reduce GHG emissions from direct and indirect sources combined would total 56,466.71 MMTCO2e.

The total amount of Project-related GHG emissions when accounting for applicable regulatory developments, project design features, and mitigation measures that would reduce GHG emissions from direct and indirect sources combined would total 42,404.68 MMTCO2e. This results in a 24.90% reduction from BAU, thus with implementation of the Project's design features and regulatory developments, the Project's GHG reduction would not meet the AB 32 reduction target of 28.5% (1). Both of these quantities are above the significance criterion used herein of 10,000 MTCO2e per year. Thus, GHG emissions is a significant cumulatively considerable impact of the proposed Project.

4.1 REGULATORY REQUIREMENTS

The Project would be required to comply with all mandates imposed by the State of California and the South Coast Air Quality Management District aimed at the reduction of air quality emissions. Those that are applicable to the Project and that would assist in the reduction of greenhouse gas emissions are:

- Global Warming Solutions Act of 2006 (AB32) (1)
- Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (SB 375) (49)
- Pavely Fuel Efficiency Standards (AB1493). Establishes fuel efficiency ratings for new vehicles (21).
- Title 24 California Code of Regulations (California Building Code). Establishes energy efficiency requirements for new construction (50).
- Title 20 California Code of Regulations (Appliance Energy Efficiency Standards). Establishes energy efficiency requirements for appliances (51).
- Title 17 California Code of Regulations (Low Carbon Fuel Standard). Requires carbon content of fuel sold in California to be 10% less by 2020 (52).
- California Water Conservation in Landscaping Act of 2006 (AB1881). Requires local agencies to adopt the Department of Water Resources updated Water Efficient Landscape Ordinance or equivalent by January 1, 2010 to ensure efficient landscapes in new development and reduced water waste in existing landscapes (53).
- Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions (26).
- Renewable Portfolio Standards (SB 1078). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20 percent by 2010 and 33 percent by 2020 (54).

Promulgated regulations that will affect the Project's emissions are accounted for in the Project's GHG calculations provided in this report. In particular, the Pavley Standards, Low

Carbon Fuel Standards, and Renewable Portfolio Standards (RPS) will be in effect for the AB 32 target year of 2020, and therefore are accounted for in the Project's emission calculations. The BAU scenario emissions do not include regulations designed to meet AB 32 standards; therefore these regulations were not included in the GHG emissions calculations for the BAU scenario.

4.2 CONSTRUCTION-SOURCE AIR POLLUTANT EMISSIONS MITIGATION MEASURES

The Project Air Quality Impact Analysis (AQIA) establishes construction activity mitigation measures that would globally reduce air pollutant emissions generated by subsequent development proposals within the Project site. Although these measures could act to reduce GHG emissions, there is insufficient data to support any reductions associated with the construction activity mitigation measures identified in the AQIA. Thus, as a conservative measure no reduction in GHG emissions are taken for construction activity mitigation measures identified in the AQIA.

4.3 OPERATIONAL-SOURCE MITIGATION MEASURES

MM AQ-3:

Prior to the issuance of building permits, the Project applicant shall ensure that the Project is designed to achieve efficiency equal to or exceeding then incumbent (2013 or later) California Building Code Title 24 requirements.

MM AQ-4:

To reduce water consumption and the associated energy-usage, the Project will be designed to comply with the mandatory reductions in indoor water usage contained in the incumbent CalGreen Code (55) and any mandated reduction in outdoor water usage contained in the City's water efficient landscape requirements. Additionally, the Project shall implement the following:

- Landscaping palette emphasizing drought tolerant plants;
- Use of water-efficient irrigation techniques;
- U.S. EPA Certified WaterSense labeled or equivalent faucets, high-efficiency toilets (HETs), and water-conserving shower heads.

MM AQ-5:

The Project will reduce vehicle miles traveled and emissions associated with by implementing the following measures:

- Pedestrian and bicycle connections shall be provided to surrounding areas consistent with the City's General Plan.
- Implement a voluntary trip reduction program, for which all employees shall be eligible to participate.

MM AQ-6:

The truck access gates and loading docks within the truck court on the Project site shall be posted with signs which state:

a) Truck drivers shall turn off engines when not in use;

b) Diesel delivery trucks servicing the Project shall not idle for more than five (5) minutes[1]; and

c) Telephone numbers of the building facilities manager and the CARB to report violations.

MM AQ-7:

- Site design shall allow for trucks to check-in within the facility area to prevent queuing of trucks outside the facility.[2]
- Signs shall be posted in loading dock areas that instruct truck drivers to shut down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged (56).

MM AQ-8

A frequent CEQA petitioner in the Inland Empire routinely asks lead agencies to impose dozens and dozens of a variety of mitigation measures. This list includes suggestions that are often duplicative of current SCAQMD Rules and are duplicative in and of themselves. In an effort to hopefully forestall a future dispute on air quality issues, this assessment has already included most of the mitigation measures from this list that are not already duplicative of existing Rules, State law, and other mitigation measures. As a conservative measure, no reduction for any of the measures listed under MM AQ-8 is taken in the analysis.

Construction Impacts

- Gravel pads must be installed at all access points to prevent tracking of mud onto public roads.
- Install and maintain trackout control devices in effective condition at all access points where paved and unpaved access or travel routes intersect (eg. Install wheel shakers, wheel washers, and limit site access.)
- Limit fugitive dust sources to 20 percent opacity.
- Require a dust control plan for earthmoving operations.
- When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
- All streets shall be swept at least once a day using SCAQMD Rule 1186 certified street sweepers utilizing reclaimed water trucks if visible soil materials are carried to adjacent streets.
- The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite.

[1] While restricted idling is required per MM HRA-1, the analysis presented here takes no quantified credit or reduction in emissions for restricted idling, and reflects an assumed 15-minute "worst case" idling condition.
[2] As above, no quantified credit or reduction in emissions is taken for site design requirements reflected in MM HRA-2

- Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours.
- Any vegetative cover to be utilized onsite shall be planted as soon as possible to reduce the disturbed area subject to wind erosion. Irrigation systems required for these plants shall be installed as soon as possible to maintain good ground cover and to minimize wind erosion of the soil.
- Any on-site stock piles of debris, dirt, or other dusty material shall be covered or watered as necessary to minimize fugitive dust pursuant to SCAQMD Rule 403.
- A high wind response plan shall be formulated for enhanced dust control if winds are forecast to exceed 25 mph in any upcoming 24-hour period.
- Implement activity management techniques including
- Development of a comprehensive construction management plan designed to minimize the number of large construction equipment operating during any given time period;
- Scheduling of construction truck trips during non-peak hours to reduce peak hour emission;
- Require the use of CARB certified equipment for construction activities.
- Utilize only CARB certified equipment for construction activities.
- The developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use and/or idling in excess of 3 minutes.
- Restrict engine size of construction equipment to minimum practical size.
- Install catalytic converters on gasoline-powered equipment.
- Electrical powered equipment shall be utilized in-lieu of gasoline-powered engines where technically feasible.
- Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow.
- Reroute construction trucks away from congested streets and sensitive receptor areas.
- Configure construction parking to minimize traffic interference.
- Minimize construction worker trips by requiring carpooling and providing for lunch onsite.
- Provide on-site food service options for the construction crew.
- Provide shuttle service to transit stations/multimodal center for the construction crew.

Operational Emissions

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

- Prohibit idling of trucks for periods exceeding three minutes.
- Charge reduced or no parking fee for EVs and CNG vehicles.
- Provide preferential parking locations for EVs and CNG vehicles.
- Planting shade trees in parking lots to provide minimum 50% cover to reduce evaporative emission from parked vehicles.
- Provide preferential parking for carpool/vanpool vehicles.
- Provide secure, weather protected bicycle parking for employees.
- Design buildings for passive heating and cooling and natural light, including building orientation, proper orientation and placement of windows, overhangs, skylights, etc.

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6 CERTIFICATION

The contents of this greenhouse gas study report represent an accurate depiction of the greenhouse gas impacts associated with the proposed Moreno Valley Logistics Center Project. The information contained in this greenhouse gas report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 660-1994 ext. 217.

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EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May, 2010

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June, 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Environmental Site Assessment – American Society for Testing and Materials • June, 2013
Planned Communities and Urban Infill – Urban Land Institute • June, 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April, 2008
Principles of Ambient Air Monitoring – California Air Resources Board • August, 2007
AB2588 Regulatory Standards – Trinity Consultants • November, 2006
Air Dispersion Modeling – Lakes Environmental • June, 2006

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APPENDIX 3.1:

CALEEMOD EMISSIONS MODEL OUTPUTS

MoVal Logistics Center- Construction

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	385.75	1000sqft	16.70	385,748.00	0
Unrefrigerated Warehouse-No Rail	1,351.77	1000sqft	50.14	1,351,770.00	0
Parking Lot	1,998.00	Space	17.98	799,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	515.47	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Total Lot Acreage:84.82; A trailer parking space requires significantly more space than one regular parking space. Therefore, for analysis purposes, 1 trailer parking=3.27 parking spaces.

Construction Phase - Based on client specifications

Off-road Equipment - Based on client specifications

Off-road Equipment - Based on client specifications

Off-road Equipment - Based on client specifications

Off-road Equipment - Based on client specifications

Off-road Equipment - Based on client specifications

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Off-road Equipment - Based on client specifications
Trips and VMT - Based on client specifications
Grading -
Architectural Coating - Based on client specifications; Use 50g/L Low VOC Paint
Vehicle Trips - Construction run only

Vechicle Emission Factors - Construction run only

Vechicle Emission Factors - Construction run only

Vechicle Emission Factors - Construction run only

Road Dust - Construction run only

Consumer Products - Construction run only

Area Coating - Construction run only

Landscape Equipment - Construction run only

Energy Use - Construction run only

Water And Wastewater - Construction run only

Solid Waste - Construction run only

Construction Off-road Equipment Mitigation - Based on client specifications

Table Name	Column Name	Default Value	New Value
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tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	880,747.00	51,832.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,642,241.00	243,073.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,642,241.00	43,746.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,642,241.00	60,727.00
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tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
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tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
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tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
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tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00

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tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	515.47
tblProjectCharacteristics	OperationalYear	2014	2017
tblRoadDust	RoadPercentPave	100	0
tblSolidWaste	SolidWasteGenerationRate	478.33	0.00
tblSolidWaste	SolidWasteGenerationRate	1,270.66	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,078.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,758.00
tblTripsAndVMT	HaulingTripNumber	0.00	728.00
tblTripsAndVMT	HaulingTripNumber	0.00	778.00
tblTripsAndVMT	HaulingTripNumber	0.00	4,152.00
tblTripsAndVMT	HaulingTripNumber	0.00	838.00
tblTripsAndVMT	HaulingTripNumber	0.00	10,384.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,374.00
tblTripsAndVMT	WorkerTripNumber	1,065.00	40.00
tblTripsAndVMT	WorkerTripNumber	1,065.00	40.00
tblTripsAndVMT	WorkerTripNumber	1,065.00	125.00
tblTripsAndVMT	WorkerTripNumber	1,065.00	40.00
tblTripsAndVMT	WorkerTripNumber	1,065.00	40.00
tblTripsAndVMT	WorkerTripNumber	1,065.00	40.00

tblTripsAndVMT	WorkerTripNumber	1,065.00	125.00
tblTripsAndVMT	WorkerTripNumber	1,065.00	40.00
tblTripsAndVMT	WorkerTripNumber	1,065.00	40.00
tblTripsAndVMT	WorkerTripNumber	1,065.00	40.00
tblTripsAndVMT	WorkerTripNumber	1,065.00	40.00
tblTripsAndVMT	WorkerTripNumber	1,065.00	40.00
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tblTripsAndVMT	WorkerTripNumber	1,065.00	125.00
tblTripsAndVMT	WorkerTripNumber	1,065.00	40.00
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tblVehicleEF	HHD	0.04	0.00
tblVehicleEF	HHD	0.04	0.00
tblVehicleEF	LDA	0.46	0.00
tblVehicleEF	LDA	0.46	0.00
tblVehicleEF	LDA	0.46	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD2	7.3830e-003	0.00
tblVehicleEF	LHD2	7.3830e-003	0.00
tblVehicleEF	LHD2	7.3830e-003	0.00

tblVehicleEF	MCY	6.4540e-003	0.00
tblVehicleEF	MCY	6.4540e-003	0.00
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tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MH	3.2420e-003	0.00
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tblVehicleEF	MH	3.2420e-003	0.00
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tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	OBUS	9.5400e-004	0.00
tblVehicleEF	OBUS	9.5400e-004	0.00
tblVehicleEF	OBUS	9.5400e-004	0.00
tblVehicleEF	SBUS	8.8400e-004	0.00
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tblVehicleEF	SBUS	8.8400e-004	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	2.59	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	2.59	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	2.59	0.00
tblWater	IndoorWaterUseRate	89,204,687.50	0.00

tblWater	IndoorWaterUseRate	312,596,812.50	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	3.6791	37.7091	27.9859	0.0583	1.5183	1.2935	2.8118	0.4066	1.1900	1.5966	0.0000	5,344.4448	5,344.4448	0.8305	0.0000	5,361.8845
2017	1.0745	6.5290	5.6239	0.0133	0.3350	0.2000	0.5350	0.0927	0.1840	0.2767	0.0000	1,179.5583	1,179.5583	0.1348	0.0000	1,182.3892
Total	**4.7537**	**44.2381**	**33.6099**	**0.0715**	**1.8533**	**1.4936**	**3.3468**	**0.4994**	**1.3740**	**1.8734**	**0.0000**	**6,524.0030**	**6,524.0030**	**0.9653**	**0.0000**	**6,544.2737**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	2.1054	17.2071	27.1824	0.0583	1.2477	0.4730	1.7207	0.3409	0.4508	0.7917	0.0000	5,344.4416	5,344.4416	0.8305	0.0000	5,361.8813
2017	0.8504	3.8001	5.7843	0.0133	0.3350	0.0905	0.4255	0.0927	0.0859	0.1787	0.0000	1,179.5578	1,179.5578	0.1348	0.0000	1,182.3887
Total	**2.9557**	**21.0072**	**32.9667**	**0.0715**	**1.5827**	**0.5635**	**2.1461**	**0.4337**	**0.5367**	**0.9703**	**0.0000**	**6,523.9994**	**6,523.9994**	**0.9653**	**0.0000**	**6,544.2700**

	ROG	NOx	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	**37.82**	**52.51**	**1.91**	**0.00**	**14.60**	**62.27**	**35.88**	**13.16**	**60.94**	**48.20**	**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	9.1665	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	3.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.1665**	**0.0000**	**1.9000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.7000e-004**	**3.7000e-004**	**0.0000**	**0.0000**	**3.9000e-004**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	9.1665	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	3.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.1665**	**0.0000**	**1.9000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.7000e-004**	**3.7000e-004**	**0.0000**	**0.0000**	**3.9000e-004**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading 1	Grading	4/29/2016	6/30/2016	5	45	
2	Grading 2	Grading	7/1/2016	7/20/2016	5	14	
3	Trenching 1	Trenching	7/1/2016	11/15/2016	5	98	

4	Concrete Shell 1	Building Construction	7/1/2016	10/24/2016	5	82
5	Trenching 2	Trenching	7/15/2016	8/31/2016	5	34
6	Concrete Shell 2	Building Construction	7/22/2016	9/29/2016	5	50
7	Grading 3	Grading	8/4/2016	8/19/2016	5	12
8	Trenching 3	Trenching	8/15/2016	9/28/2016	5	33
9	Grading 4	Grading	8/22/2016	9/14/2016	5	18
10	Concrete Shell 3	Building Construction	8/22/2016	10/25/2016	5	47
11	Trenching 4	Trenching	9/8/2016	10/26/2016	5	35
12	Concrete Shell 4	Building Construction	9/15/2016	11/23/2016	5	50
13	Steel & Roof 1	Building Construction	9/30/2016	12/5/2016	5	47
14	Steel & Roof 2	Building Construction	9/30/2016	10/31/2016	5	22
15	Steel & Roof 3	Building Construction	10/26/2016	11/22/2016	5	20
16	Roofing & Overhead Work 2	Building Construction	10/28/2016	11/29/2016	5	23
17	Roofing & Overhead Work 1	Building Construction	11/1/2016	1/5/2017	5	48
18	Paving 2	Paving	11/8/2016	12/15/2016	5	28
19	Architectural Coating 2	Architectural Coating	11/14/2016	12/7/2016	5	18
20	Misc. Finishes 2	Building Construction	11/18/2016	12/29/2016	5	30
21	Roofing & Overhead Work 3	Building Construction	11/23/2016	12/22/2016	5	22
22	Steel & Roof 4	Building Construction	11/24/2016	12/26/2016	5	23
23	Paving 3	Paving	12/2/2016	1/10/2017	5	28
24	Architectural Coating 1	Architectural Coating	12/7/2016	1/30/2017	5	39
25	Misc. Finishes 3	Building Construction	12/8/2016	1/17/2017	5	29
26	Architectural Coating 3	Architectural Coating	12/8/2016	1/2/2017	5	18
27	Paving 1	Paving	12/23/2016	4/26/2017	5	89
28	Roofing & Overhead Work 4	Building Construction	12/27/2016	1/27/2017	5	24
29	Architectural Coating 4	Architectural Coating	1/11/2017	2/7/2017	5	20
30	Paving 4	Paving	1/12/2017	3/2/2017	5	36
31	Misc. Finishes 4	Building Construction	1/17/2017	2/28/2017	5	31

32	Misc. Finishes 1	Building Construction	1/20/2017	4/20/2017	5	65	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 51,832; Non-Residential Outdoor: 51,832 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading 1	Crawler Tractors	1	8.00	410	0.43
Grading 1	Excavators	0	8.00	162	0.38
Grading 1	Graders	1	8.00	302	0.41
Grading 1	Off-Highway Tractors	2	8.00	485	0.44
Grading 1	Other Construction Equipment	2	8.00	354	0.44
Grading 1	Other General Industrial Equipment	3	8.00	330	0.37
Grading 1	Rubber Tired Dozers	1	8.00	451	0.40
Grading 1	Rubber Tired Loaders	1	8.00	350	0.36
Grading 1	Scrapers	8	8.00	452	0.48
Grading 1	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading 2	Cranes	0	7.00	226	0.29
Grading 2	Crawler Tractors	1	8.00	410	0.43
Grading 2	Excavators	0	8.00	162	0.38
Grading 2	Forklifts	0	8.00	89	0.20
Grading 2	Generator Sets	0	8.00	84	0.74
Grading 2	Graders	1	8.00	302	0.41
Grading 2	Other Construction Equipment	1	8.00	354	0.42
Grading 2	Other General Industrial Equipment	1	8.00	330	0.37

Grading 2	Pavers	0	8.00	125	0.42
Grading 2	Paving Equipment	0	8.00	49	0.36
Grading 2	Rollers	0	8.00	80	0.38
Grading 2	Rubber Tired Dozers	0	8.00	255	0.40
Grading 2	Rubber Tired Loaders	1	8.00	350	0.36
Grading 2	Scrapers	3	8.00	452	0.48
Grading 2	Tractors/Loaders/Backhoes	0	8.00	110	0.37
Grading 2	Welders	0	8.00	46	0.45
Trenching 1	Excavators	2	8.00	268	0.38
Trenching 1	Other Construction Equipment	2	8.00	354	0.42
Trenching 1	Other Material Handling Equipment	2	8.00	249	0.40
Trenching 1	Rubber Tired Loaders	2	8.00	350	0.36
Trenching 1	Tractors/Loaders/Backhoes	2	8.00	110	0.37
Concrete Shell 1	Cranes	0	7.00	226	0.29
Concrete Shell 1	Excavators	0	8.00	268	0.38
Concrete Shell 1	Forklifts	0	8.00	89	0.20
Concrete Shell 1	Generator Sets	0	8.00	84	0.74
Concrete Shell 1	Other Construction Equipment	5	8.00	354	0.42
Concrete Shell 1	Other Material Handling Equipment	0	8.00	249	0.43
Concrete Shell 1	Pavers	0	8.00	125	0.42
Concrete Shell 1	Paving Equipment	0	8.00	49	0.36
Concrete Shell 1	Rollers	0	8.00	80	0.38
Concrete Shell 1	Rubber Tired Loaders	0	8.00	350	0.36
Concrete Shell 1	Surfacing Equipment	0	8.00	350	0.30
Concrete Shell 1	Tractors/Loaders/Backhoes	4	8.00	110	0.37
Concrete Shell 1	Welders	0	8.00	46	0.45
Trenching 2	Excavators	1	8.00	268	0.38
Trenching 2	Other Construction Equipment	1	8.00	354	0.42

Trenching 2	Other Material Handling Equipment	1	8.00	249	0.43
Trenching 2	Rubber Tired Loaders	1	8.00	350	0.36
Trenching 2	Tractors/Loaders/Backhoes	1	8.00	110	0.37
Concrete Shell 2	Air Compressors	0	6.00	78	0.48
Concrete Shell 2	Cranes	0	7.00	226	0.29
Concrete Shell 2	Forklifts	0	8.00	89	0.20
Concrete Shell 2	Generator Sets	0	8.00	84	0.74
Concrete Shell 2	Other Construction Equipment	4	8.00	354	0.42
Concrete Shell 2	Tractors/Loaders/Backhoes	2	8.00	110	0.37
Concrete Shell 2	Welders	0	8.00	46	0.45
Grading 3	Air Compressors	0	6.00	78	0.48
Grading 3	Cranes	0	8.00	215	0.29
Grading 3	Crawler Tractors	1	8.00	410	0.43
Grading 3	Excavators	0	8.00	162	0.38
Grading 3	Forklifts	0	8.00	89	0.20
Grading 3	Generator Sets	0	8.00	84	0.74
Grading 3	Graders	1	8.00	302	0.41
Grading 3	Off-Highway Tractors	0	8.00	485	0.44
Grading 3	Other Construction Equipment	1	8.00	354	0.42
Grading 3	Other General Industrial Equipment	1	8.00	330	0.34
Grading 3	Rubber Tired Dozers	0	8.00	255	0.40
Grading 3	Rubber Tired Loaders	1	8.00	350	0.36
Grading 3	Scrapers	3	8.00	452	0.48
Grading 3	Surfacing Equipment	0	8.00	350	0.30
Grading 3	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading 3	Welders	0	8.00	46	0.45
Trenching 3	Excavators	1	8.00	268	0.38
Trenching 3	Other Construction Equipment	1	8.00	354	0.42

Trenching 3	Other Material Handling Equipment	1	8.00	249	0.43
Trenching 3	Rubber Tired Loaders	1	8.00	350	0.36
Trenching 3	Tractors/Loaders/Backhoes	1	8.00	110	0.37
Grading 4	Aerial Lifts	0	8.00	48	0.31
Grading 4	Cranes	0	8.00	215	0.29
Grading 4	Crawler Tractors	1	8.00	410	0.43
Grading 4	Excavators	0	8.00	162	0.38
Grading 4	Forklifts	0	8.00	110	0.20
Grading 4	Generator Sets	0	8.00	84	0.74
Grading 4	Graders	1	8.00	302	0.41
Grading 4	Other Construction Equipment	1	8.00	354	0.42
Grading 4	Other General Industrial Equipment	1	8.00	330	0.34
Grading 4	Rubber Tired Dozers	0	8.00	255	0.40
Grading 4	Rubber Tired Loaders	1	8.00	350	0.36
Grading 4	Scrapers	3	8.00	452	0.48
Grading 4	Tractors/Loaders/Backhoes	0	8.00	110	0.37
Grading 4	Welders	0	8.00	46	0.45
Concrete Shell 3	Cranes	0	7.00	226	0.29
Concrete Shell 3	Forklifts	0	8.00	89	0.20
Concrete Shell 3	Generator Sets	0	8.00	84	0.74
Concrete Shell 3	Other Construction Equipment	4	8.00	354	0.42
Concrete Shell 3	Tractors/Loaders/Backhoes	2	8.00	110	0.37
Concrete Shell 3	Welders	0	8.00	46	0.45
Trenching 4	Excavators	1	8.00	268	0.38
Trenching 4	Other Construction Equipment	1	8.00	354	0.42
Trenching 4	Other Material Handling Equipment	1	8.00	249	0.40
Trenching 4	Rubber Tired Loaders	1	8.00	350	0.36
Trenching 4	Tractors/Loaders/Backhoes	1	8.00	110	0.37

Concrete Shell 4	Air Compressors	0	6.00	78	0.48
Concrete Shell 4	Cranes	0	7.00	226	0.29
Concrete Shell 4	Excavators	0	8.00	268	0.38
Concrete Shell 4	Forklifts	0	8.00	89	0.20
Concrete Shell 4	Generator Sets	0	8.00	84	0.74
Concrete Shell 4	Other Construction Equipment	4	8.00	354	0.42
Concrete Shell 4	Other Material Handling Equipment	0	8.00	249	0.40
Concrete Shell 4	Rubber Tired Loaders	0	8.00	350	0.36
Concrete Shell 4	Tractors/Loaders/Backhoes	2	8.00	110	0.37
Concrete Shell 4	Welders	0	8.00	46	0.45
Steel & Roof 1	Aerial Lifts	0	8.00	48	0.31
Steel & Roof 1	Air Compressors	0	6.00	78	0.48
Steel & Roof 1	Cranes	2	8.00	215	0.29
Steel & Roof 1	Forklifts	0	8.00	89	0.20
Steel & Roof 1	Forklifts	0	8.00	89	0.20
Steel & Roof 1	Generator Sets	0	8.00	84	0.74
Steel & Roof 1	Other Construction Equipment	3	8.00	354	0.42
Steel & Roof 1	Pavers	0	8.00	125	0.42
Steel & Roof 1	Paving Equipment	0	8.00	130	0.36
Steel & Roof 1	Rollers	0	8.00	80	0.38
Steel & Roof 1	Rubber Tired Loaders	0	8.00	350	0.36
Steel & Roof 1	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Steel & Roof 1	Trenchers	0	8.00	81	0.50
Steel & Roof 1	Welders	0	8.00	46	0.45
Steel & Roof 2	Aerial Lifts	0	8.00	48	0.31
Steel & Roof 2	Air Compressors	0	6.00	78	0.48
Steel & Roof 2	Cranes	1	8.00	215	0.29
Steel & Roof 2	Crawler Tractors	0	8.00	410	0.43

Steel & Roof 2	Excavators	0	8.00	162	0.38
Steel & Roof 2	Forklifts	0	8.00	89	0.20
Steel & Roof 2	Forklifts	0	8.00	89	0.20
Steel & Roof 2	Generator Sets	0	8.00	84	0.74
Steel & Roof 2	Graders	0	8.00	302	0.41
Steel & Roof 2	Off-Highway Tractors	0	8.00	485	0.44
Steel & Roof 2	Other Construction Equipment	2	8.00	354	0.42
Steel & Roof 2	Rubber Tired Dozers	0	8.00	255	0.40
Steel & Roof 2	Scrapers	0	8.00	452	0.48
Steel & Roof 2	Surfacing Equipment	0	8.00	350	0.30
Steel & Roof 2	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Steel & Roof 2	Welders	0	8.00	46	0.45
Steel & Roof 3	Aerial Lifts	0	8.00	48	0.31
Steel & Roof 3	Cranes	1	8.00	215	0.29
Steel & Roof 3	Forklifts	0	8.00	110	0.20
Steel & Roof 3	Generator Sets	0	8.00	84	0.74
Steel & Roof 3	Other Construction Equipment	2	8.00	354	0.42
Steel & Roof 3	Tractors/Loaders/Backhoes	0	8.00	110	0.37
Steel & Roof 3	Welders	0	8.00	46	0.45
Roofing & Overhead Work 2	Aerial Lifts	1	8.00	48	0.31
Roofing & Overhead Work 2	Air Compressors	0	6.00	78	0.48
Roofing & Overhead Work 2	Cranes	0	8.00	215	0.29
Roofing & Overhead Work 2	Crawler Tractors	0	8.00	249	0.43
Roofing & Overhead Work 2	Excavators	0	8.00	268	0.38
Roofing & Overhead Work 2	Forklifts	1	8.00	110	0.20
Roofing & Overhead Work 2	Generator Sets	0	8.00	84	0.74
Roofing & Overhead Work 2	Graders	0	8.00	302	0.41
Roofing & Overhead Work 2	Graders	0	8.00	302	0.41

Roofing & Overhead Work 2	Off-Highway Tractors	0	8.00	451	0.44
Roofing & Overhead Work 2	Other Construction Equipment	2	8.00	354	0.42
Roofing & Overhead Work 2	Other General Industrial Equipment	0	8.00	330	0.34
Roofing & Overhead Work 2	Pavers	0	8.00	125	0.42
Roofing & Overhead Work 2	Paving Equipment	0	8.00	130	0.36
Roofing & Overhead Work 2	Rollers	0	8.00	80	0.38
Roofing & Overhead Work 2	Rubber Tired Dozers	0	8.00	255	0.40
Roofing & Overhead Work 2	Rubber Tired Loaders	0	8.00	350	0.36
Roofing & Overhead Work 2	Scrapers	0	8.00	330	0.48
Roofing & Overhead Work 2	Tractors/Loaders/Backhoes	0	8.00	110	0.37
Roofing & Overhead Work 2	Welders	0	8.00	46	0.45
Roofing & Overhead Work 1	Aerial Lifts	3	8.00	48	0.31
Roofing & Overhead Work 1	Air Compressors	0	6.00	78	0.48
Roofing & Overhead Work 1	Cranes	0	8.00	215	0.29
Roofing & Overhead Work 1	Excavators	0	8.00	268	0.38
Roofing & Overhead Work 1	Forklifts	2	8.00	110	0.20
Roofing & Overhead Work 1	Generator Sets	0	8.00	84	0.74
Roofing & Overhead Work 1	Other Construction Equipment	3	8.00	354	0.42
Roofing & Overhead Work 1	Other Material Handling Equipment	0	8.00	249	0.43
Roofing & Overhead Work 1	Rubber Tired Loaders	0	8.00	350	0.36
Roofing & Overhead Work 1	Tractors/Loaders/Backhoes	0	8.00	110	0.37
Roofing & Overhead Work 1	Welders	0	8.00	46	0.45
Paving 2	Aerial Lifts	0	8.00	48	0.31
Paving 2	Cranes	0	7.00	226	0.29
Paving 2	Crawler Tractors	0	8.00	249	0.43
Paving 2	Excavators	0	8.00	268	0.38
Paving 2	Forklifts	0	8.00	110	0.20
Paving 2	Generator Sets	0	8.00	84	0.74

Paving 2	Graders	0	8.00	174	0.41
Paving 2	Other Construction Equipment	1	8.00	354	0.42
Paving 2	Pavers	0	8.00	125	0.42
Paving 2	Paving Equipment	0	8.00	130	0.36
Paving 2	Rollers	0	8.00	80	0.38
Paving 2	Rubber Tired Dozers	0	8.00	255	0.40
Paving 2	Rubber Tired Loaders	1	8.00	350	0.36
Paving 2	Scrapers	0	8.00	361	0.48
Paving 2	Surfacing Equipment	0	8.00	350	0.30
Paving 2	Tractors/Loaders/Backhoes	0	8.00	110	0.37
Paving 2	Trenchers	1	8.00	81	0.50
Paving 2	Welders	0	8.00	46	0.45
Architectural Coating 2	Air Compressors	0	6.00	78	0.48
Architectural Coating 2	Other Construction Equipment	1	8.00	354	0.42
Misc. Finishes 2	Aerial Lifts	1	8.00	48	0.31
Misc. Finishes 2	Cranes	0	7.00	226	0.29
Misc. Finishes 2	Forklifts	0	8.00	89	0.20
Misc. Finishes 2	Generator Sets	0	8.00	84	0.74
Misc. Finishes 2	Other Construction Equipment	1	8.00	354	0.42
Misc. Finishes 2	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Misc. Finishes 2	Welders	0	8.00	46	0.45
Roofing & Overhead Work 3	Aerial Lifts	1	8.00	48	0.31
Roofing & Overhead Work 3	Air Compressors	0	6.00	78	0.48
Roofing & Overhead Work 3	Cranes	0	7.00	226	0.29
Roofing & Overhead Work 3	Crawler Tractors	0	8.00	249	0.43
Roofing & Overhead Work 3	Excavators	0	8.00	268	0.38
Roofing & Overhead Work 3	Forklifts	1	8.00	110	0.20
Roofing & Overhead Work 3	Generator Sets	0	8.00	84	0.74

Roofing & Overhead Work 3	Other Construction Equipment	2	8.00	354	0.42
Roofing & Overhead Work 3	Rubber Tired Dozers	0	8.00	255	0.40
Roofing & Overhead Work 3	Surfacing Equipment	0	8.00	350	0.30
Roofing & Overhead Work 3	Tractors/Loaders/Backhoes	0	8.00	110	0.37
Roofing & Overhead Work 3	Welders	0	8.00	46	0.45
Steel & Roof 4	Cranes	1	8.00	215	0.29
Steel & Roof 4	Forklifts	0	8.00	89	0.20
Steel & Roof 4	Generator Sets	0	8.00	84	0.74
Steel & Roof 4	Other Construction Equipment	2	8.00	354	0.42
Steel & Roof 4	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Steel & Roof 4	Welders	0	8.00	46	0.45
Paving 3	Other Construction Equipment	1	8.00	354	0.42
Paving 3	Pavers	0	8.00	125	0.42
Paving 3	Paving Equipment	0	8.00	130	0.36
Paving 3	Rollers	0	8.00	80	0.38
Paving 3	Rubber Tired Loaders	1	8.00	350	0.36
Paving 3	Trenchers	1	8.00	81	0.50
Architectural Coating 1	Air Compressors	0	6.00	78	0.48
Architectural Coating 1	Other Construction Equipment	4	8.00	354	0.42
Misc. Finishes 3	Aerial Lifts	1	8.00	48	0.31
Misc. Finishes 3	Cranes	0	7.00	226	0.29
Misc. Finishes 3	Forklifts	0	8.00	89	0.20
Misc. Finishes 3	Generator Sets	0	8.00	84	0.74
Misc. Finishes 3	Other Construction Equipment	1	8.00	354	0.42
Misc. Finishes 3	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Misc. Finishes 3	Welders	0	8.00	46	0.45
Architectural Coating 3	Air Compressors	0	6.00	78	0.48
Architectural Coating 3	Other Construction Equipment	1	8.00	354	0.42

Paving 1	Other Construction Equipment	1	8.00	354	0.42
Paving 1	Pavers	0	8.00	125	0.42
Paving 1	Paving Equipment	0	8.00	130	0.36
Paving 1	Rollers	0	8.00	80	0.38
Paving 1	Rubber Tired Loaders	2	8.00	350	0.36
Paving 1	Trenchers	1	8.00	81	0.50
Roofing & Overhead Work 4	Aerial Lifts	1	8.00	48	0.31
Roofing & Overhead Work 4	Air Compressors	0	6.00	78	0.48
Roofing & Overhead Work 4	Concrete/Industrial Saws	0	8.00	81	0.73
Roofing & Overhead Work 4	Cranes	0	7.00	226	0.29
Roofing & Overhead Work 4	Crawler Tractors	0	8.00	410	0.43
Roofing & Overhead Work 4	Crawler Tractors	0	8.00	249	0.43
Roofing & Overhead Work 4	Excavators	0	8.00	162	0.38
Roofing & Overhead Work 4	Excavators	0	8.00	268	0.38
Roofing & Overhead Work 4	Forklifts	1	8.00	110	0.20
Roofing & Overhead Work 4	Generator Sets	0	8.00	84	0.74
Roofing & Overhead Work 4	Graders	0	8.00	302	0.41
Roofing & Overhead Work 4	Off-Highway Tractors	0	8.00	451	0.44
Roofing & Overhead Work 4	Off-Highway Tractors	0	8.00	485	0.44
Roofing & Overhead Work 4	Other Construction Equipment	2	8.00	354	0.42
Roofing & Overhead Work 4	Other General Industrial Equipment	0	8.00	330	0.37
Roofing & Overhead Work 4	Pavers	0	8.00	125	0.42
Roofing & Overhead Work 4	Paving Equipment	0	8.00	130	0.36
Roofing & Overhead Work 4	Rollers	0	8.00	80	0.38
Roofing & Overhead Work 4	Rubber Tired Dozers	0	8.00	451	0.40
Roofing & Overhead Work 4	Rubber Tired Loaders	0	8.00	350	0.37
Roofing & Overhead Work 4	Scrapers	0	8.00	452	0.48
Roofing & Overhead Work 4	Surfacing Equipment	0	8.00	350	0.30

Roofing & Overhead Work 4	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Roofing & Overhead Work 4	Tractors/Loaders/Backhoes	0	8.00	110	0.37
Roofing & Overhead Work 4	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Roofing & Overhead Work 4	Welders	0	8.00	46	0.45
Architectural Coating 4	Air Compressors	0	6.00	78	0.48
Architectural Coating 4	Other Construction Equipment	1	8.00	354	0.42
Paving 4	Other Construction Equipment	1	8.00	354	0.42
Paving 4	Pavers	0	8.00	125	0.42
Paving 4	Paving Equipment	0	8.00	130	0.36
Paving 4	Rollers	0	8.00	80	0.38
Paving 4	Rubber Tired Loaders	1	8.00	350	0.36
Paving 4	Trenchers	1	8.00	81	0.50
Misc. Finishes 4	Aerial Lifts	1	8.00	48	0.31
Misc. Finishes 4	Cranes	0	7.00	226	0.29
Misc. Finishes 4	Forklifts	0	8.00	89	0.20
Misc. Finishes 4	Generator Sets	0	8.00	84	0.74
Misc. Finishes 4	Other Construction Equipment	1	8.00	354	0.42
Misc. Finishes 4	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Misc. Finishes 4	Welders	0	8.00	46	0.45
Misc. Finishes 1	Aerial Lifts	2	8.00	48	0.31
Misc. Finishes 1	Cranes	0	7.00	226	0.29
Misc. Finishes 1	Forklifts	0	8.00	89	0.20
Misc. Finishes 1	Generator Sets	0	8.00	84	0.74
Misc. Finishes 1	Other Construction Equipment	2	8.00	354	0.42
Misc. Finishes 1	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Misc. Finishes 1	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading 1	19	48.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading 2	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching 1	10	25.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Concrete Shell 1	9	125.00	416.00	10,384.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching 2	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Concrete Shell 2	6	40.00	416.00	1,374.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading 3	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching 3	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading 4	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Concrete Shell 3	6	40.00	416.00	1,078.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching 4	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Concrete Shell 4	6	40.00	416.00	1,758.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Steel & Roof 1	5	125.00	416.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Steel & Roof 2	3	40.00	416.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Steel & Roof 3	3	40.00	416.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Roofing & Overhead Work 2	4	40.00	416.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Roofing & Overhead Work 1	8	125.00	416.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving 2	3	8.00	0.00	728.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 2	1	213.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Misc. Finishes 2	2	40.00	416.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Roofing & Overhead Work 3	4	40.00	416.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Steel & Roof 4	3	40.00	416.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving 3	3	8.00	0.00	778.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 1	4	213.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Misc. Finishes 3	2	40.00	416.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 3	1	213.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Paving 1	4	10.00	0.00	4,152.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Roofing & Overhead Work 4	4	40.00	416.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 4	1	213.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving 4	3	8.00	0.00	838.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Misc. Finishes 4	2	40.00	416.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Misc. Finishes 1	4	125.00	416.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Grading 1 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3503	0.0000	0.3503	0.0977	0.0000	0.0977	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5124	6.4082	3.9145	5.8500e-003		0.2573	0.2573		0.2367	0.2367	0.0000	551.4246	551.4246	0.1663	0.0000	554.9175
Total	**0.5124**	**6.4082**	**3.9145**	**5.8500e-003**	**0.3503**	**0.2573**	**0.6076**	**0.0977**	**0.2367**	**0.3344**	**0.0000**	**551.4246**	**551.4246**	**0.1663**	**0.0000**	**554.9175**

3.2 Grading 1 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	3.7100e-003	5.4300e-003	0.0547	1.3000e-004	0.0119	8.0000e-005	0.0120	3.1500e-003	7.0000e-005	3.2200e-003	0.0000	10.0701	10.0701	4.7000e-004	0.0000	10.0799
Total	**3.7100e-003**	**5.4300e-003**	**0.0547**	**1.3000e-004**	**0.0119**	**8.0000e-005**	**0.0120**	**3.1500e-003**	**7.0000e-005**	**3.2200e-003**	**0.0000**	**10.0701**	**10.0701**	**4.7000e-004**	**0.0000**	**10.0799**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.1366	0.0000	0.1366	0.0381	0.0000	0.0381	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1328	1.3915	3.0024	5.8500e-003		0.0559	0.0559		0.0539	0.0539	0.0000	551.4239	551.4239	0.1663	0.0000	554.9169
Total	**0.1328**	**1.3915**	**3.0024**	**5.8500e-003**	**0.1366**	**0.0559**	**0.1925**	**0.0381**	**0.0539**	**0.0920**	**0.0000**	**551.4239**	**551.4239**	**0.1663**	**0.0000**	**554.9169**

3.2 Grading 1 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	3.7100e-003	5.4300e-003	0.0547	1.3000e-004	0.0119	8.0000e-005	0.0120	3.1500e-003	7.0000e-005	3.2200e-003	0.0000	10.0701	10.0701	4.7000e-004	0.0000	10.0799
Total	**3.7100e-003**	**5.4300e-003**	**0.0547**	**1.3000e-004**	**0.0119**	**8.0000e-005**	**0.0120**	**3.1500e-003**	**7.0000e-005**	**3.2200e-003**	**0.0000**	**10.0701**	**10.0701**	**4.7000e-004**	**0.0000**	**10.0799**

3.3 Grading 2 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0297	0.0000	0.0297	3.2100e-003	0.0000	3.2100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0670	0.8435	0.4878	8.1000e-004		0.0332	0.0332		0.0305	0.0305	0.0000	76.4976	76.4976	0.0231	0.0000	76.9822
Total	**0.0670**	**0.8435**	**0.4878**	**8.1000e-004**	**0.0297**	**0.0332**	**0.0629**	**3.2100e-003**	**0.0305**	**0.0337**	**0.0000**	**76.4976**	**76.4976**	**0.0231**	**0.0000**	**76.9822**

3.3 Grading 2 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	7.0000e-004	7.0900e-003	2.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3054	1.3054	6.0000e-005	0.0000	1.3067
Total	**4.8000e-004**	**7.0000e-004**	**7.0900e-003**	**2.0000e-005**	**1.5400e-003**	**1.0000e-005**	**1.5500e-003**	**4.1000e-004**	**1.0000e-005**	**4.2000e-004**	**0.0000**	**1.3054**	**1.3054**	**6.0000e-005**	**0.0000**	**1.3067**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0116	0.0000	0.0116	1.2500e-003	0.0000	1.2500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0131	0.1512	0.3870	8.1000e-004		5.5200e-003	5.5200e-003		5.5200e-003	5.5200e-003	0.0000	76.4975	76.4975	0.0231	0.0000	76.9821
Total	**0.0131**	**0.1512**	**0.3870**	**8.1000e-004**	**0.0116**	**5.5200e-003**	**0.0171**	**1.2500e-003**	**5.5200e-003**	**6.7700e-003**	**0.0000**	**76.4975**	**76.4975**	**0.0231**	**0.0000**	**76.9821**

3.3 Grading 2 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	7.0000e-004	7.0900e-003	2.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3054	1.3054	6.0000e-005	0.0000	1.3067
Total	**4.8000e-004**	**7.0000e-004**	**7.0900e-003**	**2.0000e-005**	**1.5400e-003**	**1.0000e-005**	**1.5500e-003**	**4.1000e-004**	**1.0000e-005**	**4.2000e-004**	**0.0000**	**1.3054**	**1.3054**	**6.0000e-005**	**0.0000**	**1.3067**

3.4 Trenching 1 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3082	3.8105	1.8246	4.3500e-003		0.1529	0.1529		0.1407	0.1407	0.0000	409.8082	409.8082	0.1236	0.0000	412.4040
Total	**0.3082**	**3.8105**	**1.8246**	**4.3500e-003**		**0.1529**	**0.1529**		**0.1407**	**0.1407**	**0.0000**	**409.8082**	**409.8082**	**0.1236**	**0.0000**	**412.4040**

3.4 Trenching 1 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	4.2100e-003	6.1500e-003	0.0621	1.5000e-004	0.0135	9.0000e-005	0.0136	3.5800e-003	8.0000e-005	3.6500e-003	0.0000	11.4221	11.4221	5.3000e-004	0.0000	11.4333
Total	**4.2100e-003**	**6.1500e-003**	**0.0621**	**1.5000e-004**	**0.0135**	**9.0000e-005**	**0.0136**	**3.5800e-003**	**8.0000e-005**	**3.6500e-003**	**0.0000**	**11.4221**	**11.4221**	**5.3000e-004**	**0.0000**	**11.4333**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0815	1.2180	2.2283	4.3500e-003		0.0516	0.0516		0.0516	0.0516	0.0000	409.8077	409.8077	0.1236	0.0000	412.4035
Total	**0.0815**	**1.2180**	**2.2283**	**4.3500e-003**		**0.0516**	**0.0516**		**0.0516**	**0.0516**	**0.0000**	**409.8077**	**409.8077**	**0.1236**	**0.0000**	**412.4035**

3.4 Trenching 1 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	4.2100e-003	6.1500e-003	0.0621	1.5000e-004	0.0135	9.0000e-005	0.0136	3.5800e-003	8.0000e-005	3.6500e-003	0.0000	11.4221	11.4221	5.3000e-004	0.0000	11.4333
Total	**4.2100e-003**	**6.1500e-003**	**0.0621**	**1.5000e-004**	**0.0135**	**9.0000e-005**	**0.0136**	**3.5800e-003**	**8.0000e-005**	**3.6500e-003**	**0.0000**	**11.4221**	**11.4221**	**5.3000e-004**	**0.0000**	**11.4333**

3.5 Concrete Shell 1 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2287	2.8039	1.6770	3.2200e-003		0.1276	0.1276		0.1174	0.1174	0.0000	303.1787	303.1787	0.0915	0.0000	305.0991
Total	**0.2287**	**2.8039**	**1.6770**	**3.2200e-003**		**0.1276**	**0.1276**		**0.1174**	**0.1174**	**0.0000**	**303.1787**	**303.1787**	**0.0915**	**0.0000**	**305.0991**

3.5 Concrete Shell 1 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0807	1.4507	0.9900	3.6900e-003	0.0893	0.0252	0.1145	0.0245	0.0232	0.0477	0.0000	337.8962	337.8962	2.1500e-003	0.0000	337.9414
Vendor	0.1399	1.4959	1.7508	3.5800e-003	0.1058	0.0279	0.1337	0.0303	0.0256	0.0559	0.0000	325.7243	325.7243	2.1600e-003	0.0000	325.7696
Worker	0.0176	0.0258	0.2596	6.4000e-004	0.0563	3.6000e-004	0.0567	0.0150	3.3000e-004	0.0153	0.0000	47.7863	47.7863	2.2300e-003	0.0000	47.8330
Total	**0.2382**	**2.9724**	**3.0004**	**7.9100e-003**	**0.2514**	**0.0535**	**0.3048**	**0.0697**	**0.0492**	**0.1189**	**0.0000**	**711.4069**	**711.4069**	**6.5400e-003**	**0.0000**	**711.5441**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0464	0.4623	1.6182	3.2200e-003		0.0269	0.0269		0.0269	0.0269	0.0000	303.1783	303.1783	0.0915	0.0000	305.0988
Total	**0.0464**	**0.4623**	**1.6182**	**3.2200e-003**		**0.0269**	**0.0269**		**0.0269**	**0.0269**	**0.0000**	**303.1783**	**303.1783**	**0.0915**	**0.0000**	**305.0988**

3.5 Concrete Shell 1 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0807	1.4507	0.9900	3.6900e-003	0.0893	0.0252	0.1145	0.0245	0.0232	0.0477	0.0000	337.8962	337.8962	2.1500e-003	0.0000	337.9414
Vendor	0.1399	1.4959	1.7508	3.5800e-003	0.1058	0.0279	0.1337	0.0303	0.0256	0.0559	0.0000	325.7243	325.7243	2.1600e-003	0.0000	325.7696
Worker	0.0176	0.0258	0.2596	6.4000e-004	0.0563	3.6000e-004	0.0567	0.0150	3.3000e-004	0.0153	0.0000	47.7863	47.7863	2.2300e-003	0.0000	47.8330
Total	**0.2382**	**2.9724**	**3.0004**	**7.9100e-003**	**0.2514**	**0.0535**	**0.3048**	**0.0697**	**0.0492**	**0.1189**	**0.0000**	**711.4069**	**711.4069**	**6.5400e-003**	**0.0000**	**711.5441**

3.6 Trenching 2 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0544	0.6726	0.3202	7.7000e-004		0.0270	0.0270		0.0248	0.0248	0.0000	72.1163	72.1163	0.0218	0.0000	72.5731
Total	**0.0544**	**0.6726**	**0.3202**	**7.7000e-004**		**0.0270**	**0.0270**		**0.0248**	**0.0248**	**0.0000**	**72.1163**	**72.1163**	**0.0218**	**0.0000**	**72.5731**

3.6 Trenching 2 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	1.1100e-003	0.0112	3.0000e-005	2.4300e-003	2.0000e-005	2.4400e-003	6.5000e-004	1.0000e-005	6.6000e-004	0.0000	2.0606	2.0606	1.0000e-004	0.0000	2.0627
Total	**7.6000e-004**	**1.1100e-003**	**0.0112**	**3.0000e-005**	**2.4300e-003**	**2.0000e-005**	**2.4400e-003**	**6.5000e-004**	**1.0000e-005**	**6.6000e-004**	**0.0000**	**2.0606**	**2.0606**	**1.0000e-004**	**0.0000**	**2.0627**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0143	0.2119	0.3915	7.7000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003	0.0000	72.1163	72.1163	0.0218	0.0000	72.5731
Total	**0.0143**	**0.2119**	**0.3915**	**7.7000e-004**		**8.9700e-003**	**8.9700e-003**		**8.9700e-003**	**8.9700e-003**	**0.0000**	**72.1163**	**72.1163**	**0.0218**	**0.0000**	**72.5731**

3.6 Trenching 2 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	1.1100e-003	0.0112	3.0000e-005	2.4300e-003	2.0000e-005	2.4400e-003	6.5000e-004	1.0000e-005	6.6000e-004	0.0000	2.0606	2.0606	1.0000e-004	0.0000	2.0627
Total	**7.6000e-004**	**1.1100e-003**	**0.0112**	**3.0000e-005**	**2.4300e-003**	**2.0000e-005**	**2.4400e-003**	**6.5000e-004**	**1.0000e-005**	**6.6000e-004**	**0.0000**	**2.0606**	**2.0606**	**1.0000e-004**	**0.0000**	**2.0627**

3.7 Concrete Shell 2 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1000	1.2570	0.7360	1.4600e-003		0.0537	0.0537		0.0494	0.0494	0.0000	137.9024	137.9024	0.0416	0.0000	138.7759
Total	**0.1000**	**1.2570**	**0.7360**	**1.4600e-003**		**0.0537**	**0.0537**		**0.0494**	**0.0494**	**0.0000**	**137.9024**	**137.9024**	**0.0416**	**0.0000**	**138.7759**

3.7 Concrete Shell 2 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0107	0.1920	0.1310	4.9000e-004	0.0118	3.3300e-003	0.0151	3.2400e-003	3.0700e-003	6.3100e-003	0.0000	44.7101	44.7101	2.8000e-004	0.0000	44.7161
Vendor	0.0853	0.9122	1.0676	2.1800e-003	0.0645	0.0170	0.0815	0.0185	0.0156	0.0341	0.0000	198.6124	198.6124	1.3200e-003	0.0000	198.6400
Worker	3.4400e-003	5.0200e-003	0.0507	1.2000e-004	0.0110	7.0000e-005	0.0111	2.9200e-003	6.0000e-005	2.9800e-003	0.0000	9.3242	9.3242	4.3000e-004	0.0000	9.3333
Total	**0.0994**	**1.1091**	**1.2492**	**2.7900e-003**	**0.0873**	**0.0204**	**0.1077**	**0.0246**	**0.0188**	**0.0434**	**0.0000**	**252.6466**	**252.6466**	**2.0300e-003**	**0.0000**	**252.6894**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0200	0.1665	0.7097	1.4600e-003		8.9900e-003	8.9900e-003		8.9900e-003	8.9900e-003	0.0000	137.9022	137.9022	0.0416	0.0000	138.7758
Total	**0.0200**	**0.1665**	**0.7097**	**1.4600e-003**		**8.9900e-003**	**8.9900e-003**		**8.9900e-003**	**8.9900e-003**	**0.0000**	**137.9022**	**137.9022**	**0.0416**	**0.0000**	**138.7758**

3.7 Concrete Shell 2 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0107	0.1920	0.1310	4.9000e-004	0.0118	3.3300e-003	0.0151	3.2400e-003	3.0700e-003	6.3100e-003	0.0000	44.7101	44.7101	2.8000e-004	0.0000	44.7161
Vendor	0.0853	0.9122	1.0676	2.1800e-003	0.0645	0.0170	0.0815	0.0185	0.0156	0.0341	0.0000	198.6124	198.6124	1.3200e-003	0.0000	198.6400
Worker	3.4400e-003	5.0200e-003	0.0507	1.2000e-004	0.0110	7.0000e-005	0.0111	2.9200e-003	6.0000e-005	2.9800e-003	0.0000	9.3242	9.3242	4.3000e-004	0.0000	9.3333
Total	**0.0994**	**1.1091**	**1.2492**	**2.7900e-003**	**0.0873**	**0.0204**	**0.1077**	**0.0246**	**0.0188**	**0.0434**	**0.0000**	**252.6466**	**252.6466**	**2.0300e-003**	**0.0000**	**252.6894**

3.8 Grading 3 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0255	0.0000	0.0255	2.7500e-003	0.0000	2.7500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0571	0.7187	0.4156	6.9000e-004		0.0283	0.0283		0.0260	0.0260	0.0000	65.0874	65.0874	0.0196	0.0000	65.4997
Total	**0.0571**	**0.7187**	**0.4156**	**6.9000e-004**	**0.0255**	**0.0283**	**0.0537**	**2.7500e-003**	**0.0260**	**0.0288**	**0.0000**	**65.0874**	**65.0874**	**0.0196**	**0.0000**	**65.4997**

3.8 Grading 3 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	6.0000e-004	6.0800e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.1189	1.1189	5.0000e-005	0.0000	1.1200
Total	**4.1000e-004**	**6.0000e-004**	**6.0800e-003**	**1.0000e-005**	**1.3200e-003**	**1.0000e-005**	**1.3300e-003**	**3.5000e-004**	**1.0000e-005**	**3.6000e-004**	**0.0000**	**1.1189**	**1.1189**	**5.0000e-005**	**0.0000**	**1.1200**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.9300e-003	0.0000	9.9300e-003	1.0700e-003	0.0000	1.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.1272	0.3290	6.9000e-004		4.6400e-003	4.6400e-003		4.6400e-003	4.6400e-003	0.0000	65.0874	65.0874	0.0196	0.0000	65.4996
Total	**0.0111**	**0.1272**	**0.3290**	**6.9000e-004**	**9.9300e-003**	**4.6400e-003**	**0.0146**	**1.0700e-003**	**4.6400e-003**	**5.7100e-003**	**0.0000**	**65.0874**	**65.0874**	**0.0196**	**0.0000**	**65.4996**

3.8 Grading 3 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	6.0000e-004	6.0800e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.1189	1.1189	5.0000e-005	0.0000	1.1200
Total	**4.1000e-004**	**6.0000e-004**	**6.0800e-003**	**1.0000e-005**	**1.3200e-003**	**1.0000e-005**	**1.3300e-003**	**3.5000e-004**	**1.0000e-005**	**3.6000e-004**	**0.0000**	**1.1189**	**1.1189**	**5.0000e-005**	**0.0000**	**1.1200**

3.9 Trenching 3 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0528	0.6529	0.3108	7.4000e-004		0.0262	0.0262		0.0241	0.0241	0.0000	69.9953	69.9953	0.0211	0.0000	70.4386
Total	**0.0528**	**0.6529**	**0.3108**	**7.4000e-004**		**0.0262**	**0.0262**		**0.0241**	**0.0241**	**0.0000**	**69.9953**	**69.9953**	**0.0211**	**0.0000**	**70.4386**

3.9 Trenching 3 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4000e-004	1.0800e-003	0.0109	3.0000e-005	2.3600e-003	1.0000e-005	2.3700e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	2.0000	2.0000	9.0000e-005	0.0000	2.0020
Total	**7.4000e-004**	**1.0800e-003**	**0.0109**	**3.0000e-005**	**2.3600e-003**	**1.0000e-005**	**2.3700e-003**	**6.3000e-004**	**1.0000e-005**	**6.4000e-004**	**0.0000**	**2.0000**	**2.0000**	**9.0000e-005**	**0.0000**	**2.0020**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0138	0.2056	0.3800	7.4000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003	0.0000	69.9952	69.9952	0.0211	0.0000	70.4386
Total	**0.0138**	**0.2056**	**0.3800**	**7.4000e-004**		**8.7000e-003**	**8.7000e-003**		**8.7000e-003**	**8.7000e-003**	**0.0000**	**69.9952**	**69.9952**	**0.0211**	**0.0000**	**70.4386**

3.9 Trenching 3 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4000e-004	1.0800e-003	0.0109	3.0000e-005	2.3600e-003	1.0000e-005	2.3700e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	2.0000	2.0000	9.0000e-005	0.0000	2.0020
Total	**7.4000e-004**	**1.0800e-003**	**0.0109**	**3.0000e-005**	**2.3600e-003**	**1.0000e-005**	**2.3700e-003**	**6.3000e-004**	**1.0000e-005**	**6.4000e-004**	**0.0000**	**2.0000**	**2.0000**	**9.0000e-005**	**0.0000**	**2.0020**

3.10 Grading 4 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0382	0.0000	0.0382	4.1200e-003	0.0000	4.1200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0856	1.0780	0.6234	1.0400e-003		0.0424	0.0424		0.0390	0.0390	0.0000	97.6311	97.6311	0.0295	0.0000	98.2496
Total	**0.0856**	**1.0780**	**0.6234**	**1.0400e-003**	**0.0382**	**0.0424**	**0.0806**	**4.1200e-003**	**0.0390**	**0.0431**	**0.0000**	**97.6311**	**97.6311**	**0.0295**	**0.0000**	**98.2496**

3.10 Grading 4 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	9.0000e-004	9.1200e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6784	1.6784	8.0000e-005	0.0000	1.6800
Total	**6.2000e-004**	**9.0000e-004**	**9.1200e-003**	**2.0000e-005**	**1.9800e-003**	**1.0000e-005**	**1.9900e-003**	**5.3000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.6784**	**1.6784**	**8.0000e-005**	**0.0000**	**1.6800**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0149	0.0000	0.0149	1.6100e-003	0.0000	1.6100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0167	0.1908	0.4935	1.0400e-003		6.9600e-003	6.9600e-003		6.9600e-003	6.9600e-003	0.0000	97.6310	97.6310	0.0295	0.0000	98.2495
Total	**0.0167**	**0.1908**	**0.4935**	**1.0400e-003**	**0.0149**	**6.9600e-003**	**0.0219**	**1.6100e-003**	**6.9600e-003**	**8.5700e-003**	**0.0000**	**97.6310**	**97.6310**	**0.0295**	**0.0000**	**98.2495**

3.10 Grading 4 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	9.0000e-004	9.1200e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6784	1.6784	8.0000e-005	0.0000	1.6800
Total	**6.2000e-004**	**9.0000e-004**	**9.1200e-003**	**2.0000e-005**	**1.9800e-003**	**1.0000e-005**	**1.9900e-003**	**5.3000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.6784**	**1.6784**	**8.0000e-005**	**0.0000**	**1.6800**

3.11 Concrete Shell 3 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0940	1.1816	0.6918	1.3800e-003		0.0505	0.0505		0.0465	0.0465	0.0000	129.6283	129.6283	0.0391	0.0000	130.4494
Total	**0.0940**	**1.1816**	**0.6918**	**1.3800e-003**		**0.0505**	**0.0505**		**0.0465**	**0.0465**	**0.0000**	**129.6283**	**129.6283**	**0.0391**	**0.0000**	**130.4494**

3.11 Concrete Shell 3 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.3800e-003	0.1506	0.1028	3.8000e-004	9.2700e-003	2.6200e-003	0.0119	2.5400e-003	2.4100e-003	4.9500e-003	0.0000	35.0782	35.0782	2.2000e-004	0.0000	35.0829
Vendor	0.0802	0.8574	1.0035	2.0500e-003	0.0607	0.0160	0.0766	0.0174	0.0147	0.0321	0.0000	186.6957	186.6957	1.2400e-003	0.0000	186.7216
Worker	3.2300e-003	4.7200e-003	0.0476	1.2000e-004	0.0103	7.0000e-005	0.0104	2.7400e-003	6.0000e-005	2.8000e-003	0.0000	8.7647	8.7647	4.1000e-004	0.0000	8.7733
Total	**0.0918**	**1.0128**	**1.1539**	**2.5500e-003**	**0.0803**	**0.0187**	**0.0989**	**0.0226**	**0.0172**	**0.0398**	**0.0000**	**230.5386**	**230.5386**	**1.8700e-003**	**0.0000**	**230.5778**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0188	0.1565	0.6671	1.3800e-003		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003	0.0000	129.6281	129.6281	0.0391	0.0000	130.4492
Total	**0.0188**	**0.1565**	**0.6671**	**1.3800e-003**		**8.4500e-003**	**8.4500e-003**		**8.4500e-003**	**8.4500e-003**	**0.0000**	**129.6281**	**129.6281**	**0.0391**	**0.0000**	**130.4492**

3.11 Concrete Shell 3 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.3800e-003	0.1506	0.1028	3.8000e-004	9.2700e-003	2.6200e-003	0.0119	2.5400e-003	2.4100e-003	4.9500e-003	0.0000	35.0782	35.0782	2.2000e-004	0.0000	35.0829
Vendor	0.0802	0.8574	1.0035	2.0500e-003	0.0607	0.0160	0.0766	0.0174	0.0147	0.0321	0.0000	186.6957	186.6957	1.2400e-003	0.0000	186.7216
Worker	3.2300e-003	4.7200e-003	0.0476	1.2000e-004	0.0103	7.0000e-005	0.0104	2.7400e-003	6.0000e-005	2.8000e-003	0.0000	8.7647	8.7647	4.1000e-004	0.0000	8.7733
Total	**0.0918**	**1.0128**	**1.1539**	**2.5500e-003**	**0.0803**	**0.0187**	**0.0989**	**0.0226**	**0.0172**	**0.0398**	**0.0000**	**230.5386**	**230.5386**	**1.8700e-003**	**0.0000**	**230.5778**

3.12 Trenching 4 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0550	0.6804	0.3258	7.8000e-004		0.0273	0.0273		0.0251	0.0251	0.0000	73.1800	73.1800	0.0221	0.0000	73.6436
Total	**0.0550**	**0.6804**	**0.3258**	**7.8000e-004**		**0.0273**	**0.0273**		**0.0251**	**0.0251**	**0.0000**	**73.1800**	**73.1800**	**0.0221**	**0.0000**	**73.6436**

3.12 Trenching 4 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	1.1400e-003	0.0115	3.0000e-005	2.5000e-003	2.0000e-005	2.5200e-003	6.6000e-004	1.0000e-005	6.8000e-004	0.0000	2.1213	2.1213	1.0000e-004	0.0000	2.1233
Total	**7.8000e-004**	**1.1400e-003**	**0.0115**	**3.0000e-005**	**2.5000e-003**	**2.0000e-005**	**2.5200e-003**	**6.6000e-004**	**1.0000e-005**	**6.8000e-004**	**0.0000**	**2.1213**	**2.1213**	**1.0000e-004**	**0.0000**	**2.1233**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.2175	0.3979	7.8000e-004		9.2100e-003	9.2100e-003		9.2100e-003	9.2100e-003	0.0000	73.1799	73.1799	0.0221	0.0000	73.6435
Total	**0.0145**	**0.2175**	**0.3979**	**7.8000e-004**		**9.2100e-003**	**9.2100e-003**		**9.2100e-003**	**9.2100e-003**	**0.0000**	**73.1799**	**73.1799**	**0.0221**	**0.0000**	**73.6435**

3.12 Trenching 4 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	1.1400e-003	0.0115	3.0000e-005	2.5000e-003	2.0000e-005	2.5200e-003	6.6000e-004	1.0000e-005	6.8000e-004	0.0000	2.1213	2.1213	1.0000e-004	0.0000	2.1233
Total	**7.8000e-004**	**1.1400e-003**	**0.0115**	**3.0000e-005**	**2.5000e-003**	**2.0000e-005**	**2.5200e-003**	**6.6000e-004**	**1.0000e-005**	**6.8000e-004**	**0.0000**	**2.1213**	**2.1213**	**1.0000e-004**	**0.0000**	**2.1233**

3.13 Concrete Shell 4 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1000	1.2570	0.7360	1.4600e-003		0.0537	0.0537		0.0494	0.0494	0.0000	137.9024	137.9024	0.0416	0.0000	138.7759
Total	**0.1000**	**1.2570**	**0.7360**	**1.4600e-003**		**0.0537**	**0.0537**		**0.0494**	**0.0494**	**0.0000**	**137.9024**	**137.9024**	**0.0416**	**0.0000**	**138.7759**

3.13 Concrete Shell 4 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0137	0.2456	0.1676	6.3000e-004	0.0151	4.2700e-003	0.0194	4.1500e-003	3.9200e-003	8.0700e-003	0.0000	57.2055	57.2055	3.6000e-004	0.0000	57.2131
Vendor	0.0853	0.9122	1.0676	2.1800e-003	0.0645	0.0170	0.0815	0.0185	0.0156	0.0341	0.0000	198.6124	198.6124	1.3200e-003	0.0000	198.6400
Worker	3.4400e-003	5.0200e-003	0.0507	1.2000e-004	0.0110	7.0000e-005	0.0111	2.9200e-003	6.0000e-005	2.9800e-003	0.0000	9.3242	9.3242	4.3000e-004	0.0000	9.3333
Total	**0.1024**	**1.1628**	**1.2859**	**2.9300e-003**	**0.0906**	**0.0213**	**0.1120**	**0.0255**	**0.0196**	**0.0452**	**0.0000**	**265.1420**	**265.1420**	**2.1100e-003**	**0.0000**	**265.1864**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0200	0.1665	0.7097	1.4600e-003		8.9900e-003	8.9900e-003		8.9900e-003	8.9900e-003	0.0000	137.9022	137.9022	0.0416	0.0000	138.7758
Total	**0.0200**	**0.1665**	**0.7097**	**1.4600e-003**		**8.9900e-003**	**8.9900e-003**		**8.9900e-003**	**8.9900e-003**	**0.0000**	**137.9022**	**137.9022**	**0.0416**	**0.0000**	**138.7758**

3.13 Concrete Shell 4 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0137	0.2456	0.1676	6.3000e-004	0.0151	4.2700e-003	0.0194	4.1500e-003	3.9200e-003	8.0700e-003	0.0000	57.2055	57.2055	3.6000e-004	0.0000	57.2131
Vendor	0.0853	0.9122	1.0676	2.1800e-003	0.0645	0.0170	0.0815	0.0185	0.0156	0.0341	0.0000	198.6124	198.6124	1.3200e-003	0.0000	198.6400
Worker	3.4400e-003	5.0200e-003	0.0507	1.2000e-004	0.0110	7.0000e-005	0.0111	2.9200e-003	6.0000e-005	2.9800e-003	0.0000	9.3242	9.3242	4.3000e-004	0.0000	9.3333
Total	**0.1024**	**1.1628**	**1.2859**	**2.9300e-003**	**0.0906**	**0.0213**	**0.1120**	**0.0255**	**0.0196**	**0.0452**	**0.0000**	**265.1420**	**265.1420**	**2.1100e-003**	**0.0000**	**265.1864**

3.14 Steel & Roof 1 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0891	1.1375	0.5559	1.1600e-003		0.0452	0.0452		0.0416	0.0416	0.0000	109.2624	109.2624	0.0330	0.0000	109.9545
Total	**0.0891**	**1.1375**	**0.5559**	**1.1600e-003**		**0.0452**	**0.0452**		**0.0416**	**0.0416**	**0.0000**	**109.2624**	**109.2624**	**0.0330**	**0.0000**	**109.9545**

3.14 Steel & Roof 1 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0802	0.8574	1.0035	2.0500e-003	0.0607	0.0160	0.0766	0.0174	0.0147	0.0321	0.0000	186.6957	186.6957	1.2400e-003	0.0000	186.7216
Worker	0.0101	0.0148	0.1488	3.6000e-004	0.0323	2.1000e-004	0.0325	8.5700e-003	1.9000e-004	8.7600e-003	0.0000	27.3897	27.3897	1.2800e-003	0.0000	27.4165
Total	**0.0903**	**0.8722**	**1.1523**	**2.4100e-003**	**0.0929**	**0.0162**	**0.1091**	**0.0259**	**0.0149**	**0.0408**	**0.0000**	**214.0854**	**214.0854**	**2.5200e-003**	**0.0000**	**214.1381**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0433	0.4295	0.5402	1.1600e-003		0.0188	0.0188		0.0174	0.0174	0.0000	109.2623	109.2623	0.0330	0.0000	109.9544
Total	**0.0433**	**0.4295**	**0.5402**	**1.1600e-003**		**0.0188**	**0.0188**		**0.0174**	**0.0174**	**0.0000**	**109.2623**	**109.2623**	**0.0330**	**0.0000**	**109.9544**

3.14 Steel & Roof 1 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0802	0.8574	1.0035	2.0500e-003	0.0607	0.0160	0.0766	0.0174	0.0147	0.0321	0.0000	186.6957	186.6957	1.2400e-003	0.0000	186.7216
Worker	0.0101	0.0148	0.1488	3.6000e-004	0.0323	2.1000e-004	0.0325	8.5700e-003	1.9000e-004	8.7600e-003	0.0000	27.3897	27.3897	1.2800e-003	0.0000	27.4165
Total	**0.0903**	**0.8722**	**1.1523**	**2.4100e-003**	**0.0929**	**0.0162**	**0.1091**	**0.0259**	**0.0149**	**0.0408**	**0.0000**	**214.0854**	**214.0854**	**2.5200e-003**	**0.0000**	**214.1381**

3.15 Steel & Roof 2 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0253	0.3252	0.1631	3.4000e-004		0.0127	0.0127		0.0117	0.0117	0.0000	32.2410	32.2410	9.7300e-003	0.0000	32.4452
Total	**0.0253**	**0.3252**	**0.1631**	**3.4000e-004**		**0.0127**	**0.0127**		**0.0117**	**0.0117**	**0.0000**	**32.2410**	**32.2410**	**9.7300e-003**	**0.0000**	**32.4452**

3.15 Steel & Roof 2 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0375	0.4013	0.4697	9.6000e-004	0.0284	7.4800e-003	0.0359	8.1300e-003	6.8800e-003	0.0150	0.0000	87.3895	87.3895	5.8000e-004	0.0000	87.4016
Worker	1.5100e-003	2.2100e-003	0.0223	5.0000e-005	4.8400e-003	3.0000e-005	4.8700e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1026	4.1026	1.9000e-004	0.0000	4.1066
Total	**0.0391**	**0.4036**	**0.4920**	**1.0100e-003**	**0.0332**	**7.5100e-003**	**0.0407**	**9.4100e-003**	**6.9100e-003**	**0.0163**	**0.0000**	**91.4921**	**91.4921**	**7.7000e-004**	**0.0000**	**91.5083**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0110	0.1043	0.1582	3.4000e-004		4.5100e-003	4.5100e-003		4.1900e-003	4.1900e-003	0.0000	32.2409	32.2409	9.7300e-003	0.0000	32.4452
Total	**0.0110**	**0.1043**	**0.1582**	**3.4000e-004**		**4.5100e-003**	**4.5100e-003**		**4.1900e-003**	**4.1900e-003**	**0.0000**	**32.2409**	**32.2409**	**9.7300e-003**	**0.0000**	**32.4452**

3.15 Steel & Roof 2 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0375	0.4013	0.4697	9.6000e-004	0.0284	7.4800e-003	0.0359	8.1300e-003	6.8800e-003	0.0150	0.0000	87.3895	87.3895	5.8000e-004	0.0000	87.4016
Worker	1.5100e-003	2.2100e-003	0.0223	5.0000e-005	4.8400e-003	3.0000e-005	4.8700e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1026	4.1026	1.9000e-004	0.0000	4.1066
Total	**0.0391**	**0.4036**	**0.4920**	**1.0100e-003**	**0.0332**	**7.5100e-003**	**0.0407**	**9.4100e-003**	**6.9100e-003**	**0.0163**	**0.0000**	**91.4921**	**91.4921**	**7.7000e-004**	**0.0000**	**91.5083**

3.16 Steel & Roof 3 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0230	0.2957	0.1482	3.1000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	29.3100	29.3100	8.8400e-003	0.0000	29.4956
Total	**0.0230**	**0.2957**	**0.1482**	**3.1000e-004**		**0.0116**	**0.0116**		**0.0107**	**0.0107**	**0.0000**	**29.3100**	**29.3100**	**8.8400e-003**	**0.0000**	**29.4956**

3.16 Steel & Roof 3 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0341	0.3649	0.4270	8.7000e-004	0.0258	6.8000e-003	0.0326	7.3900e-003	6.2500e-003	0.0136	0.0000	79.4450	79.4450	5.3000e-004	0.0000	79.4560
Worker	1.3700e-003	2.0100e-003	0.0203	5.0000e-005	4.4000e-003	3.0000e-005	4.4200e-003	1.1700e-003	3.0000e-005	1.1900e-003	0.0000	3.7297	3.7297	1.7000e-004	0.0000	3.7333
Total	**0.0355**	**0.3669**	**0.4473**	**9.2000e-004**	**0.0302**	**6.8300e-003**	**0.0370**	**8.5600e-003**	**6.2800e-003**	**0.0148**	**0.0000**	**83.1746**	**83.1746**	**7.0000e-004**	**0.0000**	**83.1893**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0100	0.0948	0.1438	3.1000e-004		4.1000e-003	4.1000e-003		3.8100e-003	3.8100e-003	0.0000	29.3099	29.3099	8.8400e-003	0.0000	29.4956
Total	**0.0100**	**0.0948**	**0.1438**	**3.1000e-004**		**4.1000e-003**	**4.1000e-003**		**3.8100e-003**	**3.8100e-003**	**0.0000**	**29.3099**	**29.3099**	**8.8400e-003**	**0.0000**	**29.4956**

3.16 Steel & Roof 3 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0341	0.3649	0.4270	8.7000e-004	0.0258	6.8000e-003	0.0326	7.3900e-003	6.2500e-003	0.0136	0.0000	79.4450	79.4450	5.3000e-004	0.0000	79.4560
Worker	1.3700e-003	2.0100e-003	0.0203	5.0000e-005	4.4000e-003	3.0000e-005	4.4200e-003	1.1700e-003	3.0000e-005	1.1900e-003	0.0000	3.7297	3.7297	1.7000e-004	0.0000	3.7333
Total	**0.0355**	**0.3669**	**0.4473**	**9.2000e-004**	**0.0302**	**6.8300e-003**	**0.0370**	**8.5600e-003**	**6.2800e-003**	**0.0148**	**0.0000**	**83.1746**	**83.1746**	**7.0000e-004**	**0.0000**	**83.1893**

3.17 Roofing & Overhead Work 2 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0225	0.2855	0.1654	3.3000e-004		0.0117	0.0117		0.0108	0.0108	0.0000	31.4762	31.4762	9.4900e-003	0.0000	31.6756
Total	**0.0225**	**0.2855**	**0.1654**	**3.3000e-004**		**0.0117**	**0.0117**		**0.0108**	**0.0108**	**0.0000**	**31.4762**	**31.4762**	**9.4900e-003**	**0.0000**	**31.6756**

3.17 Roofing & Overhead Work 2 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0392	0.4196	0.4911	1.0000e-003	0.0297	7.8200e-003	0.0375	8.4900e-003	7.1900e-003	0.0157	0.0000	91.3617	91.3617	6.1000e-004	0.0000	91.3744
Worker	1.5800e-003	2.3100e-003	0.0233	6.0000e-005	5.0600e-003	3.0000e-005	5.0900e-003	1.3400e-003	3.0000e-005	1.3700e-003	0.0000	4.2891	4.2891	2.0000e-004	0.0000	4.2933
Total	**0.0408**	**0.4219**	**0.5144**	**1.0600e-003**	**0.0347**	**7.8500e-003**	**0.0426**	**9.8300e-003**	**7.2200e-003**	**0.0171**	**0.0000**	**95.6508**	**95.6508**	**8.1000e-004**	**0.0000**	**95.6677**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	7.5300e-003	0.0545	0.1603	3.3000e-004		3.1200e-003	3.1200e-003		2.9100e-003	2.9100e-003	0.0000	31.4762	31.4762	9.4900e-003	0.0000	31.6756
Total	**7.5300e-003**	**0.0545**	**0.1603**	**3.3000e-004**		**3.1200e-003**	**3.1200e-003**		**2.9100e-003**	**2.9100e-003**	**0.0000**	**31.4762**	**31.4762**	**9.4900e-003**	**0.0000**	**31.6756**

3.17 Roofing & Overhead Work 2 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0392	0.4196	0.4911	1.0000e-003	0.0297	7.8200e-003	0.0375	8.4900e-003	7.1900e-003	0.0157	0.0000	91.3617	91.3617	6.1000e-004	0.0000	91.3744
Worker	1.5800e-003	2.3100e-003	0.0233	6.0000e-005	5.0600e-003	3.0000e-005	5.0900e-003	1.3400e-003	3.0000e-005	1.3700e-003	0.0000	4.2891	4.2891	2.0000e-004	0.0000	4.2933
Total	**0.0408**	**0.4219**	**0.5144**	**1.0600e-003**	**0.0347**	**7.8500e-003**	**0.0426**	**9.8300e-003**	**7.2200e-003**	**0.0171**	**0.0000**	**95.6508**	**95.6508**	**8.1000e-004**	**0.0000**	**95.6677**

3.18 Roofing & Overhead Work 1 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0695	0.8777	0.5195	1.0300e-003		0.0368	0.0368		0.0338	0.0338	0.0000	96.7040	96.7040	0.0292	0.0000	97.3165
Total	**0.0695**	**0.8777**	**0.5195**	**1.0300e-003**		**0.0368**	**0.0368**		**0.0338**	**0.0338**	**0.0000**	**96.7040**	**96.7040**	**0.0292**	**0.0000**	**97.3165**

3.18 Roofing & Overhead Work 1 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0751	0.8027	0.9395	1.9200e-003	0.0568	0.0150	0.0717	0.0163	0.0138	0.0300	0.0000	174.7789	174.7789	1.1600e-003	0.0000	174.8032
Worker	9.4500e-003	0.0138	0.1393	3.4000e-004	0.0302	1.9000e-004	0.0304	8.0300e-003	1.8000e-004	8.2000e-003	0.0000	25.6414	25.6414	1.1900e-003	0.0000	25.6665
Total	**0.0845**	**0.8165**	**1.0788**	**2.2600e-003**	**0.0870**	**0.0152**	**0.1022**	**0.0243**	**0.0139**	**0.0382**	**0.0000**	**200.4204**	**200.4204**	**2.3500e-003**	**0.0000**	**200.4697**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0267	0.2149	0.5048	1.0300e-003		0.0121	0.0121		0.0112	0.0112	0.0000	96.7039	96.7039	0.0292	0.0000	97.3164
Total	**0.0267**	**0.2149**	**0.5048**	**1.0300e-003**		**0.0121**	**0.0121**		**0.0112**	**0.0112**	**0.0000**	**96.7039**	**96.7039**	**0.0292**	**0.0000**	**97.3164**

3.18 Roofing & Overhead Work 1 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0751	0.8027	0.9395	1.9200e-003	0.0568	0.0150	0.0717	0.0163	0.0138	0.0300	0.0000	174.7789	174.7789	1.1600e-003	0.0000	174.8032
Worker	9.4500e-003	0.0138	0.1393	3.4000e-004	0.0302	1.9000e-004	0.0304	8.0300e-003	1.8000e-004	8.2000e-003	0.0000	25.6414	25.6414	1.1900e-003	0.0000	25.6665
Total	**0.0845**	**0.8165**	**1.0788**	**2.2600e-003**	**0.0870**	**0.0152**	**0.1022**	**0.0243**	**0.0139**	**0.0382**	**0.0000**	**200.4204**	**200.4204**	**2.3500e-003**	**0.0000**	**200.4697**

3.18 Roofing & Overhead Work 1 - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9300e-003	0.0739	0.0445	9.0000e-005		3.0400e-003	3.0400e-003		2.8000e-003	2.8000e-003	0.0000	8.6453	8.6453	2.6500e-003	0.0000	8.7009
Total	**5.9300e-003**	**0.0739**	**0.0445**	**9.0000e-005**		**3.0400e-003**	**3.0400e-003**		**2.8000e-003**	**2.8000e-003**	**0.0000**	**8.6453**	**8.6453**	**2.6500e-003**	**0.0000**	**8.7009**

3.18 Roofing & Overhead Work 1 - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.1500e-003	0.0662	0.0806	1.7000e-004	5.1600e-003	1.2200e-003	6.3800e-003	1.4800e-003	1.1200e-003	2.6000e-003	0.0000	15.6205	15.6205	1.0000e-004	0.0000	15.6227
Worker	7.7000e-004	1.1300e-003	0.0113	3.0000e-005	2.7500e-003	2.0000e-005	2.7600e-003	7.3000e-004	2.0000e-005	7.5000e-004	0.0000	2.2385	2.2385	1.0000e-004	0.0000	2.2406
Total	**6.9200e-003**	**0.0673**	**0.0920**	**2.0000e-004**	**7.9100e-003**	**1.2400e-003**	**9.1400e-003**	**2.2100e-003**	**1.1400e-003**	**3.3500e-003**	**0.0000**	**17.8591**	**17.8591**	**2.0000e-004**	**0.0000**	**17.8633**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3200e-003	0.0186	0.0458	9.0000e-005		1.0000e-003	1.0000e-003		9.3000e-004	9.3000e-004	0.0000	8.6453	8.6453	2.6500e-003	0.0000	8.7009
Total	**2.3200e-003**	**0.0186**	**0.0458**	**9.0000e-005**		**1.0000e-003**	**1.0000e-003**		**9.3000e-004**	**9.3000e-004**	**0.0000**	**8.6453**	**8.6453**	**2.6500e-003**	**0.0000**	**8.7009**

3.18 Roofing & Overhead Work 1 - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.1500e-003	0.0662	0.0806	1.7000e-004	5.1600e-003	1.2200e-003	6.3800e-003	1.4800e-003	1.1200e-003	2.6000e-003	0.0000	15.6205	15.6205	1.0000e-004	0.0000	15.6227
Worker	7.7000e-004	1.1300e-003	0.0113	3.0000e-005	2.7500e-003	2.0000e-005	2.7600e-003	7.3000e-004	2.0000e-005	7.5000e-004	0.0000	2.2385	2.2385	1.0000e-004	0.0000	2.2406
Total	**6.9200e-003**	**0.0673**	**0.0920**	**2.0000e-004**	**7.9100e-003**	**1.2400e-003**	**9.1400e-003**	**2.2100e-003**	**1.1400e-003**	**3.3500e-003**	**0.0000**	**17.8591**	**17.8591**	**2.0000e-004**	**0.0000**	**17.8633**

3.19 Paving 2 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0313	0.3631	0.1908	3.8000e-004		0.0164	0.0164		0.0150	0.0150	0.0000	35.7254	35.7254	0.0108	0.0000	35.9517
Paving	0.0236					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0549**	**0.3631**	**0.1908**	**3.8000e-004**		**0.0164**	**0.0164**		**0.0150**	**0.0150**	**0.0000**	**35.7254**	**35.7254**	**0.0108**	**0.0000**	**35.9517**

3.19 Paving 2 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.6600e-003	0.1017	0.0694	2.6000e-004	6.2600e-003	1.7700e-003	8.0200e-003	1.7200e-003	1.6300e-003	3.3400e-003	0.0000	23.6892	23.6892	1.5000e-004	0.0000	23.6924
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	5.6000e-004	5.6700e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	1.0443	1.0443	5.0000e-005	0.0000	1.0453
Total	**6.0400e-003**	**0.1023**	**0.0751**	**2.7000e-004**	**7.4900e-003**	**1.7800e-003**	**9.2600e-003**	**2.0500e-003**	**1.6400e-003**	**3.6700e-003**	**0.0000**	**24.7335**	**24.7335**	**2.0000e-004**	**0.0000**	**24.7377**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	7.1400e-003	0.1091	0.1987	3.8000e-004		4.9500e-003	4.9500e-003		4.9500e-003	4.9500e-003	0.0000	35.7254	35.7254	0.0108	0.0000	35.9517
Paving	0.0236					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0307**	**0.1091**	**0.1987**	**3.8000e-004**		**4.9500e-003**	**4.9500e-003**		**4.9500e-003**	**4.9500e-003**	**0.0000**	**35.7254**	**35.7254**	**0.0108**	**0.0000**	**35.9517**

3.19 Paving 2 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.6600e-003	0.1017	0.0694	2.6000e-004	6.2600e-003	1.7700e-003	8.0200e-003	1.7200e-003	1.6300e-003	3.3400e-003	0.0000	23.6892	23.6892	1.5000e-004	0.0000	23.6924
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	5.6000e-004	5.6700e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	1.0443	1.0443	5.0000e-005	0.0000	1.0453
Total	**6.0400e-003**	**0.1023**	**0.0751**	**2.7000e-004**	**7.4900e-003**	**1.7800e-003**	**9.2600e-003**	**2.0500e-003**	**1.6400e-003**	**3.6700e-003**	**0.0000**	**24.7335**	**24.7335**	**2.0000e-004**	**0.0000**	**24.7377**

3.20 Architectural Coating 2 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1201					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.2600e-003	0.0965	0.0539	1.2000e-004		3.5600e-003	3.5600e-003		3.2700e-003	3.2700e-003	0.0000	10.9128	10.9128	3.2900e-003	0.0000	10.9819
Total	**0.1274**	**0.0965**	**0.0539**	**1.2000e-004**		**3.5600e-003**	**3.5600e-003**		**3.2700e-003**	**3.2700e-003**	**0.0000**	**10.9128**	**10.9128**	**3.2900e-003**	**0.0000**	**10.9819**

3.20 Architectural Coating 2 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5900e-003	9.6300e-003	0.0971	2.4000e-004	0.0211	1.3000e-004	0.0212	5.5900e-003	1.2000e-004	5.7200e-003	0.0000	17.8744	17.8744	8.3000e-004	0.0000	17.8919
Total	**6.5900e-003**	**9.6300e-003**	**0.0971**	**2.4000e-004**	**0.0211**	**1.3000e-004**	**0.0212**	**5.5900e-003**	**1.2000e-004**	**5.7200e-003**	**0.0000**	**17.8744**	**17.8744**	**8.3000e-004**	**0.0000**	**17.8919**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1201					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4200e-003	6.1400e-003	0.0519	1.2000e-004		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	10.9128	10.9128	3.2900e-003	0.0000	10.9819
Total	**0.1215**	**6.1400e-003**	**0.0519**	**1.2000e-004**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**	**0.0000**	**10.9128**	**10.9128**	**3.2900e-003**	**0.0000**	**10.9819**

3.20 Architectural Coating 2 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5900e-003	9.6300e-003	0.0971	2.4000e-004	0.0211	1.3000e-004	0.0212	5.5900e-003	1.2000e-004	5.7200e-003	0.0000	17.8744	17.8744	8.3000e-004	0.0000	17.8919
Total	**6.5900e-003**	**9.6300e-003**	**0.0971**	**2.4000e-004**	**0.0211**	**1.3000e-004**	**0.0212**	**5.5900e-003**	**1.2000e-004**	**5.7200e-003**	**0.0000**	**17.8744**	**17.8744**	**8.3000e-004**	**0.0000**	**17.8919**

3.21 Misc. Finishes 2 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0130	0.1753	0.1025	2.1000e-004		6.3400e-003	6.3400e-003		5.8300e-003	5.8300e-003	0.0000	20.1985	20.1985	6.0900e-003	0.0000	20.3265
Total	**0.0130**	**0.1753**	**0.1025**	**2.1000e-004**		**6.3400e-003**	**6.3400e-003**		**5.8300e-003**	**5.8300e-003**	**0.0000**	**20.1985**	**20.1985**	**6.0900e-003**	**0.0000**	**20.3265**

3.21 Misc. Finishes 2 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0512	0.5473	0.6406	1.3100e-003	0.0387	0.0102	0.0489	0.0111	9.3800e-003	0.0205	0.0000	119.1674	119.1674	7.9000e-004	0.0000	119.1840
Worker	2.0600e-003	3.0100e-003	0.0304	7.0000e-005	6.5900e-003	4.0000e-005	6.6400e-003	1.7500e-003	4.0000e-005	1.7900e-003	0.0000	5.5945	5.5945	2.6000e-004	0.0000	5.6000
Total	**0.0533**	**0.5503**	**0.6709**	**1.3800e-003**	**0.0453**	**0.0102**	**0.0556**	**0.0128**	**9.4200e-003**	**0.0223**	**0.0000**	**124.7619**	**124.7619**	**1.0500e-003**	**0.0000**	**124.7840**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2600e-003	0.0247	0.0991	2.1000e-004		7.3000e-004	7.3000e-004		6.9000e-004	6.9000e-004	0.0000	20.1985	20.1985	6.0900e-003	0.0000	20.3264
Total	**3.2600e-003**	**0.0247**	**0.0991**	**2.1000e-004**		**7.3000e-004**	**7.3000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**20.1985**	**20.1985**	**6.0900e-003**	**0.0000**	**20.3264**

3.21 Misc. Finishes 2 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0512	0.5473	0.6406	1.3100e-003	0.0387	0.0102	0.0489	0.0111	9.3800e-003	0.0205	0.0000	119.1674	119.1674	7.9000e-004	0.0000	119.1840
Worker	2.0600e-003	3.0100e-003	0.0304	7.0000e-005	6.5900e-003	4.0000e-005	6.6400e-003	1.7500e-003	4.0000e-005	1.7900e-003	0.0000	5.5945	5.5945	2.6000e-004	0.0000	5.6000
Total	**0.0533**	**0.5503**	**0.6709**	**1.3800e-003**	**0.0453**	**0.0102**	**0.0556**	**0.0128**	**9.4200e-003**	**0.0223**	**0.0000**	**124.7619**	**124.7619**	**1.0500e-003**	**0.0000**	**124.7840**

3.22 Roofing & Overhead Work 3 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0215	0.2731	0.1582	3.2000e-004		0.0112	0.0112		0.0103	0.0103	0.0000	30.1077	30.1077	9.0800e-003	0.0000	30.2984
Total	**0.0215**	**0.2731**	**0.1582**	**3.2000e-004**		**0.0112**	**0.0112**		**0.0103**	**0.0103**	**0.0000**	**30.1077**	**30.1077**	**9.0800e-003**	**0.0000**	**30.2984**

3.22 Roofing & Overhead Work 3 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0375	0.4013	0.4697	9.6000e-004	0.0284	7.4800e-003	0.0359	8.1300e-003	6.8800e-003	0.0150	0.0000	87.3895	87.3895	5.8000e-004	0.0000	87.4016
Worker	1.5100e-003	2.2100e-003	0.0223	5.0000e-005	4.8400e-003	3.0000e-005	4.8700e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1026	4.1026	1.9000e-004	0.0000	4.1066
Total	**0.0391**	**0.4036**	**0.4920**	**1.0100e-003**	**0.0332**	**7.5100e-003**	**0.0407**	**9.4100e-003**	**6.9100e-003**	**0.0163**	**0.0000**	**91.4921**	**91.4921**	**7.7000e-004**	**0.0000**	**91.5083**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	7.2000e-003	0.0522	0.1533	3.2000e-004		2.9800e-003	2.9800e-003		2.7800e-003	2.7800e-003	0.0000	30.1077	30.1077	9.0800e-003	0.0000	30.2984
Total	**7.2000e-003**	**0.0522**	**0.1533**	**3.2000e-004**		**2.9800e-003**	**2.9800e-003**		**2.7800e-003**	**2.7800e-003**	**0.0000**	**30.1077**	**30.1077**	**9.0800e-003**	**0.0000**	**30.2984**

3.22 Roofing & Overhead Work 3 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0375	0.4013	0.4697	9.6000e-004	0.0284	7.4800e-003	0.0359	8.1300e-003	6.8800e-003	0.0150	0.0000	87.3895	87.3895	5.8000e-004	0.0000	87.4016
Worker	1.5100e-003	2.2100e-003	0.0223	5.0000e-005	4.8400e-003	3.0000e-005	4.8700e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1026	4.1026	1.9000e-004	0.0000	4.1066
Total	**0.0391**	**0.4036**	**0.4920**	**1.0100e-003**	**0.0332**	**7.5100e-003**	**0.0407**	**9.4100e-003**	**6.9100e-003**	**0.0163**	**0.0000**	**91.4921**	**91.4921**	**7.7000e-004**	**0.0000**	**91.5083**

3.23 Steel & Roof 4 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0264	0.3400	0.1705	3.6000e-004		0.0133	0.0133		0.0123	0.0123	0.0000	33.7065	33.7065	0.0102	0.0000	33.9200
Total	**0.0264**	**0.3400**	**0.1705**	**3.6000e-004**		**0.0133**	**0.0133**		**0.0123**	**0.0123**	**0.0000**	**33.7065**	**33.7065**	**0.0102**	**0.0000**	**33.9200**

3.23 Steel & Roof 4 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0392	0.4196	0.4911	1.0000e-003	0.0297	7.8200e-003	0.0375	8.4900e-003	7.1900e-003	0.0157	0.0000	91.3617	91.3617	6.1000e-004	0.0000	91.3744
Worker	1.5800e-003	2.3100e-003	0.0233	6.0000e-005	5.0600e-003	3.0000e-005	5.0900e-003	1.3400e-003	3.0000e-005	1.3700e-003	0.0000	4.2891	4.2891	2.0000e-004	0.0000	4.2933
Total	**0.0408**	**0.4219**	**0.5144**	**1.0600e-003**	**0.0347**	**7.8500e-003**	**0.0426**	**9.8300e-003**	**7.2200e-003**	**0.0171**	**0.0000**	**95.6508**	**95.6508**	**8.1000e-004**	**0.0000**	**95.6677**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0115	0.1090	0.1653	3.6000e-004		4.7200e-003	4.7200e-003		4.3800e-003	4.3800e-003	0.0000	33.7064	33.7064	0.0102	0.0000	33.9199
Total	**0.0115**	**0.1090**	**0.1653**	**3.6000e-004**		**4.7200e-003**	**4.7200e-003**		**4.3800e-003**	**4.3800e-003**	**0.0000**	**33.7064**	**33.7064**	**0.0102**	**0.0000**	**33.9199**

3.23 Steel & Roof 4 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0392	0.4196	0.4911	1.0000e-003	0.0297	7.8200e-003	0.0375	8.4900e-003	7.1900e-003	0.0157	0.0000	91.3617	91.3617	6.1000e-004	0.0000	91.3744
Worker	1.5800e-003	2.3100e-003	0.0233	6.0000e-005	5.0600e-003	3.0000e-005	5.0900e-003	1.3400e-003	3.0000e-005	1.3700e-003	0.0000	4.2891	4.2891	2.0000e-004	0.0000	4.2933
Total	**0.0408**	**0.4219**	**0.5144**	**1.0600e-003**	**0.0347**	**7.8500e-003**	**0.0426**	**9.8300e-003**	**7.2200e-003**	**0.0171**	**0.0000**	**95.6508**	**95.6508**	**8.1000e-004**	**0.0000**	**95.6677**

3.24 Paving 3 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0235	0.2724	0.1431	2.8000e-004		0.0123	0.0123		0.0113	0.0113	0.0000	26.7941	26.7941	8.0800e-003	0.0000	26.9638
Paving	0.0177					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0412**	**0.2724**	**0.1431**	**2.8000e-004**		**0.0123**	**0.0123**		**0.0113**	**0.0113**	**0.0000**	**26.7941**	**26.7941**	**8.0800e-003**	**0.0000**	**26.9638**

3.24 Paving 3 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.5300e-003	0.0815	0.0556	2.1000e-004	6.2800e-003	1.4200e-003	7.6900e-003	1.6900e-003	1.3000e-003	2.9900e-003	0.0000	18.9871	18.9871	1.2000e-004	0.0000	18.9897
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	4.2000e-004	4.2500e-003	1.0000e-005	9.2000e-004	1.0000e-005	9.3000e-004	2.5000e-004	1.0000e-005	2.5000e-004	0.0000	0.7832	0.7832	4.0000e-005	0.0000	0.7840
Total	**4.8200e-003**	**0.0819**	**0.0599**	**2.2000e-004**	**7.2000e-003**	**1.4300e-003**	**8.6200e-003**	**1.9400e-003**	**1.3100e-003**	**3.2400e-003**	**0.0000**	**19.7704**	**19.7704**	**1.6000e-004**	**0.0000**	**19.7737**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3500e-003	0.0818	0.1490	2.8000e-004		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	26.7940	26.7940	8.0800e-003	0.0000	26.9638
Paving	0.0177					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0230**	**0.0818**	**0.1490**	**2.8000e-004**		**3.7100e-003**	**3.7100e-003**		**3.7100e-003**	**3.7100e-003**	**0.0000**	**26.7940**	**26.7940**	**8.0800e-003**	**0.0000**	**26.9638**

3.24 Paving 3 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.5300e-003	0.0815	0.0556	2.1000e-004	6.2800e-003	1.4200e-003	7.6900e-003	1.6900e-003	1.3000e-003	2.9900e-003	0.0000	18.9871	18.9871	1.2000e-004	0.0000	18.9897
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	4.2000e-004	4.2500e-003	1.0000e-005	9.2000e-004	1.0000e-005	9.3000e-004	2.5000e-004	1.0000e-005	2.5000e-004	0.0000	0.7832	0.7832	4.0000e-005	0.0000	0.7840
Total	**4.8200e-003**	**0.0819**	**0.0599**	**2.2000e-004**	**7.2000e-003**	**1.4300e-003**	**8.6200e-003**	**1.9400e-003**	**1.3100e-003**	**3.2400e-003**	**0.0000**	**19.7704**	**19.7704**	**1.6000e-004**	**0.0000**	**19.7737**

3.24 Paving 3 - 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	7.4400e-003	0.0844	0.0454	9.0000e-005		3.8200e-003	3.8200e-003		3.5200e-003	3.5200e-003	0.0000	8.7845	8.7845	2.6900e-003	0.0000	8.8410
Paving	5.8900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0133**	**0.0844**	**0.0454**	**9.0000e-005**		**3.8200e-003**	**3.8200e-003**		**3.5200e-003**	**3.5200e-003**	**0.0000**	**8.7845**	**8.7845**	**2.6900e-003**	**0.0000**	**8.8410**

3.24 Paving 3 - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-003	0.0249	0.0178	7.0000e-005	5.4600e-003	4.3000e-004	5.8900e-003	1.3900e-003	4.0000e-004	1.7900e-003	0.0000	6.2218	6.2218	4.0000e-005	0.0000	6.2226
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	1.3000e-004	1.2700e-003	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2507	0.2507	1.0000e-005	0.0000	0.2510
Total	**1.4900e-003**	**0.0250**	**0.0191**	**7.0000e-005**	**5.7700e-003**	**4.3000e-004**	**6.2000e-003**	**1.4700e-003**	**4.0000e-004**	**1.8700e-003**	**0.0000**	**6.4725**	**6.4725**	**5.0000e-005**	**0.0000**	**6.4736**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7800e-003	0.0273	0.0497	9.0000e-005		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	8.7845	8.7845	2.6900e-003	0.0000	8.8410
Paving	5.8900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.6700e-003**	**0.0273**	**0.0497**	**9.0000e-005**		**1.2400e-003**	**1.2400e-003**		**1.2400e-003**	**1.2400e-003**	**0.0000**	**8.7845**	**8.7845**	**2.6900e-003**	**0.0000**	**8.8410**

3.24 Paving 3 - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-003	0.0249	0.0178	7.0000e-005	5.4600e-003	4.3000e-004	5.8900e-003	1.3900e-003	4.0000e-004	1.7900e-003	0.0000	6.2218	6.2218	4.0000e-005	0.0000	6.2226
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	1.3000e-004	1.2700e-003	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2507	0.2507	1.0000e-005	0.0000	0.2510
Total	**1.4900e-003**	**0.0250**	**0.0191**	**7.0000e-005**	**5.7700e-003**	**4.3000e-004**	**6.2000e-003**	**1.4700e-003**	**4.0000e-004**	**1.8700e-003**	**0.0000**	**6.4725**	**6.4725**	**5.0000e-005**	**0.0000**	**6.4736**

3.25 Architectural Coating 1 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0290	0.3861	0.2157	4.6000e-004		0.0142	0.0142		0.0131	0.0131	0.0000	43.6511	43.6511	0.0132	0.0000	43.9276
Total	**0.2890**	**0.3861**	**0.2157**	**4.6000e-004**		**0.0142**	**0.0142**		**0.0131**	**0.0131**	**0.0000**	**43.6511**	**43.6511**	**0.0132**	**0.0000**	**43.9276**

3.25 Architectural Coating 1 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5900e-003	9.6300e-003	0.0971	2.4000e-004	0.0211	1.3000e-004	0.0212	5.5900e-003	1.2000e-004	5.7200e-003	0.0000	17.8744	17.8744	8.3000e-004	0.0000	17.8919
Total	**6.5900e-003**	**9.6300e-003**	**0.0971**	**2.4000e-004**	**0.0211**	**1.3000e-004**	**0.0212**	**5.5900e-003**	**1.2000e-004**	**5.7200e-003**	**0.0000**	**17.8744**	**17.8744**	**8.3000e-004**	**0.0000**	**17.8919**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6600e-003	0.0245	0.2077	4.6000e-004		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	43.6510	43.6510	0.0132	0.0000	43.9275
Total	**0.2657**	**0.0245**	**0.2077**	**4.6000e-004**		**7.6000e-004**	**7.6000e-004**		**7.6000e-004**	**7.6000e-004**	**0.0000**	**43.6510**	**43.6510**	**0.0132**	**0.0000**	**43.9275**

3.25 Architectural Coating 1 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5900e-003	9.6300e-003	0.0971	2.4000e-004	0.0211	1.3000e-004	0.0212	5.5900e-003	1.2000e-004	5.7200e-003	0.0000	17.8744	17.8744	8.3000e-004	0.0000	17.8919
Total	**6.5900e-003**	**9.6300e-003**	**0.0971**	**2.4000e-004**	**0.0211**	**1.3000e-004**	**0.0212**	**5.5900e-003**	**1.2000e-004**	**5.7200e-003**	**0.0000**	**17.8744**	**17.8744**	**8.3000e-004**	**0.0000**	**17.8919**

3.25 Architectural Coating 1 - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3033					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0319	0.4160	0.2336	5.4000e-004		0.0152	0.0152		0.0140	0.0140	0.0000	50.0693	50.0693	0.0153	0.0000	50.3915
Total	**0.3353**	**0.4160**	**0.2336**	**5.4000e-004**		**0.0152**	**0.0152**		**0.0140**	**0.0140**	**0.0000**	**50.0693**	**50.0693**	**0.0153**	**0.0000**	**50.3915**

3.25 Architectural Coating 1 - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8600e-003	0.0101	0.1014	2.8000e-004	0.0246	1.5000e-004	0.0247	6.5300e-003	1.4000e-004	6.6700e-003	0.0000	20.0260	20.0260	8.9000e-004	0.0000	20.0447
Total	**6.8600e-003**	**0.0101**	**0.1014**	**2.8000e-004**	**0.0246**	**1.5000e-004**	**0.0247**	**6.5300e-003**	**1.4000e-004**	**6.6700e-003**	**0.0000**	**20.0260**	**20.0260**	**8.9000e-004**	**0.0000**	**20.0447**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3033					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6100e-003	0.0286	0.2423	5.4000e-004		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	50.0693	50.0693	0.0153	0.0000	50.3914
Total	**0.3099**	**0.0286**	**0.2423**	**5.4000e-004**		**8.8000e-004**	**8.8000e-004**		**8.8000e-004**	**8.8000e-004**	**0.0000**	**50.0693**	**50.0693**	**0.0153**	**0.0000**	**50.3914**

3.25 Architectural Coating 1 - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8600e-003	0.0101	0.1014	2.8000e-004	0.0246	1.5000e-004	0.0247	6.5300e-003	1.4000e-004	6.6700e-003	0.0000	20.0260	20.0260	8.9000e-004	0.0000	20.0447
Total	**6.8600e-003**	**0.0101**	**0.1014**	**2.8000e-004**	**0.0246**	**1.5000e-004**	**0.0247**	**6.5300e-003**	**1.4000e-004**	**6.6700e-003**	**0.0000**	**20.0260**	**20.0260**	**8.9000e-004**	**0.0000**	**20.0447**

3.26 Misc. Finishes 3 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.3600e-003	0.0994	0.0581	1.2000e-004		3.5900e-003	3.5900e-003		3.3000e-003	3.3000e-003	0.0000	11.4458	11.4458	3.4500e-003	0.0000	11.5183
Total	**7.3600e-003**	**0.0994**	**0.0581**	**1.2000e-004**		**3.5900e-003**	**3.5900e-003**		**3.3000e-003**	**3.3000e-003**	**0.0000**	**11.4458**	**11.4458**	**3.4500e-003**	**0.0000**	**11.5183**

3.26 Misc. Finishes 3 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0290	0.3101	0.3630	7.4000e-004	0.0219	5.7800e-003	0.0277	6.2800e-003	5.3200e-003	0.0116	0.0000	67.5282	67.5282	4.5000e-004	0.0000	67.5376
Worker	1.1700e-003	1.7100e-003	0.0172	4.0000e-005	3.7400e-003	2.0000e-005	3.7600e-003	9.9000e-004	2.0000e-005	1.0100e-003	0.0000	3.1702	3.1702	1.5000e-004	0.0000	3.1733
Total	**0.0302**	**0.3118**	**0.3802**	**7.8000e-004**	**0.0257**	**5.8000e-003**	**0.0315**	**7.2700e-003**	**5.3400e-003**	**0.0126**	**0.0000**	**70.6984**	**70.6984**	**6.0000e-004**	**0.0000**	**70.7109**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8500e-003	0.0140	0.0562	1.2000e-004		4.1000e-004	4.1000e-004		3.9000e-004	3.9000e-004	0.0000	11.4458	11.4458	3.4500e-003	0.0000	11.5183
Total	**1.8500e-003**	**0.0140**	**0.0562**	**1.2000e-004**		**4.1000e-004**	**4.1000e-004**		**3.9000e-004**	**3.9000e-004**	**0.0000**	**11.4458**	**11.4458**	**3.4500e-003**	**0.0000**	**11.5183**

3.26 Misc. Finishes 3 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0290	0.3101	0.3630	7.4000e-004	0.0219	5.7800e-003	0.0277	6.2800e-003	5.3200e-003	0.0116	0.0000	67.5282	67.5282	4.5000e-004	0.0000	67.5376
Worker	1.1700e-003	1.7100e-003	0.0172	4.0000e-005	3.7400e-003	2.0000e-005	3.7600e-003	9.9000e-004	2.0000e-005	1.0100e-003	0.0000	3.1702	3.1702	1.5000e-004	0.0000	3.1733
Total	**0.0302**	**0.3118**	**0.3802**	**7.8000e-004**	**0.0257**	**5.8000e-003**	**0.0315**	**7.2700e-003**	**5.3400e-003**	**0.0126**	**0.0000**	**70.6984**	**70.6984**	**6.0000e-004**	**0.0000**	**70.7109**

3.26 Misc. Finishes 3 - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.8900e-003	0.0649	0.0384	9.0000e-005		2.3000e-003	2.3000e-003		2.1200e-003	2.1200e-003	0.0000	7.9445	7.9445	2.4300e-003	0.0000	7.9956
Total	**4.8900e-003**	**0.0649**	**0.0384**	**9.0000e-005**		**2.3000e-003**	**2.3000e-003**		**2.1200e-003**	**2.1200e-003**	**0.0000**	**7.9445**	**7.9445**	**2.4300e-003**	**0.0000**	**7.9956**

3.26 Misc. Finishes 3 - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0185	0.1984	0.2419	5.2000e-004	0.0155	3.6600e-003	0.0191	4.4300e-003	3.3600e-003	7.8000e-003	0.0000	46.8616	46.8616	3.0000e-004	0.0000	46.8680
Worker	7.4000e-004	1.0800e-003	0.0109	3.0000e-005	2.6400e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.2000e-004	0.0000	2.1490	2.1490	1.0000e-004	0.0000	2.1510
Total	**0.0192**	**0.1995**	**0.2527**	**5.5000e-004**	**0.0181**	**3.6800e-003**	**0.0218**	**5.1300e-003**	**3.3800e-003**	**8.5200e-003**	**0.0000**	**49.0106**	**49.0106**	**4.0000e-004**	**0.0000**	**49.0190**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.2700e-003	9.5500e-003	0.0396	9.0000e-005		2.5000e-004	2.5000e-004		2.4000e-004	2.4000e-004	0.0000	7.9445	7.9445	2.4300e-003	0.0000	7.9956
Total	**1.2700e-003**	**9.5500e-003**	**0.0396**	**9.0000e-005**		**2.5000e-004**	**2.5000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**7.9445**	**7.9445**	**2.4300e-003**	**0.0000**	**7.9956**

3.26 Misc. Finishes 3 - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0185	0.1984	0.2419	5.2000e-004	0.0155	3.6600e-003	0.0191	4.4300e-003	3.3600e-003	7.8000e-003	0.0000	46.8616	46.8616	3.0000e-004	0.0000	46.8680
Worker	7.4000e-004	1.0800e-003	0.0109	3.0000e-005	2.6400e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.2000e-004	0.0000	2.1490	2.1490	1.0000e-004	0.0000	2.1510
Total	**0.0192**	**0.1995**	**0.2527**	**5.5000e-004**	**0.0181**	**3.6800e-003**	**0.0218**	**5.1300e-003**	**3.3800e-003**	**8.5200e-003**	**0.0000**	**49.0106**	**49.0106**	**4.0000e-004**	**0.0000**	**49.0190**

3.27 Architectural Coating 3 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0958					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8500e-003	0.0912	0.0509	1.1000e-004		3.3600e-003	3.3600e-003		3.0900e-003	3.0900e-003	0.0000	10.3065	10.3065	3.1100e-003	0.0000	10.3718
Total	**0.1026**	**0.0912**	**0.0509**	**1.1000e-004**		**3.3600e-003**	**3.3600e-003**		**3.0900e-003**	**3.0900e-003**	**0.0000**	**10.3065**	**10.3065**	**3.1100e-003**	**0.0000**	**10.3718**

3.27 Architectural Coating 3 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2200e-003	9.1000e-003	0.0917	2.2000e-004	0.0199	1.3000e-004	0.0200	5.2800e-003	1.2000e-004	5.4000e-003	0.0000	16.8814	16.8814	7.9000e-004	0.0000	16.8979
Total	**6.2200e-003**	**9.1000e-003**	**0.0917**	**2.2000e-004**	**0.0199**	**1.3000e-004**	**0.0200**	**5.2800e-003**	**1.2000e-004**	**5.4000e-003**	**0.0000**	**16.8814**	**16.8814**	**7.9000e-004**	**0.0000**	**16.8979**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0958					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3400e-003	5.8000e-003	0.0490	1.1000e-004		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	10.3065	10.3065	3.1100e-003	0.0000	10.3718
Total	**0.0971**	**5.8000e-003**	**0.0490**	**1.1000e-004**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**10.3065**	**10.3065**	**3.1100e-003**	**0.0000**	**10.3718**

3.27 Architectural Coating 3 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2200e-003	9.1000e-003	0.0917	2.2000e-004	0.0199	1.3000e-004	0.0200	5.2800e-003	1.2000e-004	5.4000e-003	0.0000	16.8814	16.8814	7.9000e-004	0.0000	16.8979
Total	**6.2200e-003**	**9.1000e-003**	**0.0917**	**2.2000e-004**	**0.0199**	**1.3000e-004**	**0.0200**	**5.2800e-003**	**1.2000e-004**	**5.4000e-003**	**0.0000**	**16.8814**	**16.8814**	**7.9000e-004**	**0.0000**	**16.8979**

3.27 Architectural Coating 3 - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.6300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8000e-004	4.9500e-003	2.7800e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.7000e-004	1.7000e-004	0.0000	0.5961	0.5961	1.8000e-004	0.0000	0.5999
Total	**6.0100e-003**	**4.9500e-003**	**2.7800e-003**	**1.0000e-005**		**1.8000e-004**	**1.8000e-004**		**1.7000e-004**	**1.7000e-004**	**0.0000**	**0.5961**	**0.5961**	**1.8000e-004**	**0.0000**	**0.5999**

3.27 Architectural Coating 3 - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	3.3000e-004	4.8000e-004	4.8300e-003	1.0000e-005	1.1700e-003	1.0000e-005	1.1800e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9536	0.9536	4.0000e-005	0.0000	0.9545
Total	**3.3000e-004**	**4.8000e-004**	**4.8300e-003**	**1.0000e-005**	**1.1700e-003**	**1.0000e-005**	**1.1800e-003**	**3.1000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9536**	**0.9536**	**4.0000e-005**	**0.0000**	**0.9545**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	5.6300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-005	3.4000e-004	2.8800e-003	1.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.5961	0.5961	1.8000e-004	0.0000	0.5999
Total	**5.7100e-003**	**3.4000e-004**	**2.8800e-003**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.5961**	**0.5961**	**1.8000e-004**	**0.0000**	**0.5999**

3.27 Architectural Coating 3 - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	3.3000e-004	4.8000e-004	4.8300e-003	1.0000e-005	1.1700e-003	1.0000e-005	1.1800e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9536	0.9536	4.0000e-005	0.0000	0.9545
Total	**3.3000e-004**	**4.8000e-004**	**4.8300e-003**	**1.0000e-005**	**1.1700e-003**	**1.0000e-005**	**1.1800e-003**	**3.1000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9536**	**0.9536**	**4.0000e-005**	**0.0000**	**0.9545**

3.28 Paving 1 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.3200e-003	0.1087	0.0553	1.1000e-004		4.6600e-003	4.6600e-003		4.2900e-003	4.2900e-003	0.0000	10.6821	10.6821	3.2200e-003	0.0000	10.7497
Paving	1.5900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1087**	**0.0553**	**1.1000e-004**		**4.6600e-003**	**4.6600e-003**		**4.2900e-003**	**4.2900e-003**	**0.0000**	**10.6821**	**10.6821**	**3.2200e-003**	**0.0000**	**10.7497**

3.28 Paving 1 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1800e-003	0.0391	0.0267	1.0000e-004	0.0275	6.8000e-004	0.0282	6.8200e-003	6.2000e-004	7.4500e-003	0.0000	9.1083	9.1083	6.0000e-005	0.0000	9.1095
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	1.5000e-004	1.5200e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2797	0.2797	1.0000e-005	0.0000	0.2800
Total	**2.2800e-003**	**0.0393**	**0.0282**	**1.0000e-004**	**0.0278**	**6.8000e-004**	**0.0285**	**6.9100e-003**	**6.2000e-004**	**7.5400e-003**	**0.0000**	**9.3880**	**9.3880**	**7.0000e-005**	**0.0000**	**9.3895**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3300e-003	0.0389	0.0599	1.1000e-004		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	10.6821	10.6821	3.2200e-003	0.0000	10.7497
Paving	1.5900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.9200e-003**	**0.0389**	**0.0599**	**1.1000e-004**		**1.6500e-003**	**1.6500e-003**		**1.6500e-003**	**1.6500e-003**	**0.0000**	**10.6821**	**10.6821**	**3.2200e-003**	**0.0000**	**10.7497**

3.28 Paving 1 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1800e-003	0.0391	0.0267	1.0000e-004	0.0275	6.8000e-004	0.0282	6.8200e-003	6.2000e-004	7.4500e-003	0.0000	9.1083	9.1083	6.0000e-005	0.0000	9.1095
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	1.5000e-004	1.5200e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2797	0.2797	1.0000e-005	0.0000	0.2800
Total	**2.2800e-003**	**0.0393**	**0.0282**	**1.0000e-004**	**0.0278**	**6.8000e-004**	**0.0285**	**6.9100e-003**	**6.2000e-004**	**7.5400e-003**	**0.0000**	**9.3880**	**9.3880**	**7.0000e-005**	**0.0000**	**9.3895**

3.28 Paving 1 - 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	0.1222	1.3935	0.7285	1.5700e-003		0.0601	0.0601		0.0553	0.0553	0.0000	145.3445	145.3445	0.0445	0.0000	146.2797
Paving	0.0220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1442**	**1.3935**	**0.7285**	**1.5700e-003**		**0.0601**	**0.0601**		**0.0553**	**0.0553**	**0.0000**	**145.3445**	**145.3445**	**0.0445**	**0.0000**	**146.2797**

3.28 Paving 1 - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0279	0.4949	0.3548	1.3800e-003	0.0351	8.6400e-003	0.0437	9.5800e-003	7.9500e-003	0.0175	0.0000	123.8626	123.8626	7.8000e-004	0.0000	123.8790
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2700e-003	1.8700e-003	0.0188	5.0000e-005	4.5600e-003	3.0000e-005	4.5900e-003	1.2100e-003	3.0000e-005	1.2400e-003	0.0000	3.7160	3.7160	1.7000e-004	0.0000	3.7194
Total	**0.0292**	**0.4968**	**0.3736**	**1.4300e-003**	**0.0397**	**8.6700e-003**	**0.0483**	**0.0108**	**7.9800e-003**	**0.0188**	**0.0000**	**127.5785**	**127.5785**	**9.5000e-004**	**0.0000**	**127.5984**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0322	0.5374	0.8287	1.5700e-003		0.0228	0.0228		0.0228	0.0228	0.0000	145.3443	145.3443	0.0445	0.0000	146.2795
Paving	0.0220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0542**	**0.5374**	**0.8287**	**1.5700e-003**		**0.0228**	**0.0228**		**0.0228**	**0.0228**	**0.0000**	**145.3443**	**145.3443**	**0.0445**	**0.0000**	**146.2795**

3.28 Paving 1 - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0279	0.4949	0.3548	1.3800e-003	0.0351	8.6400e-003	0.0437	9.5800e-003	7.9500e-003	0.0175	0.0000	123.8626	123.8626	7.8000e-004	0.0000	123.8790
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2700e-003	1.8700e-003	0.0188	5.0000e-005	4.5600e-003	3.0000e-005	4.5900e-003	1.2100e-003	3.0000e-005	1.2400e-003	0.0000	3.7160	3.7160	1.7000e-004	0.0000	3.7194
Total	**0.0292**	**0.4968**	**0.3736**	**1.4300e-003**	**0.0397**	**8.6700e-003**	**0.0483**	**0.0108**	**7.9800e-003**	**0.0188**	**0.0000**	**127.5785**	**127.5785**	**9.5000e-004**	**0.0000**	**127.5984**

3.29 Roofing & Overhead Work 4 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.9100e-003	0.0497	0.0288	6.0000e-005		2.0400e-003	2.0400e-003		1.8800e-003	1.8800e-003	0.0000	5.4741	5.4741	1.6500e-003	0.0000	5.5088
Total	**3.9100e-003**	**0.0497**	**0.0288**	**6.0000e-005**		**2.0400e-003**	**2.0400e-003**		**1.8800e-003**	**1.8800e-003**	**0.0000**	**5.4741**	**5.4741**	**1.6500e-003**	**0.0000**	**5.5088**

3.29 Roofing & Overhead Work 4 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8300e-003	0.0730	0.0854	1.7000e-004	5.1600e-003	1.3600e-003	6.5200e-003	1.4800e-003	1.2500e-003	2.7300e-003	0.0000	15.8890	15.8890	1.1000e-004	0.0000	15.8912
Worker	2.7000e-004	4.0000e-004	4.0500e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7459	0.7459	3.0000e-005	0.0000	0.7467
Total	**7.1000e-003**	**0.0734**	**0.0895**	**1.8000e-004**	**6.0400e-003**	**1.3700e-003**	**7.4000e-003**	**1.7100e-003**	**1.2600e-003**	**2.9700e-003**	**0.0000**	**16.6349**	**16.6349**	**1.4000e-004**	**0.0000**	**16.6379**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3100e-003	9.4800e-003	0.0279	6.0000e-005		5.4000e-004	5.4000e-004		5.1000e-004	5.1000e-004	0.0000	5.4741	5.4741	1.6500e-003	0.0000	5.5088
Total	**1.3100e-003**	**9.4800e-003**	**0.0279**	**6.0000e-005**		**5.4000e-004**	**5.4000e-004**		**5.1000e-004**	**5.1000e-004**	**0.0000**	**5.4741**	**5.4741**	**1.6500e-003**	**0.0000**	**5.5088**

3.29 Roofing & Overhead Work 4 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8300e-003	0.0730	0.0854	1.7000e-004	5.1600e-003	1.3600e-003	6.5200e-003	1.4800e-003	1.2500e-003	2.7300e-003	0.0000	15.8890	15.8890	1.1000e-004	0.0000	15.8912
Worker	2.7000e-004	4.0000e-004	4.0500e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7459	0.7459	3.0000e-005	0.0000	0.7467
Total	**7.1000e-003**	**0.0734**	**0.0895**	**1.8000e-004**	**6.0400e-003**	**1.3700e-003**	**7.4000e-003**	**1.7100e-003**	**1.2600e-003**	**2.9700e-003**	**0.0000**	**16.6349**	**16.6349**	**1.4000e-004**	**0.0000**	**16.6379**

3.29 Roofing & Overhead Work 4 - 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	0.0184	0.2298	0.1350	2.9000e-004		9.3200e-003	9.3200e-003		8.5700e-003	8.5700e-003	0.0000	26.9141	26.9141	8.2500e-003	0.0000	27.0873
Total	**0.0184**	**0.2298**	**0.1350**	**2.9000e-004**		**9.3200e-003**	**9.3200e-003**		**8.5700e-003**	**8.5700e-003**	**0.0000**	**26.9141**	**26.9141**	**8.2500e-003**	**0.0000**	**27.0873**

3.29 Roofing & Overhead Work 4 - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0308	0.3307	0.4031	8.7000e-004	0.0258	6.0900e-003	0.0319	7.3900e-003	5.6000e-003	0.0130	0.0000	78.1026	78.1026	5.1000e-004	0.0000	78.1133
Worker	1.2300e-003	1.8000e-003	0.0181	5.0000e-005	4.4000e-003	3.0000e-005	4.4200e-003	1.1700e-003	3.0000e-005	1.1900e-003	0.0000	3.5817	3.5817	1.6000e-004	0.0000	3.5850
Total	**0.0320**	**0.3325**	**0.4212**	**9.2000e-004**	**0.0302**	**6.1200e-003**	**0.0363**	**8.5600e-003**	**5.6300e-003**	**0.0142**	**0.0000**	**81.6843**	**81.6843**	**6.7000e-004**	**0.0000**	**81.6983**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3000e-003	0.0453	0.1391	2.9000e-004		2.4900e-003	2.4900e-003		2.3200e-003	2.3200e-003	0.0000	26.9140	26.9140	8.2500e-003	0.0000	27.0872
Total	**6.3000e-003**	**0.0453**	**0.1391**	**2.9000e-004**		**2.4900e-003**	**2.4900e-003**		**2.3200e-003**	**2.3200e-003**	**0.0000**	**26.9140**	**26.9140**	**8.2500e-003**	**0.0000**	**27.0872**

3.29 Roofing & Overhead Work 4 - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0308	0.3307	0.4031	8.7000e-004	0.0258	6.0900e-003	0.0319	7.3900e-003	5.6000e-003	0.0130	0.0000	78.1026	78.1026	5.1000e-004	0.0000	78.1133
Worker	1.2300e-003	1.8000e-003	0.0181	5.0000e-005	4.4000e-003	3.0000e-005	4.4200e-003	1.1700e-003	3.0000e-005	1.1900e-003	0.0000	3.5817	3.5817	1.6000e-004	0.0000	3.5850
Total	**0.0320**	**0.3325**	**0.4212**	**9.2000e-004**	**0.0302**	**6.1200e-003**	**0.0363**	**8.5600e-003**	**5.6300e-003**	**0.0142**	**0.0000**	**81.6843**	**81.6843**	**6.7000e-004**	**0.0000**	**81.6983**

3.30 Architectural Coating 4 - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1407					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6000e-003	0.0990	0.0556	1.3000e-004		3.6200e-003	3.6200e-003		3.3300e-003	3.3300e-003	0.0000	11.9213	11.9213	3.6500e-003	0.0000	11.9980
Total	**0.1483**	**0.0990**	**0.0556**	**1.3000e-004**		**3.6200e-003**	**3.6200e-003**		**3.3300e-003**	**3.3300e-003**	**0.0000**	**11.9213**	**11.9213**	**3.6500e-003**	**0.0000**	**11.9980**

3.30 Architectural Coating 4 - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5300e-003	9.6000e-003	0.0966	2.6000e-004	0.0234	1.4000e-004	0.0236	6.2200e-003	1.3000e-004	6.3500e-003	0.0000	19.0723	19.0723	8.5000e-004	0.0000	19.0902
Total	**6.5300e-003**	**9.6000e-003**	**0.0966**	**2.6000e-004**	**0.0234**	**1.4000e-004**	**0.0236**	**6.2200e-003**	**1.3000e-004**	**6.3500e-003**	**0.0000**	**19.0723**	**19.0723**	**8.5000e-004**	**0.0000**	**19.0902**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1407					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5700e-003	6.8200e-003	0.0577	1.3000e-004		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	11.9213	11.9213	3.6500e-003	0.0000	11.9980
Total	**0.1423**	**6.8200e-003**	**0.0577**	**1.3000e-004**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**	**0.0000**	**11.9213**	**11.9213**	**3.6500e-003**	**0.0000**	**11.9980**

3.30 Architectural Coating 4 - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5300e-003	9.6000e-003	0.0966	2.6000e-004	0.0234	1.4000e-004	0.0236	6.2200e-003	1.3000e-004	6.3500e-003	0.0000	19.0723	19.0723	8.5000e-004	0.0000	19.0902
Total	**6.5300e-003**	**9.6000e-003**	**0.0966**	**2.6000e-004**	**0.0234**	**1.4000e-004**	**0.0236**	**6.2200e-003**	**1.3000e-004**	**6.3500e-003**	**0.0000**	**19.0723**	**19.0723**	**8.5000e-004**	**0.0000**	**19.0902**

3.31 Paving 4 - 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	0.0382	0.4343	0.2336	4.9000e-004		0.0197	0.0197		0.0181	0.0181	0.0000	45.1772	45.1772	0.0138	0.0000	45.4679
Paving	0.0236					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0618**	**0.4343**	**0.2336**	**4.9000e-004**		**0.0197**	**0.0197**		**0.0181**	**0.0181**	**0.0000**	**45.1772**	**45.1772**	**0.0138**	**0.0000**	**45.4679**

3.31 Paving 4 - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0400e-003	0.1071	0.0768	3.0000e-004	7.2000e-003	1.8700e-003	9.0700e-003	1.9800e-003	1.7200e-003	3.7000e-003	0.0000	26.8064	26.8064	1.7000e-004	0.0000	26.8100
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	6.5000e-004	6.5300e-003	2.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2894	1.2894	6.0000e-005	0.0000	1.2906
Total	**6.4800e-003**	**0.1078**	**0.0833**	**3.2000e-004**	**8.7800e-003**	**1.8800e-003**	**0.0107**	**2.4000e-003**	**1.7300e-003**	**4.1300e-003**	**0.0000**	**28.0958**	**28.0958**	**2.3000e-004**	**0.0000**	**28.1006**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	9.1800e-003	0.1403	0.2554	4.9000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	45.1772	45.1772	0.0138	0.0000	45.4679
Paving	0.0236					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0327**	**0.1403**	**0.2554**	**4.9000e-004**		**6.3700e-003**	**6.3700e-003**		**6.3700e-003**	**6.3700e-003**	**0.0000**	**45.1772**	**45.1772**	**0.0138**	**0.0000**	**45.4679**

3.31 Paving 4 - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0400e-003	0.1071	0.0768	3.0000e-004	7.2000e-003	1.8700e-003	9.0700e-003	1.9800e-003	1.7200e-003	3.7000e-003	0.0000	26.8064	26.8064	1.7000e-004	0.0000	26.8100
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	6.5000e-004	6.5300e-003	2.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2894	1.2894	6.0000e-005	0.0000	1.2906
Total	**6.4800e-003**	**0.1078**	**0.0833**	**3.2000e-004**	**8.7800e-003**	**1.8800e-003**	**0.0107**	**2.4000e-003**	**1.7300e-003**	**4.1300e-003**	**0.0000**	**28.0958**	**28.0958**	**2.3000e-004**	**0.0000**	**28.1006**

3.32 Misc. Finishes 4 - 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	0.0126	0.1676	0.0991	2.2000e-004		5.9400e-003	5.9400e-003		5.4600e-003	5.4600e-003	0.0000	20.5233	20.5233	6.2900e-003	0.0000	20.6553
Total	**0.0126**	**0.1676**	**0.0991**	**2.2000e-004**		**5.9400e-003**	**5.9400e-003**		**5.4600e-003**	**5.4600e-003**	**0.0000**	**20.5233**	**20.5233**	**6.2900e-003**	**0.0000**	**20.6553**

3.32 Misc. Finishes 4 - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0477	0.5126	0.6248	1.3500e-003	0.0400	9.4500e-003	0.0495	0.0115	8.6900e-003	0.0201	0.0000	121.0591	121.0591	7.9000e-004	0.0000	121.0756
Worker	1.9000e-003	2.7900e-003	0.0281	8.0000e-005	6.8100e-003	4.0000e-005	6.8600e-003	1.8100e-003	4.0000e-005	1.8500e-003	0.0000	5.5516	5.5516	2.5000e-004	0.0000	5.5568
Total	**0.0496**	**0.5154**	**0.6529**	**1.4300e-003**	**0.0468**	**9.4900e-003**	**0.0563**	**0.0133**	**8.7300e-003**	**0.0220**	**0.0000**	**126.6106**	**126.6106**	**1.0400e-003**	**0.0000**	**126.6323**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2900e-003	0.0247	0.1023	2.2000e-004		6.5000e-004	6.5000e-004		6.2000e-004	6.2000e-004	0.0000	20.5232	20.5232	6.2900e-003	0.0000	20.6553
Total	**3.2900e-003**	**0.0247**	**0.1023**	**2.2000e-004**		**6.5000e-004**	**6.5000e-004**		**6.2000e-004**	**6.2000e-004**	**0.0000**	**20.5232**	**20.5232**	**6.2900e-003**	**0.0000**	**20.6553**

3.32 Misc. Finishes 4 - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0477	0.5126	0.6248	1.3500e-003	0.0400	9.4500e-003	0.0495	0.0115	8.6900e-003	0.0201	0.0000	121.0591	121.0591	7.9000e-004	0.0000	121.0756
Worker	1.9000e-003	2.7900e-003	0.0281	8.0000e-005	6.8100e-003	4.0000e-005	6.8600e-003	1.8100e-003	4.0000e-005	1.8500e-003	0.0000	5.5516	5.5516	2.5000e-004	0.0000	5.5568
Total	**0.0496**	**0.5154**	**0.6529**	**1.4300e-003**	**0.0468**	**9.4900e-003**	**0.0563**	**0.0133**	**8.7300e-003**	**0.0220**	**0.0000**	**126.6106**	**126.6106**	**1.0400e-003**	**0.0000**	**126.6323**

3.33 Misc. Finishes 1 - 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	0.0530	0.7030	0.4156	9.3000e-004		0.0249	0.0249		0.0229	0.0229	0.0000	86.0653	86.0653	0.0264	0.0000	86.6191
Total	**0.0530**	**0.7030**	**0.4156**	**9.3000e-004**		**0.0249**	**0.0249**		**0.0229**	**0.0229**	**0.0000**	**86.0653**	**86.0653**	**0.0264**	**0.0000**	**86.6191**

3.33 Misc. Finishes 1 - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0999	1.0749	1.3101	2.8300e-003	0.0839	0.0198	0.1037	0.0240	0.0182	0.0422	0.0000	253.8335	253.8335	1.6500e-003	0.0000	253.8681
Worker	0.0125	0.0183	0.1842	5.0000e-004	0.0447	2.8000e-004	0.0449	0.0119	2.5000e-004	0.0121	0.0000	36.3762	36.3762	1.6200e-003	0.0000	36.4102
Total	**0.1124**	**1.0932**	**1.4942**	**3.3300e-003**	**0.1285**	**0.0201**	**0.1486**	**0.0359**	**0.0185**	**0.0543**	**0.0000**	**290.2097**	**290.2097**	**3.2700e-003**	**0.0000**	**290.2784**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0138	0.1035	0.4290	9.3000e-004		2.7100e-003	2.7100e-003		2.6000e-003	2.6000e-003	0.0000	86.0652	86.0652	0.0264	0.0000	86.6190
Total	**0.0138**	**0.1035**	**0.4290**	**9.3000e-004**		**2.7100e-003**	**2.7100e-003**		**2.6000e-003**	**2.6000e-003**	**0.0000**	**86.0652**	**86.0652**	**0.0264**	**0.0000**	**86.6190**

3.33 Misc. Finishes 1 - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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	0.0999	1.0749	1.3101	2.8300e-003	0.0839	0.0198	0.1037	0.0240	0.0182	0.0422	0.0000	253.8335	253.8335	1.6500e-003	0.0000	253.8681
Worker	0.0125	0.0183	0.1842	5.0000e-004	0.0447	2.8000e-004	0.0449	0.0119	2.5000e-004	0.0121	0.0000	36.3762	36.3762	1.6200e-003	0.0000	36.4102
Total	**0.1124**	**1.0932**	**1.4942**	**3.3300e-003**	**0.1285**	**0.0201**	**0.1486**	**0.0359**	**0.0185**	**0.0543**	**0.0000**	**290.2097**	**290.2097**	**3.2700e-003**	**0.0000**	**290.2784**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	9.1665	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	3.9000e-004
Unmitigated	9.1665	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	3.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.1664					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	3.9000e-004
Total	**9.1665**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.7000e-004**	**3.7000e-004**	**0.0000**	**0.0000**	**3.9000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.1664					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	3.9000e-004
Total	**9.1665**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.7000e-004**	**3.7000e-004**	**0.0000**	**0.0000**	**3.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Vegetation

MoVal Logistics Center- 2005 High Cube (Trucks)

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	173.75	1000sqft	4.62	173,750.00	0
Unrefrigerated Warehouse-No Rail	1,178.02	1000sqft	41.61	1,178,020.00	0
Parking Lot	1,386.00	Space	12.47	554,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2005
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	673.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44. Year 2008 used in absense of year 2005.

Land Use - Lot Acreage:58.7; Cold Storage takes into account 10% of total Project land uses (High Cube and Light Industrial)

Construction Phase - Operation run only

Off-road Equipment - Operational run only

Trips and VMT - Operational Run Only.

Vehicle Trips - ITE Truck Trip Rate for High-Cube Warehouse.

Vechicle Emission Factors - Trucks Only.

Vechicle Emission Factors - Trucks Only.

Vechicle Emission Factors - Trucks Only.

Area Coating -

Energy Use - Used historical data

Water And Wastewater - Water usage based on 0.75 AFY per acre which is based on EMWD data for similar projects.

Area Mitigation -

Operational Off-Road Equipment - based on CARB Cargo Handling Equipment Yard Truck Emission Testing Report. hours per day based on the Port of Long Beach Air Emissions Inventory (June 2008)

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	70.00	1.00
tblLandUse	LotAcreage	3.99	4.62
tblLandUse	LotAcreage	27.04	41.61
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	5.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	673.35
tblProjectCharacteristics	OperationalYear	2014	2005

tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblVehicleEF	HHD	0.03	0.60
tblVehicleEF	HHD	0.03	0.60
tblVehicleEF	HHD	0.03	0.60
tblVehicleEF	LDA	0.44	0.00
tblVehicleEF	LDA	0.44	0.00
tblVehicleEF	LDA	0.44	0.00
tblVehicleEF	LDT1	0.10	0.00
tblVehicleEF	LDT1	0.10	0.00
tblVehicleEF	LDT1	0.10	0.00
tblVehicleEF	LDT2	0.23	0.00
tblVehicleEF	LDT2	0.23	0.00
tblVehicleEF	LDT2	0.23	0.00
tblVehicleEF	LHD1	0.03	0.22
tblVehicleEF	LHD1	0.03	0.22
tblVehicleEF	LHD1	0.03	0.22
tblVehicleEF	LHD2	7.6570e-003	0.00
tblVehicleEF	LHD2	7.6570e-003	0.00
tblVehicleEF	LHD2	7.6570e-003	0.00
tblVehicleEF	MCY	0.01	0.00
tblVehicleEF	MCY	0.01	0.00
tblVehicleEF	MCY	0.01	0.00
tblVehicleEF	MDV	0.13	0.00
tblVehicleEF	MDV	0.13	0.00
tblVehicleEF	MDV	0.13	0.00
tblVehicleEF	MH	3.6440e-003	0.00
tblVehicleEF	MH	3.6440e-003	0.00

tblVehicleEF	MH	3.6440e-003	0.00
tblVehicleEF	MHD	0.01	0.18
tblVehicleEF	MHD	0.01	0.18
tblVehicleEF	MHD	0.01	0.18
tblVehicleEF	OBUS	7.1000e-004	0.00
tblVehicleEF	OBUS	7.1000e-004	0.00
tblVehicleEF	OBUS	7.1000e-004	0.00
tblVehicleEF	SBUS	9.7400e-004	0.00
tblVehicleEF	SBUS	9.7400e-004	0.00
tblVehicleEF	SBUS	9.7400e-004	0.00
tblVehicleEF	UBUS	6.1800e-004	0.00
tblVehicleEF	UBUS	6.1800e-004	0.00
tblVehicleEF	UBUS	6.1800e-004	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	61.00
tblVehicleTrips	CW_TL	16.60	61.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	2.59	0.64
tblVehicleTrips	ST_TR	2.59	0.64
tblVehicleTrips	SU_TR	2.59	0.64
tblVehicleTrips	SU_TR	2.59	0.64
tblVehicleTrips	WD_TR	2.59	0.64
tblVehicleTrips	WD_TR	2.59	0.64
tblWater	IndoorWaterUseRate	40,179,687.50	1,843,913.00
tblWater	IndoorWaterUseRate	272,417,125.00	12,501,696.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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	8.4793	5.3000e-004	0.0445	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0679	0.0679	3.2000e-004	0.0000	0.0746
Energy	0.0646	0.5872	0.4933	3.5200e-003		0.0446	0.0446		0.0446	0.0446	0.0000	4,137.9482	4,137.9482	0.1629	0.0429	4,154.6674
Mobile	20.5449	303.2362	128.7295	2.0804	6.5596	11.9984	18.5580	2.1777	11.9984	14.1761	0.0000	25,834.3521	25,834.3521	0.9962	0.0000	25,855.2720
Offroad	0.3924	4.2761	1.0564	0.0339		0.1524	0.1524		0.1524	0.1524	0.0000	306.9957	306.9957	0.0319	0.0000	307.6650
Waste						0.0000	0.0000		0.0000	0.0000	257.9325	0.0000	257.9325	15.2434	0.0000	578.0434
Water						0.0000	0.0000		0.0000	0.0000	4.5512	57.0519	61.6031	0.4699	0.0116	75.0504
Total	**29.4813**	**308.1000**	**130.3236**	**2.1178**	**6.5596**	**12.1956**	**18.7553**	**2.1777**	**12.1956**	**14.3733**	**262.4837**	**30,336.4158**	**30,598.8995**	**16.9046**	**0.0545**	**30,970.7727**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.4793	5.3000e-004	0.0445	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0679	0.0679	3.2000e-004	0.0000	0.0746
Energy	0.0646	0.5872	0.4933	3.5200e-003		0.0446	0.0446		0.0446	0.0446	0.0000	4,137.9482	4,137.9482	0.1629	0.0429	4,154.6674
Mobile	20.5449	303.2362	128.7295	2.0804	6.5596	11.9984	18.5580	2.1777	11.9984	14.1761	0.0000	25,834.3521	25,834.3521	0.9962	0.0000	25,855.2720
Offroad	0.3924	4.2761	1.0564	0.0339		0.1524	0.1524		0.1524	0.1524	0.0000	306.9957	306.9957	0.0319	0.0000	307.6650
Waste						0.0000	0.0000		0.0000	0.0000	257.9325	0.0000	257.9325	15.2434	0.0000	578.0434
Water						0.0000	0.0000		0.0000	0.0000	4.5512	57.0519	61.6031	0.4698	0.0115	75.0431
Total	**29.4813**	**308.1000**	**130.3236**	**2.1178**	**6.5596**	**12.1956**	**18.7553**	**2.1777**	**12.1956**	**14.3733**	**262.4837**	**30,336.4158**	**30,598.8995**	**16.9045**	**0.0544**	**30,970.7654**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.33**	**1.39**	**0.81**	**1.60**	**0.00**	**1.25**	**0.81**	**0.00**	**1.25**	**1.06**	**0.00**	**1.01**	**1.00**	**0.19**	**0.04**	**0.99**

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	1/1/2016	1/1/2016	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	162	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	0.00	0.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

3.2 Demolition - 2016

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	20.5449	303.2362	128.7295	2.0804	6.5596	11.9984	18.5580	2.1777	11.9984	14.1761	0.0000	25,834.3521	25,834.3521	0.9962	0.0000	25,855.2720
Mitigated	20.5449	303.2362	128.7295	2.0804	6.5596	11.9984	18.5580	2.1777	11.9984	14.1761	0.0000	25,834.3521	25,834.3521	0.9962	0.0000	25,855.2720

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	111.20	111.20	111.20	2,302,543	2,302,543
Unrefrigerated Warehouse-No Rail	753.93	753.93	753.93	15,611,175	15,611,175
Total	865.13	865.13	865.13	17,913,718	17,913,718

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	61.00	8.40	6.90	100.00	0.00	0.00	92	5	3
Unrefrigerated Warehouse-No	61.00	8.40	6.90	100.00	0.00	0.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.000000	0.000000	0.000000	0.000000	0.220300	0.000000	0.176600	0.603100	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

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					
NaturalGas Unmitigated	0.0646	0.5872	0.4933	3.5200e-003		0.0446	0.0446		0.0446	0.0446	0.0000	639.2807	639.2807	0.0123	0.0117	643.1713
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,498.6675	3,498.6675	0.1507	0.0312	3,511.4962
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,498.6675	3,498.6675	0.1507	0.0312	3,511.4962
NaturalGas Mitigated	0.0646	0.5872	0.4933	3.5200e-003		0.0446	0.0446		0.0446	0.0446	0.0000	639.2807	639.2807	0.0123	0.0117	643.1713

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					
Refrigerated Warehouse-No Rail	9.02284e+006	0.0487	0.4423	0.3715	2.6500e-003		0.0336	0.0336		0.0336	0.0336	0.0000	481.4930	481.4930	9.2300e-003	8.8300e-003	484.4233
Unrefrigerated Warehouse-No Rail	2.95683e+006	0.0159	0.1449	0.1218	8.7000e-004		0.0110	0.0110		0.0110	0.0110	0.0000	157.7877	157.7877	3.0200e-003	2.8900e-003	158.7480
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0646**	**0.5872**	**0.4933**	**3.5200e-003**		**0.0446**	**0.0446**		**0.0446**	**0.0446**	**0.0000**	**639.2807**	**639.2807**	**0.0123**	**0.0117**	**643.1713**

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					
Refrigerated Warehouse-No Rail	9.02284e+006	0.0487	0.4423	0.3715	2.6500e-003		0.0336	0.0336		0.0336	0.0336	0.0000	481.4930	481.4930	9.2300e-003	8.8300e-003	484.4233
Unrefrigerated Warehouse-No Rail	2.95683e+006	0.0159	0.1449	0.1218	8.7000e-004		0.0110	0.0110		0.0110	0.0110	0.0000	157.7877	157.7877	3.0200e-003	2.8900e-003	158.7480
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0646**	**0.5872**	**0.4933**	**3.5200e-003**		**0.0446**	**0.0446**		**0.0446**	**0.0446**	**0.0000**	**639.2807**	**639.2807**	**0.0123**	**0.0117**	**643.1713**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	487872	149.0090	6.4200e-003	1.3300e-003	149.5554
Refrigerated Warehouse-No Rail	7.22105e+006	2,205.4995	0.0950	0.0197	2,213.5865
Unrefrigerated Warehouse-No Rail	3.7461e+006	1,144.1590	0.0493	0.0102	1,148.3544
Total		**3,498.6675**	**0.1507**	**0.0312**	**3,511.4962**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	487872	149.0090	6.4200e-003	1.3300e-003	149.5554
Refrigerated Warehouse-No Rail	7.22105e+006	2,205.4995	0.0950	0.0197	2,213.5865
Unrefrigerated Warehouse-No Rail	3.7461e+006	1,144.1590	0.0493	0.0102	1,148.3544
Total		**3,498.6675**	**0.1507**	**0.0312**	**3,511.4962**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	8.4793	5.3000e-004	0.0445	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0679	0.0679	3.2000e-004	0.0000	0.0746
Mitigated	8.4793	5.3000e-004	0.0445	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0679	0.0679	3.2000e-004	0.0000	0.0746

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.5856					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.8880					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.7500e-003	5.3000e-004	0.0445	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0679	0.0679	3.2000e-004	0.0000	0.0746
Total	**8.4793**	**5.3000e-004**	**0.0445**	**0.0000**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**	**0.0000**	**0.0679**	**0.0679**	**3.2000e-004**	**0.0000**	**0.0746**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.5856					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.8880					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.7500e-003	5.3000e-004	0.0445	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0679	0.0679	3.2000e-004	0.0000	0.0746
Total	**8.4793**	**5.3000e-004**	**0.0445**	**0.0000**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**	**0.0000**	**0.0679**	**0.0679**	**3.2000e-004**	**0.0000**	**0.0746**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	61.6031	0.4699	0.0116	75.0504
Mitigated	61.6031	0.4698	0.0115	75.0431

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.84391 / 0	7.9182	0.0604	1.4800e-003	9.6466
Unrefrigerated Warehouse-No Rail	12.5017 / 0	53.6849	0.4095	0.0101	65.4038
Total		**61.6031**	**0.4699**	**0.0115**	**75.0504**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.84391 / 0	7.9182	0.0604	1.4800e-003	9.6457
Unrefrigerated Warehouse-No Rail	12.5017 / 0	53.6849	0.4094	0.0101	65.3975
Total		**61.6031**	**0.4698**	**0.0115**	**75.0431**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	257.9325	15.2434	0.0000	578.0434
Unmitigated	257.9325	15.2434	0.0000	578.0434

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	163.32	33.1525	1.9593	0.0000	74.2969
Unrefrigerated Warehouse-No Rail	1107.34	224.7800	13.2841	0.0000	503.7465
Total		**257.9325**	**15.2434**	**0.0000**	**578.0433**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	163.32	33.1525	1.9593	0.0000	74.2969
Unrefrigerated Warehouse-No Rail	1107.34	224.7800	13.2841	0.0000	503.7465
Total		**257.9325**	**15.2434**	**0.0000**	**578.0433**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	5	4.00	365	200	0.37	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					
Tractors/Loaders/ Backhoes	0.3924	4.2761	1.0564	0.0339		0.1524	0.1524		0.1524	0.1524	0.0000	306.9957	306.9957	0.0319	0.0000	307.6650
Total	**0.3924**	**4.2761**	**1.0564**	**0.0339**		**0.1524**	**0.1524**		**0.1524**	**0.1524**	**0.0000**	**306.9957**	**306.9957**	**0.0319**	**0.0000**	**307.6650**

10.0 Vegetation

MoVal Logistics Center- 2005 High Cube (Passenger Car)

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	173.75	1000sqft	4.62	173,750.00	0
Unrefrigerated Warehouse-No Rail	1,178.02	1000sqft	41.61	1,178,020.00	0
Parking Lot	1,386.00	Space	12.47	554,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2005
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	673.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocation," cells AH/AQ 35-44. Year 2008 used in absense of year 2005.

Land Use - Lot Acreage:58.7; Cold Storage takes into account 10% of total Project land uses (High Cube and Light Industrial)

Construction Phase - Operation run only

Off-road Equipment - Operation run only

Trips and VMT - Operation run only

Vehicle Trips - ITE Passenger Cars Trip Rate for High-Cube Warehouse. For conservative analysis, C-W trip % changed to 100%.

Vechicle Emission Factors - Passenger Cars Only.

Vechicle Emission Factors - Passenger Cars Only.

Vechicle Emission Factors - Passenger Cars Only.

Area Coating -

Energy Use - Used historical data

Water And Wastewater - Water usage based on 0.75 AFY per acre which is based on EMWD data for similar projects.

Operational Off-Road Equipment - based on CARB Cargo Handling Equipment Yard Truck Emission Testing Report. hours per day based on the Port of Long Beach Air Emissions Inventory (June 2008)

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	100	50
tblConstructionPhase	NumDays	70.00	1.00
tblLandUse	LotAcreage	3.99	4.62
tblLandUse	LotAcreage	27.04	41.61
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	5.00

tblProjectCharacteristics	CO2IntensityFactor	630.89	673.35
tblProjectCharacteristics	OperationalYear	2014	2005
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblVehicleEF	HHD	0.03	0.00
tblVehicleEF	HHD	0.03	0.00
tblVehicleEF	HHD	0.03	0.00
tblVehicleEF	LDA	0.44	1.00
tblVehicleEF	LDA	0.44	1.00
tblVehicleEF	LDA	0.44	1.00
tblVehicleEF	LDT1	0.10	0.00
tblVehicleEF	LDT1	0.10	0.00
tblVehicleEF	LDT1	0.10	0.00
tblVehicleEF	LDT2	0.23	0.00
tblVehicleEF	LDT2	0.23	0.00
tblVehicleEF	LDT2	0.23	0.00
tblVehicleEF	LHD1	0.03	0.00
tblVehicleEF	LHD1	0.03	0.00
tblVehicleEF	LHD1	0.03	0.00
tblVehicleEF	LHD2	7.6570e-003	0.00
tblVehicleEF	LHD2	7.6570e-003	0.00
tblVehicleEF	LHD2	7.6570e-003	0.00
tblVehicleEF	MCY	0.01	0.00
tblVehicleEF	MCY	0.01	0.00
tblVehicleEF	MCY	0.01	0.00
tblVehicleEF	MDV	0.13	0.00
tblVehicleEF	MDV	0.13	0.00

tblVehicleEF	MDV	0.13	0.00
tblVehicleEF	MH	3.6440e-003	0.00
tblVehicleEF	MH	3.6440e-003	0.00
tblVehicleEF	MH	3.6440e-003	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	OBUS	7.1000e-004	0.00
tblVehicleEF	OBUS	7.1000e-004	0.00
tblVehicleEF	OBUS	7.1000e-004	0.00
tblVehicleEF	SBUS	9.7400e-004	0.00
tblVehicleEF	SBUS	9.7400e-004	0.00
tblVehicleEF	SBUS	9.7400e-004	0.00
tblVehicleEF	UBUS	6.1800e-004	0.00
tblVehicleEF	UBUS	6.1800e-004	0.00
tblVehicleEF	UBUS	6.1800e-004	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	2.59	1.04
tblVehicleTrips	ST_TR	2.59	1.04
tblVehicleTrips	SU_TR	2.59	1.04
tblVehicleTrips	SU_TR	2.59	1.04
tblVehicleTrips	WD_TR	2.59	1.04
tblVehicleTrips	WD_TR	2.59	1.04
tblWater	IndoorWaterUseRate	40,179,687.50	1,843,913.00
tblWater	IndoorWaterUseRate	272,417,125.00	12,501,696.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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	8.4793	5.3000e-004	0.0445	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0679	0.0679	3.2000e-004	0.0000	0.0746
Energy	0.0646	0.5872	0.4933	3.5200e-003		0.0446	0.0446		0.0446	0.0446	0.0000	4,137.9482	4,137.9482	0.1629	0.0429	4,154.6674
Mobile	2.6214	3.4333	39.2724	0.0345	2.7257	0.0912	2.8169	0.7877	0.0912	0.8788	0.0000	3,103.5898	3,103.5898	0.2579	0.0000	3,109.0046
Offroad	0.3924	4.2761	1.0564	0.0339		0.1524	0.1524		0.1524	0.1524	0.0000	306.9957	306.9957	0.0319	0.0000	307.6650
Waste						0.0000	0.0000		0.0000	0.0000	257.9325	0.0000	257.9325	15.2434	0.0000	578.0434
Water						0.0000	0.0000		0.0000	0.0000	4.5512	57.0519	61.6031	0.4699	0.0116	75.0504
Total	**11.5577**	**8.2971**	**40.8665**	**0.0720**	**2.7257**	**0.2884**	**3.0141**	**0.7877**	**0.2884**	**1.0761**	**262.4837**	**7,605.6535**	**7,868.1372**	**16.1663**	**0.0545**	**8,224.5053**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.4793	5.3000e-004	0.0445	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0679	0.0679	3.2000e-004	0.0000	0.0746
Energy	0.0646	0.5872	0.4933	3.5200e-003		0.0446	0.0446		0.0446	0.0446	0.0000	4,137.9482	4,137.9482	0.1629	0.0429	4,154.6674
Mobile	2.6214	3.4333	39.2724	0.0345	2.7257	0.0912	2.8169	0.7877	0.0912	0.8788	0.0000	3,103.5898	3,103.5898	0.2579	0.0000	3,109.0046
Offroad	0.3924	4.2761	1.0564	0.0339		0.1524	0.1524		0.1524	0.1524	0.0000	306.9957	306.9957	0.0319	0.0000	307.6650
Waste						0.0000	0.0000		0.0000	0.0000	257.9325	0.0000	257.9325	15.2434	0.0000	578.0434
Water						0.0000	0.0000		0.0000	0.0000	4.5512	57.0519	61.6031	0.4698	0.0115	75.0431
Total	**11.5577**	**8.2971**	**40.8665**	**0.0720**	**2.7257**	**0.2884**	**3.0141**	**0.7877**	**0.2884**	**1.0761**	**262.4837**	**7,605.6535**	**7,868.1372**	**16.1662**	**0.0544**	**8,224.4981**

	ROG	NOx	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	**3.40**	**51.54**	**2.58**	**47.15**	**0.00**	**52.86**	**5.06**	**0.00**	**52.86**	**14.17**	**0.00**	**4.04**	**3.90**	**0.20**	**0.04**	**3.74**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/1/2016	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	162	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

3.2 Demolition - 2016

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	2.6214	3.4333	39.2724	0.0345	2.7257	0.0912	2.8169	0.7877	0.0912	0.8788	0.0000	3,103.5898	3,103.5898	0.2579	0.0000	3,109.0046
Mitigated	2.6214	3.4333	39.2724	0.0345	2.7257	0.0912	2.8169	0.7877	0.0912	0.8788	0.0000	3,103.5898	3,103.5898	0.2579	0.0000	3,109.0046

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	180.70	180.70	180.70	1,018,358	1,018,358
Unrefrigerated Warehouse-No Rail	1,225.14	1,225.14	1225.14	6,904,440	6,904,440
Total	1,405.84	1,405.84	1,405.84	7,922,799	7,922,799

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	92	5	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

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					
NaturalGas Unmitigated	0.0646	0.5872	0.4933	3.5200e-003		0.0446	0.0446		0.0446	0.0446	0.0000	639.2807	639.2807	0.0123	0.0117	643.1713
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,498.6675	3,498.6675	0.1507	0.0312	3,511.4962
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,498.6675	3,498.6675	0.1507	0.0312	3,511.4962
NaturalGas Mitigated	0.0646	0.5872	0.4933	3.5200e-003		0.0446	0.0446		0.0446	0.0446	0.0000	639.2807	639.2807	0.0123	0.0117	643.1713

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					
Refrigerated Warehouse-No Rail	9.02284e+006	0.0487	0.4423	0.3715	2.6500e-003		0.0336	0.0336		0.0336	0.0336	0.0000	481.4930	481.4930	9.2300e-003	8.8300e-003	484.4233
Unrefrigerated Warehouse-No Rail	2.95683e+006	0.0159	0.1449	0.1218	8.7000e-004		0.0110	0.0110		0.0110	0.0110	0.0000	157.7877	157.7877	3.0200e-003	2.8900e-003	158.7480
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0646**	**0.5872**	**0.4933**	**3.5200e-003**		**0.0446**	**0.0446**		**0.0446**	**0.0446**	**0.0000**	**639.2807**	**639.2807**	**0.0123**	**0.0117**	**643.1713**

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					
Refrigerated Warehouse-No Rail	9.02284e+006	0.0487	0.4423	0.3715	2.6500e-003		0.0336	0.0336		0.0336	0.0336	0.0000	481.4930	481.4930	9.2300e-003	8.8300e-003	484.4233
Unrefrigerated Warehouse-No Rail	2.95683e+006	0.0159	0.1449	0.1218	8.7000e-004		0.0110	0.0110		0.0110	0.0110	0.0000	157.7877	157.7877	3.0200e-003	2.8900e-003	158.7480
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0646**	**0.5872**	**0.4933**	**3.5200e-003**		**0.0446**	**0.0446**		**0.0446**	**0.0446**	**0.0000**	**639.2807**	**639.2807**	**0.0123**	**0.0117**	**643.1713**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	487872	149.0090	6.4200e-003	1.3300e-003	149.5554
Refrigerated Warehouse-No Rail	7.22105e+006	2,205.4995	0.0950	0.0197	2,213.5865
Unrefrigerated Warehouse-No Rail	3.7461e+006	1,144.1590	0.0493	0.0102	1,148.3544
Total		**3,498.6675**	**0.1507**	**0.0312**	**3,511.4962**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	487872	149.0090	6.4200e-003	1.3300e-003	149.5554
Refrigerated Warehouse-No Rail	7.22105e+006	2,205.4995	0.0950	0.0197	2,213.5865
Unrefrigerated Warehouse-No Rail	3.7461e+006	1,144.1590	0.0493	0.0102	1,148.3544
Total		**3,498.6675**	**0.1507**	**0.0312**	**3,511.4962**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	8.4793	5.3000e-004	0.0445	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0679	0.0679	3.2000e-004	0.0000	0.0746
Mitigated	8.4793	5.3000e-004	0.0445	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0679	0.0679	3.2000e-004	0.0000	0.0746

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.5856					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.8880					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.7500e-003	5.3000e-004	0.0445	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0679	0.0679	3.2000e-004	0.0000	0.0746
Total	**8.4793**	**5.3000e-004**	**0.0445**	**0.0000**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**	**0.0000**	**0.0679**	**0.0679**	**3.2000e-004**	**0.0000**	**0.0746**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.5856					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.8880					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.7500e-003	5.3000e-004	0.0445	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0679	0.0679	3.2000e-004	0.0000	0.0746
Total	**8.4793**	**5.3000e-004**	**0.0445**	**0.0000**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**	**0.0000**	**0.0679**	**0.0679**	**3.2000e-004**	**0.0000**	**0.0746**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	61.6031	0.4699	0.0116	75.0504
Mitigated	61.6031	0.4698	0.0115	75.0431

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.84391 / 0	7.9182	0.0604	1.4800e-003	9.6466
Unrefrigerated Warehouse-No Rail	12.5017 / 0	53.6849	0.4095	0.0101	65.4038
Total		**61.6031**	**0.4699**	**0.0115**	**75.0504**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.84391 / 0	7.9182	0.0604	1.4800e-003	9.6457
Unrefrigerated Warehouse-No Rail	12.5017 / 0	53.6849	0.4094	0.0101	65.3975
Total		**61.6031**	**0.4698**	**0.0115**	**75.0431**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	257.9325	15.2434	0.0000	578.0434
Unmitigated	257.9325	15.2434	0.0000	578.0434

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	163.32	33.1525	1.9593	0.0000	74.2969
Unrefrigerated Warehouse-No Rail	1107.34	224.7800	13.2841	0.0000	503.7465
Total		**257.9325**	**15.2434**	**0.0000**	**578.0433**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	163.32	33.1525	1.9593	0.0000	74.2969
Unrefrigerated Warehouse-No Rail	1107.34	224.7800	13.2841	0.0000	503.7465
Total		**257.9325**	**15.2434**	**0.0000**	**578.0433**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	5	4.00	365	200	0.37	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					
Tractors/Loaders/ Backhoes	0.3924	4.2761	1.0564	0.0339		0.1524	0.1524		0.1524	0.1524	0.0000	306.9957	306.9957	0.0319	0.0000	307.6650
Total	**0.3924**	**4.2761**	**1.0564**	**0.0339**		**0.1524**	**0.1524**		**0.1524**	**0.1524**	**0.0000**	**306.9957**	**306.9957**	**0.0319**	**0.0000**	**307.6650**

10.0 Vegetation

MoVal Logistics Center- 2005 Light Industrial (Trucks)

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	122.52	1000sqft	5.27	122,516.00	0
General Light Industry	97.22	1000sqft	4.61	97,222.00	0
General Light Industry	166.01	1000sqft	6.83	166,010.00	0
Parking Lot	187.00	Space	1.68	74,800.00	0
Parking Lot	220.00	Space	1.98	88,000.00	0
Parking Lot	205.00	Space	1.84	82,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2005
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	673.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44. Year 2008 used in absense of year 2005

Land Use - Lot Acreage (Light Industrial Buildings 2,3,4):22.21

Construction Phase - Operation run only

Off-road Equipment - Operational Run Only.

Trips and VMT - Operational Run Only.

Vehicle Trips - Truck Trip Rate based on Traffic Study

Vechicle Emission Factors - Trucks Only; Information derived from Traffic Study.

Vechicle Emission Factors - Trucks Only; Information derived from Traffic Study.

Vechicle Emission Factors - Trucks Only; Information derived from Traffic Study.

Energy Use - Used historical data

Water And Wastewater - Water usage based on 0.75 AFY per acre which is based on EMWD data for similar projects.

Operational Off-Road Equipment - based on CARB Cargo Handling Equipment Yard Truck Emission Testing Report. hours per day based on the Port of Long Beach Air Emissions Inventory (June 2008)

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	100	50
tblConstructionPhase	PhaseEndDate	1/28/2016	1/1/2016
tblLandUse	LandUseSquareFeet	122,520.00	122,516.00
tblLandUse	LandUseSquareFeet	97,220.00	97,222.00
tblLandUse	LotAcreage	2.81	5.27
tblLandUse	LotAcreage	3.81	6.83
tblLandUse	LotAcreage	2.23	4.61
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00

tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	673.35
tblProjectCharacteristics	OperationalYear	2014	2005
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblVehicleEF	HHD	0.03	0.44
tblVehicleEF	HHD	0.03	0.44
tblVehicleEF	HHD	0.03	0.44
tblVehicleEF	LDA	0.44	0.00
tblVehicleEF	LDA	0.44	0.00
tblVehicleEF	LDA	0.44	0.00
tblVehicleEF	LDT1	0.10	0.00
tblVehicleEF	LDT1	0.10	0.00
tblVehicleEF	LDT1	0.10	0.00
tblVehicleEF	LDT2	0.23	0.00
tblVehicleEF	LDT2	0.23	0.00
tblVehicleEF	LDT2	0.23	0.00
tblVehicleEF	LHD1	0.03	0.37
tblVehicleEF	LHD1	0.03	0.37
tblVehicleEF	LHD1	0.03	0.37
tblVehicleEF	LHD2	7.6570e-003	0.00
tblVehicleEF	LHD2	7.6570e-003	0.00
tblVehicleEF	LHD2	7.6570e-003	0.00
tblVehicleEF	MCY	0.01	0.00
tblVehicleEF	MCY	0.01	0.00
tblVehicleEF	MCY	0.01	0.00
tblVehicleEF	MDV	0.13	0.00

tblVehicleEF	MDV	0.13	0.00
tblVehicleEF	MDV	0.13	0.00
tblVehicleEF	MH	3.6440e-003	0.00
tblVehicleEF	MH	3.6440e-003	0.00
tblVehicleEF	MH	3.6440e-003	0.00
tblVehicleEF	MHD	0.01	0.18
tblVehicleEF	MHD	0.01	0.18
tblVehicleEF	MHD	0.01	0.18
tblVehicleEF	OBUS	7.1000e-004	0.00
tblVehicleEF	OBUS	7.1000e-004	0.00
tblVehicleEF	OBUS	7.1000e-004	0.00
tblVehicleEF	SBUS	9.7400e-004	0.00
tblVehicleEF	SBUS	9.7400e-004	0.00
tblVehicleEF	SBUS	9.7400e-004	0.00
tblVehicleEF	UBUS	6.1800e-004	0.00
tblVehicleEF	UBUS	6.1800e-004	0.00
tblVehicleEF	UBUS	6.1800e-004	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	16.60	61.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	1.32	1.49
tblVehicleTrips	SU_TR	0.68	1.49
tblVehicleTrips	WD_TR	6.97	1.49
tblWater	IndoorWaterUseRate	89,204,687.50	5,427,870.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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	2.7361	1.9000e-004	0.0162	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0248	0.0248	1.2000e-004	0.0000	0.0272
Energy	0.0705	0.6408	0.5383	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	2,121.8585	2,121.8585	0.0747	0.0255	2,131.3265
Mobile	11.0234	165.8729	79.7350	1.1133	4.2953	6.0435	10.3387	1.3840	6.0435	7.4275	0.0000	14,992.7469	14,992.7469	0.5774	0.0000	15,004.8732
Offroad	0.1570	1.7104	0.4225	0.0136		0.0610	0.0610		0.0610	0.0610	0.0000	122.7983	122.7983	0.0128	0.0000	123.0660
Waste						0.0000	0.0000		0.0000	0.0000	97.0967	0.0000	97.0967	5.7383	0.0000	217.5999
Water						0.0000	0.0000		0.0000	0.0000	1.7220	21.5864	23.3084	0.1778	4.3700e-003	28.3964
Total	**13.9869**	**168.2244**	**80.7120**	**1.1307**	**4.2953**	**6.1532**	**10.4485**	**1.3840**	**6.1532**	**7.5372**	**98.8187**	**17,259.0149**	**17,357.8335**	**6.5811**	**0.0299**	**17,505.2891**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.7361	1.9000e-004	0.0162	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0248	0.0248	1.2000e-004	0.0000	0.0272
Energy	0.0705	0.6408	0.5383	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	2,121.8585	2,121.8585	0.0747	0.0255	2,131.3265
Mobile	11.0234	165.8729	79.7350	1.1133	4.2953	6.0435	10.3387	1.3840	6.0435	7.4275	0.0000	14,992.7469	14,992.7469	0.5774	0.0000	15,004.8732
Offroad	0.1570	1.7104	0.4225	0.0136		0.0610	0.0610		0.0610	0.0610	0.0000	122.7983	122.7983	0.0128	0.0000	123.0660
Waste						0.0000	0.0000		0.0000	0.0000	97.0967	0.0000	97.0967	5.7383	0.0000	217.5999
Water						0.0000	0.0000		0.0000	0.0000	1.7220	21.5864	23.3084	0.1778	4.3600e-003	28.3937
Total	**13.9869**	**168.2244**	**80.7120**	**1.1307**	**4.2953**	**6.1532**	**10.4485**	**1.3840**	**6.1532**	**7.5372**	**98.8187**	**17,259.0149**	**17,357.8335**	**6.5810**	**0.0298**	**17,505.2864**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.12**	**1.02**	**0.52**	**1.20**	**0.00**	**0.99**	**0.58**	**0.00**	**0.99**	**0.81**	**0.00**	**0.71**	**0.71**	**0.19**	**0.03**	**0.70**

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	1/1/2016	1/1/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	162	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	0.00	0.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

3.2 Demolition - 2016

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	11.0234	165.8729	79.7350	1.1133	4.2953	6.0435	10.3387	1.3840	6.0435	7.4275	0.0000	14,992.7469	14,992.7469	0.5774	0.0000	15,004.8732
Mitigated	11.0234	165.8729	79.7350	1.1133	4.2953	6.0435	10.3387	1.3840	6.0435	7.4275	0.0000	14,992.7469	14,992.7469	0.5774	0.0000	15,004.8732

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	182.55	182.55	182.55	3,780,038	3,780,038
General Light Industry	144.86	144.86	144.86	2,999,472	2,999,472
General Light Industry	247.35	247.35	247.35	5,121,810	5,121,810
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	574.77	574.77	574.77	11,901,321	11,901,321

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	61.00	8.40	6.90	100.00	0.00	0.00	92	5	3
General Light Industry	61.00	8.40	6.90	100.00	0.00	0.00	92	5	3
General Light Industry	61.00	8.40	6.90	100.00	0.00	0.00	92	5	3
Parking Lot	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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.000000	0.000000	0.000000	0.000000	0.374000	0.000000	0.182300	0.443700	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

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					
NaturalGas Unmitigated	0.0705	0.6408	0.5383	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	697.6251	697.6251	0.0134	0.0128	701.8707
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,424.2335	1,424.2335	0.0613	0.0127	1,429.4558
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,424.2335	1,424.2335	0.0613	0.0127	1,429.4558
NaturalGas Mitigated	0.0705	0.6408	0.5383	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	697.6251	697.6251	0.0134	0.0128	701.8707

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	3.29485e+006	0.0178	0.1615	0.1357	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	175.8259	175.8259	3.3700e-003	3.2200e-003	176.8960
General Light Industry	4.15207e+006	0.0224	0.2035	0.1710	1.2200e-003		0.0155	0.0155		0.0155	0.0155	0.0000	221.5701	221.5701	4.2500e-003	4.0600e-003	222.9186
General Light Industry	5.62608e+006	0.0303	0.2758	0.2317	1.6500e-003		0.0210	0.0210		0.0210	0.0210	0.0000	300.2290	300.2290	5.7500e-003	5.5000e-003	302.0561
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0705**	**0.6408**	**0.5383**	**3.8400e-003**		**0.0487**	**0.0487**		**0.0487**	**0.0487**	**0.0000**	**697.6251**	**697.6251**	**0.0134**	**0.0128**	**701.8707**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Light Industry	3.29485e+006	0.0178	0.1615	0.1357	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	175.8259	175.8259	3.3700e-003	3.2200e-003	176.8960
General Light Industry	4.15207e+006	0.0224	0.2035	0.1710	1.2200e-003		0.0155	0.0155		0.0155	0.0155	0.0000	221.5701	221.5701	4.2500e-003	4.0600e-003	222.9186
General Light Industry	5.62608e+006	0.0303	0.2758	0.2317	1.6500e-003		0.0210	0.0210		0.0210	0.0210	0.0000	300.2290	300.2290	5.7500e-003	5.5000e-003	302.0561
Total		**0.0705**	**0.6408**	**0.5383**	**3.8400e-003**		**0.0487**	**0.0487**		**0.0487**	**0.0487**	**0.0000**	**697.6251**	**697.6251**	**0.0134**	**0.0128**	**701.8707**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.12097e+006	342.3738	0.0148	3.0500e-003	343.6292
General Light Industry	1.41261e+006	431.4483	0.0186	3.8400e-003	433.0303
General Light Industry	1.9141e+006	584.6153	0.0252	5.2100e-003	586.7589
Parking Lot	65824	20.1044	8.7000e-004	1.8000e-004	20.1781
Parking Lot	72160	22.0396	9.5000e-004	2.0000e-004	22.1204
Parking Lot	77440	23.6522	1.0200e-003	2.1000e-004	23.7390
Total		**1,424.2335**	**0.0614**	**0.0127**	**1,429.4558**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.12097e+006	342.3738	0.0148	3.0500e-003	343.6292
General Light Industry	1.41261e+006	431.4483	0.0186	3.8400e-003	433.0303
General Light Industry	1.9141e+006	584.6153	0.0252	5.2100e-003	586.7589
Parking Lot	65824	20.1044	8.7000e-004	1.8000e-004	20.1781
Parking Lot	72160	22.0396	9.5000e-004	2.0000e-004	22.1204
Parking Lot	77440	23.6522	1.0200e-003	2.1000e-004	23.7390
Total		**1,424.2335**	**0.0614**	**0.0127**	**1,429.4558**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	2.7361	1.9000e-004	0.0162	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0248	0.0248	1.2000e-004	0.0000	0.0272
Mitigated	2.7361	1.9000e-004	0.0162	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0248	0.0248	1.2000e-004	0.0000	0.0272

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	0.4555					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.2785					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0900e-003	1.9000e-004	0.0162	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0248	0.0248	1.2000e-004	0.0000	0.0272
Total	**2.7361**	**1.9000e-004**	**0.0162**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0248**	**0.0248**	**1.2000e-004**	**0.0000**	**0.0272**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4555					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.2785					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0900e-003	1.9000e-004	0.0162	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0248	0.0248	1.2000e-004	0.0000	0.0272
Total	**2.7361**	**1.9000e-004**	**0.0162**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0248**	**0.0248**	**1.2000e-004**	**0.0000**	**0.0272**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	23.3084	0.1778	4.3700e-003	28.3964
Mitigated	23.3084	0.1778	4.3600e-003	28.3937

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	5.42787 / 0	23.3084	0.1778	4.3700e-003	28.3964
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**23.3084**	**0.1778**	**4.3700e-003**	**28.3964**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	5.42787 / 0	23.3084	0.1778	4.3600e-003	28.3937
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**23.3084**	**0.1778**	**4.3600e-003**	**28.3937**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	97.0967	5.7383	0.0000	217.5999
Unmitigated	97.0967	5.7383	0.0000	217.5999

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	478.33	97.0967	5.7383	0.0000	217.5999
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**97.0967**	**5.7383**	**0.0000**	**217.5999**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	478.33	97.0967	5.7383	0.0000	217.5999
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**97.0967**	**5.7383**	**0.0000**	**217.5999**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	2	4.00	365	200	0.37	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					
Tractors/Loaders/Backhoes	0.1570	1.7104	0.4225	0.0136		0.0610	0.0610		0.0610	0.0610	0.0000	122.7983	122.7983	0.0128	0.0000	123.0660
Total	**0.1570**	**1.7104**	**0.4225**	**0.0136**		**0.0610**	**0.0610**		**0.0610**	**0.0610**	**0.0000**	**122.7983**	**122.7983**	**0.0128**	**0.0000**	**123.0660**

10.0 Vegetation

MoVal Logistics Center- 2005 Light Industrial (Passenger Cars)

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	122.52	1000sqft	5.27	122,516.00	0
General Light Industry	97.22	1000sqft	4.61	97,222.00	0
General Light Industry	166.01	1000sqft	6.83	166,010.00	0
Parking Lot	187.00	Space	1.68	74,800.00	0
Parking Lot	220.00	Space	1.98	88,000.00	0
Parking Lot	205.00	Space	1.84	82,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2005
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	673.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44. Year 2008 used in absense of year 2005

Land Use - Lot Acreage (Light Industrial Buildings 2,3,4):22.21

Construction Phase - Operation run only

Off-road Equipment - Operational Run Only.

Trips and VMT - Operational Run Only.

Vehicle Trips - Passenger Trip Rate based on Traffic Study; For conservative analysis, C-W trip % changed to 100%.

Vechicle Emission Factors - Passenger Cars Only; Information derived from Traffic Study.

Vechicle Emission Factors - Passenger Cars Only; Information derived from Traffic Study.

Vechicle Emission Factors - Passenger Cars Only; Information derived from Traffic Study.

Energy Use - Used historical data

Water And Wastewater - Water usage based on 0.75 AFY per acre which is based on EMWD data for similar projects.

Operational Off-Road Equipment - based on CARB Cargo Handling Equipment Yard Truck Emission Testing Report. hours per day based on the Port of Long Beach Air Emissions Inventory (June 2008)

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	100	50
tblConstructionPhase	NumDays	20.00	1.00
tblLandUse	LandUseSquareFeet	122,520.00	122,516.00
tblLandUse	LandUseSquareFeet	97,220.00	97,222.00
tblLandUse	LotAcreage	2.81	5.27
tblLandUse	LotAcreage	3.81	6.83
tblLandUse	LotAcreage	2.23	4.61
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00

tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	673.35
tblProjectCharacteristics	OperationalYear	2014	2005
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblVehicleEF	HHD	0.03	0.00
tblVehicleEF	HHD	0.03	0.00
tblVehicleEF	HHD	0.03	0.00
tblVehicleEF	LDA	0.44	1.00
tblVehicleEF	LDA	0.44	1.00
tblVehicleEF	LDA	0.44	1.00
tblVehicleEF	LDT1	0.10	0.00
tblVehicleEF	LDT1	0.10	0.00
tblVehicleEF	LDT1	0.10	0.00
tblVehicleEF	LDT2	0.23	0.00
tblVehicleEF	LDT2	0.23	0.00
tblVehicleEF	LDT2	0.23	0.00
tblVehicleEF	LHD1	0.03	0.00
tblVehicleEF	LHD1	0.03	0.00
tblVehicleEF	LHD1	0.03	0.00
tblVehicleEF	LHD2	7.6570e-003	0.00
tblVehicleEF	LHD2	7.6570e-003	0.00
tblVehicleEF	LHD2	7.6570e-003	0.00
tblVehicleEF	MCY	0.01	0.00
tblVehicleEF	MCY	0.01	0.00
tblVehicleEF	MCY	0.01	0.00
tblVehicleEF	MDV	0.13	0.00

tblVehicleEF	MDV	0.13	0.00
tblVehicleEF	MDV	0.13	0.00
tblVehicleEF	MH	3.6440e-003	0.00
tblVehicleEF	MH	3.6440e-003	0.00
tblVehicleEF	MH	3.6440e-003	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	OBUS	7.1000e-004	0.00
tblVehicleEF	OBUS	7.1000e-004	0.00
tblVehicleEF	OBUS	7.1000e-004	0.00
tblVehicleEF	SBUS	9.7400e-004	0.00
tblVehicleEF	SBUS	9.7400e-004	0.00
tblVehicleEF	SBUS	9.7400e-004	0.00
tblVehicleEF	UBUS	6.1800e-004	0.00
tblVehicleEF	UBUS	6.1800e-004	0.00
tblVehicleEF	UBUS	6.1800e-004	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	1.32	5.48
tblVehicleTrips	SU_TR	0.68	5.48
tblVehicleTrips	WD_TR	6.97	5.48
tblWater	IndoorWaterUseRate	89,204,687.50	5,427,870.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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	2.7361	1.9000e-004	0.0162	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0248	0.0248	1.2000e-004	0.0000	0.0272
Energy	0.0705	0.6408	0.5383	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	2,121.8585	2,121.8585	0.0747	0.0255	2,131.3265
Mobile	3.9417	5.1625	59.0525	0.0519	4.0985	0.1371	4.2356	1.1844	0.1371	1.3215	0.0000	4,666.7514	4,666.7514	0.3877	0.0000	4,674.8934
Offroad	0.1570	1.7104	0.4225	0.0136		0.0610	0.0610		0.0610	0.0610	0.0000	122.7983	122.7983	0.0128	0.0000	123.0660
Waste						0.0000	0.0000		0.0000	0.0000	97.0967	0.0000	97.0967	5.7383	0.0000	217.5999
Water						0.0000	0.0000		0.0000	0.0000	1.7220	21.5864	23.3084	0.1778	4.3700e-003	28.3964
Total	**6.9052**	**7.5139**	**60.0295**	**0.0693**	**4.0985**	**0.2468**	**4.3454**	**1.1844**	**0.2468**	**1.4312**	**98.8187**	**6,933.0194**	**7,031.8381**	**6.3913**	**0.0299**	**7,175.3093**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.7361	1.9000e-004	0.0162	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0248	0.0248	1.2000e-004	0.0000	0.0272
Energy	0.0705	0.6408	0.5383	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	2,121.8585	2,121.8585	0.0747	0.0255	2,131.3265
Mobile	3.9417	5.1625	59.0525	0.0519	4.0985	0.1371	4.2356	1.1844	0.1371	1.3215	0.0000	4,666.7514	4,666.7514	0.3877	0.0000	4,674.8934
Offroad	0.1570	1.7104	0.4225	0.0136		0.0610	0.0610		0.0610	0.0610	0.0000	122.7983	122.7983	0.0128	0.0000	123.0660
Waste						0.0000	0.0000		0.0000	0.0000	97.0967	0.0000	97.0967	5.7383	0.0000	217.5999
Water						0.0000	0.0000		0.0000	0.0000	1.7220	21.5864	23.3084	0.1778	4.3600e-003	28.3937
Total	**6.9052**	**7.5139**	**60.0295**	**0.0693**	**4.0985**	**0.2468**	**4.3454**	**1.1844**	**0.2468**	**1.4312**	**98.8187**	**6,933.0194**	**7,031.8381**	**6.3913**	**0.0298**	**7,175.3066**

	ROG	NOx	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	**2.27**	**22.76**	**0.70**	**19.58**	**0.00**	**24.71**	**1.40**	**0.00**	**24.71**	**4.26**	**0.00**	**1.77**	**1.75**	**0.20**	**0.03**	**1.72**

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	1/1/2016	1/1/2016	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	162	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	0.00	0.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

3.2 Demolition - 2016

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	3.9417	5.1625	59.0525	0.0519	4.0985	0.1371	4.2356	1.1844	0.1371	1.3215	0.0000	4,666.7514	4,666.7514	0.3877	0.0000	4,674.8934
Mitigated	3.9417	5.1625	59.0525	0.0519	4.0985	0.1371	4.2356	1.1844	0.1371	1.3215	0.0000	4,666.7514	4,666.7514	0.3877	0.0000	4,674.8934

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	671.41	671.41	671.41	3,783,816	3,783,816
General Light Industry	532.77	532.77	532.77	3,002,470	3,002,470
General Light Industry	909.73	909.73	909.73	5,126,929	5,126,929
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	2,113.91	2,113.91	2,113.91	11,913,215	11,913,215

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	100.00	0.00	0.00	92	5	3
General Light Industry	16.60	8.40	6.90	100.00	0.00	0.00	92	5	3
General Light Industry	16.60	8.40	6.90	100.00	0.00	0.00	92	5	3
Parking Lot	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
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
1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

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					
NaturalGas Unmitigated	0.0705	0.6408	0.5383	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	697.6251	697.6251	0.0134	0.0128	701.8707
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,424.2335	1,424.2335	0.0613	0.0127	1,429.4558
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,424.2335	1,424.2335	0.0613	0.0127	1,429.4558
NaturalGas Mitigated	0.0705	0.6408	0.5383	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	697.6251	697.6251	0.0134	0.0128	701.8707

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	3.29485e+006	0.0178	0.1615	0.1357	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	175.8259	175.8259	3.3700e-003	3.2200e-003	176.8960
General Light Industry	4.15207e+006	0.0224	0.2035	0.1710	1.2200e-003		0.0155	0.0155		0.0155	0.0155	0.0000	221.5701	221.5701	4.2500e-003	4.0600e-003	222.9186
General Light Industry	5.62608e+006	0.0303	0.2758	0.2317	1.6500e-003		0.0210	0.0210		0.0210	0.0210	0.0000	300.2290	300.2290	5.7500e-003	5.5000e-003	302.0561
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0705**	**0.6408**	**0.5383**	**3.8400e-003**		**0.0487**	**0.0487**		**0.0487**	**0.0487**	**0.0000**	**697.6251**	**697.6251**	**0.0134**	**0.0128**	**701.8707**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Light Industry	3.29485e+006	0.0178	0.1615	0.1357	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	175.8259	175.8259	3.3700e-003	3.2200e-003	176.8960
General Light Industry	4.15207e+006	0.0224	0.2035	0.1710	1.2200e-003		0.0155	0.0155		0.0155	0.0155	0.0000	221.5701	221.5701	4.2500e-003	4.0600e-003	222.9186
General Light Industry	5.62608e+006	0.0303	0.2758	0.2317	1.6500e-003		0.0210	0.0210		0.0210	0.0210	0.0000	300.2290	300.2290	5.7500e-003	5.5000e-003	302.0561
Total		**0.0705**	**0.6408**	**0.5383**	**3.8400e-003**		**0.0487**	**0.0487**		**0.0487**	**0.0487**	**0.0000**	**697.6251**	**697.6251**	**0.0134**	**0.0128**	**701.8707**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.12097e+006	342.3738	0.0148	3.0500e-003	343.6292
General Light Industry	1.41261e+006	431.4483	0.0186	3.8400e-003	433.0303
General Light Industry	1.9141e+006	584.6153	0.0252	5.2100e-003	586.7589
Parking Lot	65824	20.1044	8.7000e-004	1.8000e-004	20.1781
Parking Lot	72160	22.0396	9.5000e-004	2.0000e-004	22.1204
Parking Lot	77440	23.6522	1.0200e-003	2.1000e-004	23.7390
Total		**1,424.2335**	**0.0614**	**0.0127**	**1,429.4558**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.12097e+006	342.3738	0.0148	3.0500e-003	343.6292
General Light Industry	1.41261e+006	431.4483	0.0186	3.8400e-003	433.0303
General Light Industry	1.9141e+006	584.6153	0.0252	5.2100e-003	586.7589
Parking Lot	65824	20.1044	8.7000e-004	1.8000e-004	20.1781
Parking Lot	72160	22.0396	9.5000e-004	2.0000e-004	22.1204
Parking Lot	77440	23.6522	1.0200e-003	2.1000e-004	23.7390
Total		**1,424.2335**	**0.0614**	**0.0127**	**1,429.4558**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	2.7361	1.9000e-004	0.0162	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0248	0.0248	1.2000e-004	0.0000	0.0272
Mitigated	2.7361	1.9000e-004	0.0162	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0248	0.0248	1.2000e-004	0.0000	0.0272

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	0.4555					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.2785					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0900e-003	1.9000e-004	0.0162	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0248	0.0248	1.2000e-004	0.0000	0.0272
Total	**2.7361**	**1.9000e-004**	**0.0162**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0248**	**0.0248**	**1.2000e-004**	**0.0000**	**0.0272**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4555					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.2785					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0900e-003	1.9000e-004	0.0162	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0248	0.0248	1.2000e-004	0.0000	0.0272
Total	**2.7361**	**1.9000e-004**	**0.0162**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0248**	**0.0248**	**1.2000e-004**	**0.0000**	**0.0272**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	23.3084	0.1778	4.3700e-003	28.3964
Mitigated	23.3084	0.1778	4.3600e-003	28.3937

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	5.42787 / 0	23.3084	0.1778	4.3700e-003	28.3964
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**23.3084**	**0.1778**	**4.3700e-003**	**28.3964**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	5.42787 / 0	23.3084	0.1778	4.3600e-003	28.3937
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**23.3084**	**0.1778**	**4.3600e-003**	**28.3937**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	97.0967	5.7383	0.0000	217.5999
Unmitigated	97.0967	5.7383	0.0000	217.5999

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	478.33	97.0967	5.7383	0.0000	217.5999
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**97.0967**	**5.7383**	**0.0000**	**217.5999**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	478.33	97.0967	5.7383	0.0000	217.5999
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**97.0967**	**5.7383**	**0.0000**	**217.5999**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	2	4.00	365	200	0.37	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					
Tractors/Loaders/Backhoes	0.1570	1.7104	0.4225	0.0136		0.0610	0.0610		0.0610	0.0610	0.0000	122.7983	122.7983	0.0128	0.0000	123.0660
Total	**0.1570**	**1.7104**	**0.4225**	**0.0136**		**0.0610**	**0.0610**		**0.0610**	**0.0610**	**0.0000**	**122.7983**	**122.7983**	**0.0128**	**0.0000**	**123.0660**

10.0 Vegetation

MoVal Logistics Center- 2020 High Cube (Trucks)

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	173.75	1000sqft	4.62	173,750.00	0
Unrefrigerated Warehouse-No Rail	1,178.02	1000sqft	41.61	1,178,020.00	0
Parking Lot	1,386.00	Space	12.47	554,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	466.91	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Lot Acreage:58.7; Cold Storage takes into account 10% of total Project land uses (High Cube and Light Industrial)

Construction Phase - Operation run only

Off-road Equipment - Operational run only

Trips and VMT - Operational Run Only.

Vehicle Trips - ITE Truck Trip Rate for High-Cube Warehouse.

Vechicle Emission Factors - Trucks Only.

Vechicle Emission Factors - Trucks Only.

Vechicle Emission Factors - Trucks Only.

Area Coating -

Energy Use - Title-24 Electricity Energy Intensity and Title-24 Natural Gas Energy Intensity were adjusted by 21.8% and 16.8% respectively, to reflect 2013 Title 24 requirements. Source: Impact Analysis California's 2013 Building Energy Efficiency Standards (CEC 2013)

Water And Wastewater - Water usage based on 0.75 AFY per acre which is based on EMWD data for similar projects.

Operational Off-Road Equipment - based on CARB Cargo Handling Equipment Yard Truck Emission Testing Report. hours per day based on the Port of Long Beach Air Emissions Inventory (June 2008)

Mobile Land Use Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	70.00	1.00
tblEnergyUse	T24E	1.30	1.02
tblEnergyUse	T24E	0.45	0.35
tblEnergyUse	T24NG	3.42	2.85
tblEnergyUse	T24NG	2.11	1.76
tblLandUse	LotAcreage	3.99	4.62
tblLandUse	LotAcreage	27.04	41.61
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	5.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	466.91
tblProjectCharacteristics	OperationalYear	2014	2020
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblVehicleEF	HHD	0.04	0.60
tblVehicleEF	HHD	0.04	0.60
tblVehicleEF	HHD	0.04	0.60
tblVehicleEF	LDA	0.46	0.00
tblVehicleEF	LDA	0.46	0.00
tblVehicleEF	LDA	0.46	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.05	0.22
tblVehicleEF	LHD1	0.05	0.22
tblVehicleEF	LHD1	0.05	0.22
tblVehicleEF	LHD2	7.4600e-003	0.00
tblVehicleEF	LHD2	7.4600e-003	0.00
tblVehicleEF	LHD2	7.4600e-003	0.00
tblVehicleEF	MCY	6.5150e-003	0.00
tblVehicleEF	MCY	6.5150e-003	0.00

tblVehicleEF	MCY	6.5150e-003	0.00
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MH	3.2720e-003	0.00
tblVehicleEF	MH	3.2720e-003	0.00
tblVehicleEF	MH	3.2720e-003	0.00
tblVehicleEF	MHD	0.01	0.18
tblVehicleEF	MHD	0.01	0.18
tblVehicleEF	MHD	0.01	0.18
tblVehicleEF	OBUS	9.0200e-004	0.00
tblVehicleEF	OBUS	9.0200e-004	0.00
tblVehicleEF	OBUS	9.0200e-004	0.00
tblVehicleEF	SBUS	8.2800e-004	0.00
tblVehicleEF	SBUS	8.2800e-004	0.00
tblVehicleEF	SBUS	8.2800e-004	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	61.00
tblVehicleTrips	CW_TL	16.60	61.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	2.59	0.64
tblVehicleTrips	ST_TR	2.59	0.64
tblVehicleTrips	SU_TR	2.59	0.64

tblVehicleTrips	SU_TR	2.59	0.64
tblVehicleTrips	WD_TR	2.59	0.64
tblVehicleTrips	WD_TR	2.59	0.64
tblWater	IndoorWaterUseRate	40,179,687.50	1,843,913.00
tblWater	IndoorWaterUseRate	272,417,125.00	12,501,696.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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	8.4769	3.2000e-004	0.0352	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0679	0.0679	1.8000e-004	0.0000	0.0718
Energy	0.0595	0.5408	0.4543	3.2400e-003		0.0411	0.0411		0.0411	0.0411	0.0000	2,927.0753	2,927.0753	0.1565	0.0408	2,943.0233
Mobile	3.3388	61.1427	33.0996	0.2437	7.6556	1.3959	9.0515	2.1285	1.2843	3.4128	0.0000	20,763.9797	20,763.9797	0.1368	0.0000	20,766.8515
Offroad	0.1341	1.6304	0.7121	2.8900e-003		0.0535	0.0535		0.0492	0.0492	0.0000	254.1640	254.1640	0.0822	0.0000	255.8902
Waste						0.0000	0.0000		0.0000	0.0000	257.9325	0.0000	257.9325	15.2434	0.0000	578.0434
Water						0.0000	0.0000		0.0000	0.0000	4.5512	39.5605	44.1117	0.4699	0.0116	57.5591
Total	**12.0093**	**63.3142**	**34.3012**	**0.2499**	**7.6556**	**1.4906**	**9.1462**	**2.1285**	**1.3747**	**3.5032**	**262.4837**	**23,984.8475**	**24,247.3312**	**16.0889**	**0.0524**	**24,601.4393**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.4769	3.2000e-004	0.0352	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0679	0.0679	1.8000e-004	0.0000	0.0718
Energy	0.0595	0.5408	0.4543	3.2400e-003		0.0411	0.0411		0.0411	0.0411	0.0000	2,927.0753	2,927.0753	0.1565	0.0408	2,943.0233
Mobile	3.2838	59.9586	32.6731	0.2389	7.5025	1.3681	8.8706	2.0860	1.2586	3.3446	0.0000	20,351.6423	20,351.6423	0.1342	0.0000	20,354.4594
Offroad	0.1341	1.6304	0.7121	2.8900e-003		0.0535	0.0535		0.0492	0.0492	0.0000	254.1640	254.1640	0.0822	0.0000	255.8902
Waste						0.0000	0.0000		0.0000	0.0000	257.9325	0.0000	257.9325	15.2434	0.0000	578.0434
Water						0.0000	0.0000		0.0000	0.0000	3.6410	31.6484	35.2894	0.3759	9.2200e-003	46.0415
Total	**11.9543**	**62.1301**	**33.8747**	**0.2450**	**7.5025**	**1.4628**	**8.9653**	**2.0860**	**1.3491**	**3.4350**	**261.5735**	**23,564.5980**	**23,826.1714**	**15.9923**	**0.0501**	**24,177.5295**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.57**	**4.45**	**3.32**	**3.09**	**2.00**	**5.46**	**2.56**	**2.00**	**5.44**	**3.35**	**0.35**	**2.81**	**2.79**	**1.11**	**4.45**	**2.76**

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	1/1/2016	1/1/2016	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	162	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	0.00	0.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

3.2 Demolition - 2016

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	3.3388	61.1427	33.0996	0.2437	7.6556	1.3959	9.0515	2.1285	1.2843	3.4128	0.0000	20,763.9797	20,763.9797	0.1368	0.0000	20,766.8515
Mitigated	3.2838	59.9586	32.6731	0.2389	7.5025	1.3681	8.8706	2.0860	1.2586	3.3446	0.0000	20,351.6423	20,351.6423	0.1342	0.0000	20,354.4594

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	111.20	111.20	111.20	2,302,543	2,256,492
Unrefrigerated Warehouse-No Rail	753.93	753.93	753.93	15,611,175	15,298,952
Total	865.13	865.13	865.13	17,913,718	17,555,444

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	61.00	8.40	6.90	100.00	0.00	0.00	92	5	3
Unrefrigerated Warehouse-No	61.00	8.40	6.90	100.00	0.00	0.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.000000	0.000000	0.000000	0.000000	0.220300	0.000000	0.176600	0.603100	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	tons/yr										MT/yr					
NaturalGas Unmitigated	0.0595	0.5408	0.4543	3.2400e-003		0.0411	0.0411		0.0411	0.0411	0.0000	588.7339	588.7339	0.0113	0.0108	592.3168
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,338.3415	2,338.3415	0.1452	0.0301	2,350.7065
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,338.3415	2,338.3415	0.1452	0.0301	2,350.7065
NaturalGas Mitigated	0.0595	0.5408	0.4543	3.2400e-003		0.0411	0.0411		0.0411	0.0411	0.0000	588.7339	588.7339	0.0113	0.0108	592.3168

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					
Refrigerated Warehouse-No Rail	8.9238e+006	0.0481	0.4374	0.3675	2.6200e-003		0.0333	0.0333		0.0333	0.0333	0.0000	476.2080	476.2080	9.1300e-003	8.7300e-003	479.1061
Unrefrigerated Warehouse-No Rail	2.10866e+006	0.0114	0.1034	0.0868	6.2000e-004		7.8600e-003	7.8600e-003		7.8600e-003	7.8600e-003	0.0000	112.5259	112.5259	2.1600e-003	2.0600e-003	113.2107
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0595**	**0.5408**	**0.4543**	**3.2400e-003**		**0.0411**	**0.0411**		**0.0411**	**0.0411**	**0.0000**	**588.7339**	**588.7339**	**0.0113**	**0.0108**	**592.3168**

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					
Refrigerated Warehouse-No Rail	8.9238e+006	0.0481	0.4374	0.3675	2.6200e-003		0.0333	0.0333		0.0333	0.0333	0.0000	476.2080	476.2080	9.1300e-003	8.7300e-003	479.1061
Unrefrigerated Warehouse-No Rail	2.10866e+006	0.0114	0.1034	0.0868	6.2000e-004		7.8600e-003	7.8600e-003		7.8600e-003	7.8600e-003	0.0000	112.5259	112.5259	2.1600e-003	2.0600e-003	113.2107
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0595**	**0.5408**	**0.4543**	**3.2400e-003**		**0.0411**	**0.0411**		**0.0411**	**0.0411**	**0.0000**	**588.7339**	**588.7339**	**0.0113**	**0.0108**	**592.3168**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	487872	103.3249	6.4200e-003	1.3300e-003	103.8712
Refrigerated Warehouse-No Rail	7.11333e+006	1,506.5084	0.0936	0.0194	1,514.4748
Unrefrigerated Warehouse-No Rail	3.43982e+006	728.5082	0.0453	9.3600e-003	732.3605
Total		**2,338.3415**	**0.1452**	**0.0301**	**2,350.7065**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	487872	103.3249	6.4200e-003	1.3300e-003	103.8712
Refrigerated Warehouse-No Rail	7.11333e+006	1,506.5084	0.0936	0.0194	1,514.4748
Unrefrigerated Warehouse-No Rail	3.43982e+006	728.5082	0.0453	9.3600e-003	732.3605
Total		**2,338.3415**	**0.1452**	**0.0301**	**2,350.7065**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	8.4769	3.2000e-004	0.0352	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0679	0.0679	1.8000e-004	0.0000	0.0718
Mitigated	8.4769	3.2000e-004	0.0352	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0679	0.0679	1.8000e-004	0.0000	0.0718

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.5856					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.8880					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.3100e-003	3.2000e-004	0.0352	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0679	0.0679	1.8000e-004	0.0000	0.0718
Total	**8.4769**	**3.2000e-004**	**0.0352**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.0679**	**0.0679**	**1.8000e-004**	**0.0000**	**0.0718**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.5856					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.8880					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.3100e-003	3.2000e-004	0.0352	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0679	0.0679	1.8000e-004	0.0000	0.0718
Total	**8.4769**	**3.2000e-004**	**0.0352**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.0679**	**0.0679**	**1.8000e-004**	**0.0000**	**0.0718**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	44.1117	0.4699	0.0116	57.5591
Mitigated	35.2894	0.3759	9.2200e-003	46.0415

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.84391 / 0	5.6699	0.0604	1.4800e-003	7.3984
Unrefrigerated Warehouse-No Rail	12.5017 / 0	38.4418	0.4095	0.0101	50.1607
Total		**44.1117**	**0.4699**	**0.0115**	**57.5591**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.47513 / 0	4.5359	0.0483	1.1900e-003	5.9179
Unrefrigerated Warehouse-No Rail	10.0014 / 0	30.7535	0.3276	8.0400e-003	40.1235
Total		**35.2894**	**0.3759**	**9.2300e-003**	**46.0415**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	257.9325	15.2434	0.0000	578.0434
Unmitigated	257.9325	15.2434	0.0000	578.0434

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	163.32	33.1525	1.9593	0.0000	74.2969
Unrefrigerated Warehouse-No Rail	1107.34	224.7800	13.2841	0.0000	503.7465
Total		**257.9325**	**15.2434**	**0.0000**	**578.0433**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	163.32	33.1525	1.9593	0.0000	74.2969
Unrefrigerated Warehouse-No Rail	1107.34	224.7800	13.2841	0.0000	503.7465
Total		**257.9325**	**15.2434**	**0.0000**	**578.0433**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	5	4.00	365	200	0.37	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					
Tractors/Loaders/Backhoes	0.1341	1.6304	0.7121	2.8900e-003		0.0535	0.0535		0.0492	0.0492	0.0000	254.1640	254.1640	0.0822	0.0000	255.8902
Total	**0.1341**	**1.6304**	**0.7121**	**2.8900e-003**		**0.0535**	**0.0535**		**0.0492**	**0.0492**	**0.0000**	**254.1640**	**254.1640**	**0.0822**	**0.0000**	**255.8902**

10.0 Vegetation

MoVal Logistics Center- 2020 High Cube (Passenger Car)

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	173.75	1000sqft	4.62	173,750.00	0
Unrefrigerated Warehouse-No Rail	1,178.02	1000sqft	41.61	1,178,020.00	0
Parking Lot	1,386.00	Space	12.47	554,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	466.91	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocation," cells AH/AQ 35-44.

Land Use - Lot Acreage:58.7; Cold Storage takes into account 10% of total Project land uses (High Cube and Light Industrial)

Construction Phase - Operation run only

Off-road Equipment - Operation run only

Trips and VMT - Operation run only

Vehicle Trips - ITE Passenger Cars Trip Rate for High-Cube Warehouse. For conservative analysis, C-W trip % changed to 100%.

Vechicle Emission Factors - Passenger Cars Only.

Vechicle Emission Factors - Passenger Cars Only.

Vechicle Emission Factors - Passenger Cars Only.

Area Coating -

Energy Use - Title-24 Electricity Energy Intensity and Title-24 Natural Gas Energy Intensity were adjusted by 21.8% and 16.8% respectively, to reflect 2013 Title 24 requirements. Source: Impact Analysis California's 2013 Building Energy Efficiency Standards (CEC 2013)

Water And Wastewater - Water usage based on 0.75 AFY per acre which is based on EMWD data for similar projects.

Operational Off-Road Equipment - based on CARB Cargo Handling Equipment Yard Truck Emission Testing Report. hours per day based on the Port of Long Beach Air Emissions Inventory (June 2008)

Mobile Land Use Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	70.00	1.00
tblEnergyUse	T24E	1.30	1.02
tblEnergyUse	T24E	0.45	0.35
tblEnergyUse	T24NG	3.42	2.85
tblEnergyUse	T24NG	2.11	1.76
tblLandUse	LotAcreage	3.99	4.62
tblLandUse	LotAcreage	27.04	41.61
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	5.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	466.91
tblProjectCharacteristics	OperationalYear	2014	2020
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblVehicleEF	HHD	0.04	0.00
tblVehicleEF	HHD	0.04	0.00
tblVehicleEF	HHD	0.04	0.00
tblVehicleEF	LDA	0.46	1.00
tblVehicleEF	LDA	0.46	1.00
tblVehicleEF	LDA	0.46	1.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD2	7.4600e-003	0.00
tblVehicleEF	LHD2	7.4600e-003	0.00
tblVehicleEF	LHD2	7.4600e-003	0.00
tblVehicleEF	MCY	6.5150e-003	0.00

tblVehicleEF	MCY	6.5150e-003	0.00
tblVehicleEF	MCY	6.5150e-003	0.00
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MH	3.2720e-003	0.00
tblVehicleEF	MH	3.2720e-003	0.00
tblVehicleEF	MH	3.2720e-003	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	OBUS	9.0200e-004	0.00
tblVehicleEF	OBUS	9.0200e-004	0.00
tblVehicleEF	OBUS	9.0200e-004	0.00
tblVehicleEF	SBUS	8.2800e-004	0.00
tblVehicleEF	SBUS	8.2800e-004	0.00
tblVehicleEF	SBUS	8.2800e-004	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	2.59	1.04
tblVehicleTrips	ST_TR	2.59	1.04
tblVehicleTrips	SU_TR	2.59	1.04
tblVehicleTrips	SU_TR	2.59	1.04

tblVehicleTrips	WD_TR	2.59	1.04
tblVehicleTrips	WD_TR	2.59	1.04
tblWater	IndoorWaterUseRate	40,179,687.50	1,843,913.00
tblWater	IndoorWaterUseRate	272,417,125.00	12,501,696.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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	8.4769	3.2000e-004	0.0352	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0679	0.0679	1.8000e-004	0.0000	0.0718
Energy	0.0595	0.5408	0.4543	3.2400e-003		0.0411	0.0411		0.0411	0.0411	0.0000	2,927.0753	2,927.0753	0.1565	0.0408	2,943.0233
Mobile	0.3504	0.5912	6.3621	0.0293	2.9593	0.0151	2.9744	0.7855	0.0140	0.7995	0.0000	1,809.4387	1,809.4387	0.0636	0.0000	1,810.7741
Offroad	0.1341	1.6304	0.7121	2.8900e-003		0.0535	0.0535		0.0492	0.0492	0.0000	254.1640	254.1640	0.0822	0.0000	255.8902
Waste						0.0000	0.0000		0.0000	0.0000	257.9325	0.0000	257.9325	15.2434	0.0000	578.0434
Water						0.0000	0.0000		0.0000	0.0000	4.5512	39.5605	44.1117	0.4699	0.0116	57.5591
Total	**9.0209**	**2.7627**	**7.5636**	**0.0355**	**2.9593**	**0.1098**	**3.0691**	**0.7855**	**0.1045**	**0.8899**	**262.4837**	**5,030.3065**	**5,292.7902**	**16.0158**	**0.0524**	**5,645.3618**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.4769	3.2000e-004	0.0352	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0679	0.0679	1.8000e-004	0.0000	0.0718
Energy	0.0595	0.5408	0.4543	3.2400e-003		0.0411	0.0411		0.0411	0.0411	0.0000	2,927.0753	2,927.0753	0.1565	0.0408	2,943.0233
Mobile	0.3485	0.5802	6.2491	0.0288	2.9001	0.0149	2.9150	0.7698	0.0138	0.7835	0.0000	1,773.7831	1,773.7831	0.0624	0.0000	1,775.0928
Offroad	0.1341	1.6304	0.7121	2.8900e-003		0.0535	0.0535		0.0492	0.0492	0.0000	254.1640	254.1640	0.0822	0.0000	255.8902
Waste						0.0000	0.0000		0.0000	0.0000	257.9325	0.0000	257.9325	15.2434	0.0000	578.0434
Water						0.0000	0.0000		0.0000	0.0000	3.6410	31.6484	35.2894	0.3759	9.2200e-003	46.0415
Total	**9.0190**	**2.7517**	**7.4506**	**0.0349**	**2.9001**	**0.1096**	**3.0097**	**0.7698**	**0.1042**	**0.8740**	**261.5735**	**4,986.7387**	**5,248.3122**	**15.9205**	**0.0501**	**5,598.1629**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.51**	**59.41**	**10.91**	**9.78**	**2.00**	**48.93**	**3.68**	**2.00**	**47.34**	**7.32**	**0.35**	**5.92**	**5.64**	**1.11**	**4.45**	**5.37**

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	1/1/2016	1/1/2016	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	162	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

3.2 Demolition - 2016

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	0.3504	0.5912	6.3621	0.0293	2.9593	0.0151	2.9744	0.7855	0.0140	0.7995	0.0000	1,809.4387	1,809.4387	0.0636	0.0000	1,810.7741
Mitigated	0.3485	0.5802	6.2491	0.0288	2.9001	0.0149	2.9150	0.7698	0.0138	0.7835	0.0000	1,773.7831	1,773.7831	0.0624	0.0000	1,775.0928

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	180.70	180.70	180.70	1,018,358	997,991
Unrefrigerated Warehouse-No Rail	1,225.14	1,225.14	1225.14	6,904,440	6,766,351
Total	1,405.84	1,405.84	1,405.84	7,922,799	7,764,343

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	92	5	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	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	tons/yr										MT/yr					
NaturalGas Unmitigated	0.0595	0.5408	0.4543	3.2400e-003		0.0411	0.0411		0.0411	0.0411	0.0000	588.7339	588.7339	0.0113	0.0108	592.3168
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,338.3415	2,338.3415	0.1452	0.0301	2,350.7065
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,338.3415	2,338.3415	0.1452	0.0301	2,350.7065
NaturalGas Mitigated	0.0595	0.5408	0.4543	3.2400e-003		0.0411	0.0411		0.0411	0.0411	0.0000	588.7339	588.7339	0.0113	0.0108	592.3168

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					
Refrigerated Warehouse-No Rail	8.9238e+006	0.0481	0.4374	0.3675	2.6200e-003		0.0333	0.0333		0.0333	0.0333	0.0000	476.2080	476.2080	9.1300e-003	8.7300e-003	479.1061
Unrefrigerated Warehouse-No Rail	2.10866e+006	0.0114	0.1034	0.0868	6.2000e-004		7.8600e-003	7.8600e-003		7.8600e-003	7.8600e-003	0.0000	112.5259	112.5259	2.1600e-003	2.0600e-003	113.2107
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0595**	**0.5408**	**0.4543**	**3.2400e-003**		**0.0411**	**0.0411**		**0.0411**	**0.0411**	**0.0000**	**588.7339**	**588.7339**	**0.0113**	**0.0108**	**592.3168**

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					
Refrigerated Warehouse-No Rail	8.9238e+006	0.0481	0.4374	0.3675	2.6200e-003		0.0333	0.0333		0.0333	0.0333	0.0000	476.2080	476.2080	9.1300e-003	8.7300e-003	479.1061
Unrefrigerated Warehouse-No Rail	2.10866e+006	0.0114	0.1034	0.0868	6.2000e-004		7.8600e-003	7.8600e-003		7.8600e-003	7.8600e-003	0.0000	112.5259	112.5259	2.1600e-003	2.0600e-003	113.2107
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0595**	**0.5408**	**0.4543**	**3.2400e-003**		**0.0411**	**0.0411**		**0.0411**	**0.0411**	**0.0000**	**588.7339**	**588.7339**	**0.0113**	**0.0108**	**592.3168**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	487872	103.3249	6.4200e-003	1.3300e-003	103.8712
Refrigerated Warehouse-No Rail	7.11333e+006	1,506.5084	0.0936	0.0194	1,514.4748
Unrefrigerated Warehouse-No Rail	3.43982e+006	728.5082	0.0453	9.3600e-003	732.3605
Total		**2,338.3415**	**0.1452**	**0.0301**	**2,350.7065**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	487872	103.3249	6.4200e-003	1.3300e-003	103.8712
Refrigerated Warehouse-No Rail	7.11333e+006	1,506.5084	0.0936	0.0194	1,514.4748
Unrefrigerated Warehouse-No Rail	3.43982e+006	728.5082	0.0453	9.3600e-003	732.3605
Total		**2,338.3415**	**0.1452**	**0.0301**	**2,350.7065**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	8.4769	3.2000e-004	0.0352	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0679	0.0679	1.8000e-004	0.0000	0.0718
Mitigated	8.4769	3.2000e-004	0.0352	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0679	0.0679	1.8000e-004	0.0000	0.0718

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.5856					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.8880					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.3100e-003	3.2000e-004	0.0352	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0679	0.0679	1.8000e-004	0.0000	0.0718
Total	**8.4769**	**3.2000e-004**	**0.0352**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.0679**	**0.0679**	**1.8000e-004**	**0.0000**	**0.0718**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.5856					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.8880					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.3100e-003	3.2000e-004	0.0352	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0679	0.0679	1.8000e-004	0.0000	0.0718
Total	**8.4769**	**3.2000e-004**	**0.0352**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.0679**	**0.0679**	**1.8000e-004**	**0.0000**	**0.0718**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	44.1117	0.4699	0.0116	57.5591
Mitigated	35.2894	0.3759	9.2200e-003	46.0415

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.84391 / 0	5.6699	0.0604	1.4800e-003	7.3984
Unrefrigerated Warehouse-No Rail	12.5017 / 0	38.4418	0.4095	0.0101	50.1607
Total		**44.1117**	**0.4699**	**0.0115**	**57.5591**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.47513 / 0	4.5359	0.0483	1.1900e-003	5.9179
Unrefrigerated Warehouse-No Rail	10.0014 / 0	30.7535	0.3276	8.0400e-003	40.1235
Total		**35.2894**	**0.3759**	**9.2300e-003**	**46.0415**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	257.9325	15.2434	0.0000	578.0434
Unmitigated	257.9325	15.2434	0.0000	578.0434

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	163.32	33.1525	1.9593	0.0000	74.2969
Unrefrigerated Warehouse-No Rail	1107.34	224.7800	13.2841	0.0000	503.7465
Total		**257.9325**	**15.2434**	**0.0000**	**578.0433**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	163.32	33.1525	1.9593	0.0000	74.2969
Unrefrigerated Warehouse-No Rail	1107.34	224.7800	13.2841	0.0000	503.7465
Total		**257.9325**	**15.2434**	**0.0000**	**578.0433**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	5	4.00	365	200	0.37	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					
Tractors/Loaders/Backhoes	0.1341	1.6304	0.7121	2.8900e-003		0.0535	0.0535		0.0492	0.0492	0.0000	254.1640	254.1640	0.0822	0.0000	255.8902
Total	**0.1341**	**1.6304**	**0.7121**	**2.8900e-003**		**0.0535**	**0.0535**		**0.0492**	**0.0492**	**0.0000**	**254.1640**	**254.1640**	**0.0822**	**0.0000**	**255.8902**

10.0 Vegetation

MoVal Logistics Center- 2020 Light Industrial (Trucks)

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	122.52	1000sqft	5.27	122,516.00	0
General Light Industry	97.22	1000sqft	4.61	97,222.00	0
General Light Industry	166.01	1000sqft	6.83	166,010.00	0
Parking Lot	187.00	Space	1.68	74,800.00	0
Parking Lot	220.00	Space	1.98	88,000.00	0
Parking Lot	205.00	Space	1.84	82,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	466.91	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Lot Acreage (Light Industrial Buildings 2,3,4):22.21

Construction Phase -

Off-road Equipment - Operational Run Only.

Trips and VMT - Operational Run Only.

Vehicle Trips - Truck Trip Rate based on Traffic Study

Vechicle Emission Factors - Trucks Only; Information derived from Traffic Study.

Vechicle Emission Factors - Trucks Only; Information derived from Traffic Study.

Vechicle Emission Factors - Trucks Only; Information derived from Traffic Study.

Energy Use - Title-24 Electricity Energy Intensity and Title-24 Natural Gas Energy Intensity were adjusted by 21.8% and 16.8% respectively, to reflect 2013 Title 24 requirements. Source: Impact Analysis California's 2013 Building Energy Efficiency Standards (CEC 2013)

Water And Wastewater - Water usage based on 0.75 AFY per acre which is based on EMWD data for similar projects.

Operational Off-Road Equipment - based on CARB Cargo Handling Equipment Yard Truck Emission Testing Report. hours per day based on the Port of Long Beach Air Emissions Inventory (June 2008)

Mobile Land Use Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	2.69	2.10
tblEnergyUse	T24NG	16.16	13.45
tblLandUse	LandUseSquareFeet	122,520.00	122,516.00
tblLandUse	LandUseSquareFeet	97,220.00	97,222.00
tblLandUse	LotAcreage	2.81	5.27
tblLandUse	LotAcreage	3.81	6.83
tblLandUse	LotAcreage	2.23	4.61
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00

tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	466.91
tblProjectCharacteristics	OperationalYear	2014	2020
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblVehicleEF	HHD	0.04	0.44
tblVehicleEF	HHD	0.04	0.44
tblVehicleEF	HHD	0.04	0.44
tblVehicleEF	LDA	0.46	0.00
tblVehicleEF	LDA	0.46	0.00
tblVehicleEF	LDA	0.46	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.05	0.37
tblVehicleEF	LHD1	0.05	0.37
tblVehicleEF	LHD1	0.05	0.37
tblVehicleEF	LHD2	7.4600e-003	0.00
tblVehicleEF	LHD2	7.4600e-003	0.00
tblVehicleEF	LHD2	7.4600e-003	0.00
tblVehicleEF	MCY	6.5150e-003	0.00
tblVehicleEF	MCY	6.5150e-003	0.00
tblVehicleEF	MCY	6.5150e-003	0.00

tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MH	3.2720e-003	0.00
tblVehicleEF	MH	3.2720e-003	0.00
tblVehicleEF	MH	3.2720e-003	0.00
tblVehicleEF	MHD	0.01	0.18
tblVehicleEF	MHD	0.01	0.18
tblVehicleEF	MHD	0.01	0.18
tblVehicleEF	OBUS	9.0200e-004	0.00
tblVehicleEF	OBUS	9.0200e-004	0.00
tblVehicleEF	OBUS	9.0200e-004	0.00
tblVehicleEF	SBUS	8.2800e-004	0.00
tblVehicleEF	SBUS	8.2800e-004	0.00
tblVehicleEF	SBUS	8.2800e-004	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	16.60	61.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	1.32	1.49
tblVehicleTrips	SU_TR	0.68	1.49
tblVehicleTrips	WD_TR	6.97	1.49
tblWater	IndoorWaterUseRate	89,204,687.50	5,427,870.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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	2.7352	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0262
Energy	0.0636	0.5782	0.4857	3.4700e-003		0.0440	0.0440		0.0440	0.0440	0.0000	1,531.2904	1,531.2904	0.0681	0.0231	1,539.8900
Mobile	1.8593	34.5609	18.4798	0.1405	5.0192	0.7377	5.7568	1.3949	0.6787	2.0736	0.0000	11,934.1878	11,934.1878	0.0854	0.0000	11,935.9819
Offroad	0.0537	0.6521	0.2849	1.1600e-003		0.0214	0.0214		0.0197	0.0197	0.0000	101.6656	101.6656	0.0329	0.0000	102.3561
Waste						0.0000	0.0000		0.0000	0.0000	97.0967	0.0000	97.0967	5.7383	0.0000	217.5999
Water						0.0000	0.0000		0.0000	0.0000	1.7220	14.9683	16.6903	0.1778	4.3700e-003	21.7783
Total	**4.7118**	**35.7914**	**19.2632**	**0.1451**	**5.0192**	**0.8031**	**5.8222**	**1.3949**	**0.7423**	**2.1373**	**98.8187**	**13,582.1368**	**13,680.9555**	**6.1025**	**0.0275**	**13,817.6323**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.7352	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0262
Energy	0.0636	0.5782	0.4857	3.4700e-003		0.0440	0.0440		0.0440	0.0440	0.0000	1,531.2904	1,531.2904	0.0681	0.0231	1,539.8900
Mobile	1.8291	33.8911	18.2319	0.1377	4.9188	0.7229	5.6417	1.3670	0.6651	2.0322	0.0000	11,697.1168	11,697.1168	0.0838	0.0000	11,698.8766
Offroad	0.0537	0.6521	0.2849	1.1600e-003		0.0214	0.0214		0.0197	0.0197	0.0000	101.6656	101.6656	0.0329	0.0000	102.3561
Waste						0.0000	0.0000		0.0000	0.0000	97.0967	0.0000	97.0967	5.7383	0.0000	217.5999
Water						0.0000	0.0000		0.0000	0.0000	1.3776	11.9747	13.3523	0.1422	3.4900e-003	17.4205
Total	**4.6816**	**35.1216**	**19.0153**	**0.1423**	**4.9188**	**0.7883**	**5.7071**	**1.3670**	**0.7288**	**2.0958**	**98.4743**	**13,342.0721**	**13,440.5464**	**6.0653**	**0.0266**	**13,576.1692**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.78**	**3.69**	**2.77**	**2.72**	**2.00**	**4.50**	**2.34**	**2.00**	**4.48**	**2.86**	**0.35**	**2.52**	**2.50**	**1.15**	**3.20**	**2.49**

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	1/1/2016	1/28/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	162	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	0.00	0.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

3.2 Demolition - 2016

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	1.8593	34.5609	18.4798	0.1405	5.0192	0.7377	5.7568	1.3949	0.6787	2.0736	0.0000	11,934.1878	11,934.1878	0.0854	0.0000	11,935.9819
Mitigated	1.8291	33.8911	18.2319	0.1377	4.9188	0.7229	5.6417	1.3670	0.6651	2.0322	0.0000	11,697.1168	11,697.1168	0.0838	0.0000	11,698.8766

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	182.55	182.55	182.55	3,780,038	3,704,438
General Light Industry	144.86	144.86	144.86	2,999,472	2,939,483
General Light Industry	247.35	247.35	247.35	5,121,810	5,019,374
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	574.77	574.77	574.77	11,901,321	11,663,295

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	61.00	8.40	6.90	100.00	0.00	0.00	92	5	3
General Light Industry	61.00	8.40	6.90	100.00	0.00	0.00	92	5	3
General Light Industry	61.00	8.40	6.90	100.00	0.00	0.00	92	5	3
Parking Lot	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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.000000	0.000000	0.000000	0.000000	0.374000	0.000000	0.182300	0.443700	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	tons/yr										MT/yr					
NaturalGas Unmitigated	0.0636	0.5782	0.4857	3.4700e-003		0.0440	0.0440		0.0440	0.0440	0.0000	629.4888	629.4888	0.0121	0.0115	633.3197
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	901.8016	901.8016	0.0560	0.0116	906.5703
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	901.8016	901.8016	0.0560	0.0116	906.5703
NaturalGas Mitigated	0.0636	0.5782	0.4857	3.4700e-003		0.0440	0.0440		0.0440	0.0440	0.0000	629.4888	629.4888	0.0121	0.0115	633.3197

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	2.97305e+006	0.0160	0.1457	0.1224	8.7000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	158.6532	158.6532	3.0400e-003	2.9100e-003	159.6187
General Light Industry	3.74654e+006	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9296	199.9296	3.8300e-003	3.6700e-003	201.1463
General Light Industry	5.07659e+006	0.0274	0.2489	0.2090	1.4900e-003		0.0189	0.0189		0.0189	0.0189	0.0000	270.9060	270.9060	5.1900e-003	4.9700e-003	272.5546
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0636**	**0.5782**	**0.4857**	**3.4600e-003**		**0.0440**	**0.0440**		**0.0440**	**0.0440**	**0.0000**	**629.4888**	**629.4888**	**0.0121**	**0.0116**	**633.3197**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Light Industry	2.97305e+006	0.0160	0.1457	0.1224	8.7000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	158.6532	158.6532	3.0400e-003	2.9100e-003	159.6187
General Light Industry	3.74654e+006	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9296	199.9296	3.8300e-003	3.6700e-003	201.1463
General Light Industry	5.07659e+006	0.0274	0.2489	0.2090	1.4900e-003		0.0189	0.0189		0.0189	0.0189	0.0000	270.9060	270.9060	5.1900e-003	4.9700e-003	272.5546
Total		**0.0636**	**0.5782**	**0.4857**	**3.4600e-003**		**0.0440**	**0.0440**		**0.0440**	**0.0440**	**0.0000**	**629.4888**	**629.4888**	**0.0121**	**0.0116**	**633.3197**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.01889e+006	215.7867	0.0134	2.7700e-003	216.9278
General Light Industry	1.28397e+006	271.9274	0.0169	3.4900e-003	273.3654
General Light Industry	1.73978e+006	368.4635	0.0229	4.7300e-003	370.4119
Parking Lot	65824	13.9407	8.7000e-004	1.8000e-004	14.0144
Parking Lot	72160	15.2825	9.5000e-004	2.0000e-004	15.3634
Parking Lot	77440	16.4008	1.0200e-003	2.1000e-004	16.4875
Total		**901.8016**	**0.0560**	**0.0116**	**906.5703**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.01889e+006	215.7867	0.0134	2.7700e-003	216.9278
General Light Industry	1.28397e+006	271.9274	0.0169	3.4900e-003	273.3654
General Light Industry	1.73978e+006	368.4635	0.0229	4.7300e-003	370.4119
Parking Lot	65824	13.9407	8.7000e-004	1.8000e-004	14.0144
Parking Lot	72160	15.2825	9.5000e-004	2.0000e-004	15.3634
Parking Lot	77440	16.4008	1.0200e-003	2.1000e-004	16.4875
Total		**901.8016**	**0.0560**	**0.0116**	**906.5703**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	2.7352	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0262
Mitigated	2.7352	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0262

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	0.4555					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.2785					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2100e-003	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0262
Total	**2.7352**	**1.2000e-004**	**0.0128**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0248**	**0.0248**	**7.0000e-005**	**0.0000**	**0.0262**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4555					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.2785					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2100e-003	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0262
Total	**2.7352**	**1.2000e-004**	**0.0128**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0248**	**0.0248**	**7.0000e-005**	**0.0000**	**0.0262**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	16.6903	0.1778	4.3700e-003	21.7783
Mitigated	13.3523	0.1422	3.4900e-003	17.4205

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	5.42787 / 0	16.6903	0.1778	4.3700e-003	21.7783
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**16.6903**	**0.1778**	**4.3700e-003**	**21.7783**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	4.3423 / 0	13.3523	0.1422	3.4900e-003	17.4205
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**13.3523**	**0.1422**	**3.4900e-003**	**17.4205**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	97.0967	5.7383	0.0000	217.5999
Unmitigated	97.0967	5.7383	0.0000	217.5999

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	478.33	97.0967	5.7383	0.0000	217.5999
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**97.0967**	**5.7383**	**0.0000**	**217.5999**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	478.33	97.0967	5.7383	0.0000	217.5999
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**97.0967**	**5.7383**	**0.0000**	**217.5999**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	2	4.00	365	200	0.37	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					
Tractors/Loaders/Backhoes	0.0537	0.6521	0.2849	1.1600e-003		0.0214	0.0214		0.0197	0.0197	0.0000	101.6656	101.6656	0.0329	0.0000	102.3561
Total	**0.0537**	**0.6521**	**0.2849**	**1.1600e-003**		**0.0214**	**0.0214**		**0.0197**	**0.0197**	**0.0000**	**101.6656**	**101.6656**	**0.0329**	**0.0000**	**102.3561**

10.0 Vegetation

MoVal Logistics Center- 2020 Light Industrial (Passenger Cars)

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	122.52	1000sqft	5.27	122,516.00	0
General Light Industry	97.22	1000sqft	4.61	97,222.00	0
General Light Industry	166.01	1000sqft	6.83	166,010.00	0
Parking Lot	187.00	Space	1.68	74,800.00	0
Parking Lot	220.00	Space	1.98	88,000.00	0
Parking Lot	205.00	Space	1.84	82,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	466.91	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Lot Acreage (Light Industrial Buildings 2,3,4):22.21

Construction Phase -

Off-road Equipment - Operational Run Only.

Trips and VMT - Operational Run Only.

Vehicle Trips - Passenger Trip Rate based on Traffic Study; For conservative analysis, C-W trip % changed to 100%.

Vechicle Emission Factors - Passenger Cars Only; Information derived from Traffic Study.

Vechicle Emission Factors - Passenger Cars Only; Information derived from Traffic Study.

Vechicle Emission Factors - Passenger Cars Only; Information derived from Traffic Study.

Energy Use - Title-24 Electricity Energy Intensity and Title-24 Natural Gas Energy Intensity were adjusted by 21.8% and 16.8% respectively, to reflect 2013 Title 24 requirements. Source: Impact Analysis California's 2013 Building Energy Efficiency Standards (CEC 2013)

Water And Wastewater - Water usage based on 0.75 AFY per acre which is based on EMWD data for similar projects.

Operational Off-Road Equipment - based on CARB Cargo Handling Equipment Yard Truck Emission Testing Report. hours per day based on the Port of Long Beach Air Emissions Inventory (June 2008)

Mobile Land Use Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	2.69	2.10
tblEnergyUse	T24NG	16.16	13.45
tblLandUse	LandUseSquareFeet	122,520.00	122,516.00
tblLandUse	LandUseSquareFeet	97,220.00	97,222.00
tblLandUse	LotAcreage	2.81	5.27
tblLandUse	LotAcreage	3.81	6.83
tblLandUse	LotAcreage	2.23	4.61
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00

tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	466.91
tblProjectCharacteristics	OperationalYear	2014	2020
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblVehicleEF	HHD	0.04	0.00
tblVehicleEF	HHD	0.04	0.00
tblVehicleEF	HHD	0.04	0.00
tblVehicleEF	LDA	0.46	1.00
tblVehicleEF	LDA	0.46	1.00
tblVehicleEF	LDA	0.46	1.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD2	7.4600e-003	0.00
tblVehicleEF	LHD2	7.4600e-003	0.00
tblVehicleEF	LHD2	7.4600e-003	0.00
tblVehicleEF	MCY	6.5150e-003	0.00
tblVehicleEF	MCY	6.5150e-003	0.00
tblVehicleEF	MCY	6.5150e-003	0.00

tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MH	3.2720e-003	0.00
tblVehicleEF	MH	3.2720e-003	0.00
tblVehicleEF	MH	3.2720e-003	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	OBUS	9.0200e-004	0.00
tblVehicleEF	OBUS	9.0200e-004	0.00
tblVehicleEF	OBUS	9.0200e-004	0.00
tblVehicleEF	SBUS	8.2800e-004	0.00
tblVehicleEF	SBUS	8.2800e-004	0.00
tblVehicleEF	SBUS	8.2800e-004	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	1.32	5.48
tblVehicleTrips	SU_TR	0.68	5.48
tblVehicleTrips	WD_TR	6.97	5.48
tblWater	IndoorWaterUseRate	89,204,687.50	5,427,870.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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	2.7352	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0262
Energy	0.0636	0.5782	0.4857	3.4700e-003		0.0440	0.0440		0.0440	0.0440	0.0000	1,531.2904	1,531.2904	0.0681	0.0231	1,539.8900
Mobile	0.5269	0.8889	9.5664	0.0441	4.4498	0.0227	4.4725	1.1811	0.0211	1.2022	0.0000	2,720.7850	2,720.7850	0.0956	0.0000	2,722.7930
Offroad	0.0537	0.6521	0.2849	1.1600e-003		0.0214	0.0214		0.0197	0.0197	0.0000	101.6656	101.6656	0.0329	0.0000	102.3561
Waste						0.0000	0.0000		0.0000	0.0000	97.0967	0.0000	97.0967	5.7383	0.0000	217.5999
Water						0.0000	0.0000		0.0000	0.0000	1.7220	14.9683	16.6903	0.1778	4.3700e-003	21.7783
Total	**3.3793**	**2.1194**	**10.3498**	**0.0487**	**4.4498**	**0.0881**	**4.5379**	**1.1811**	**0.0848**	**1.2658**	**98.8187**	**4,368.7340**	**4,467.5527**	**6.1127**	**0.0275**	**4,604.4434**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.7352	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0262
Energy	0.0636	0.5782	0.4857	3.4700e-003		0.0440	0.0440		0.0440	0.0440	0.0000	1,531.2904	1,531.2904	0.0681	0.0231	1,539.8900
Mobile	0.5240	0.8725	9.3965	0.0432	4.3608	0.0223	4.3831	1.1575	0.0207	1.1782	0.0000	2,667.1709	2,667.1709	0.0938	0.0000	2,669.1403
Offroad	0.0537	0.6521	0.2849	1.1600e-003		0.0214	0.0214		0.0197	0.0197	0.0000	101.6656	101.6656	0.0329	0.0000	102.3561
Waste						0.0000	0.0000		0.0000	0.0000	97.0967	0.0000	97.0967	5.7383	0.0000	217.5999
Water						0.0000	0.0000		0.0000	0.0000	1.3776	11.9747	13.3523	0.1422	3.4900e-003	17.4205
Total	**3.3764**	**2.1030**	**10.1799**	**0.0479**	**4.3608**	**0.0877**	**4.4485**	**1.1575**	**0.0844**	**1.2418**	**98.4743**	**4,312.1263**	**4,410.6006**	**6.0753**	**0.0266**	**4,546.4329**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.67**	**31.54**	**4.39**	**4.16**	**2.00**	**24.73**	**2.44**	**2.00**	**23.66**	**3.45**	**0.35**	**3.62**	**3.55**	**1.15**	**3.20**	**3.48**

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	1/1/2016	1/28/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	162	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	0.00	0.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

3.2 Demolition - 2016

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	0.5269	0.8889	9.5664	0.0441	4.4498	0.0227	4.4725	1.1811	0.0211	1.2022	0.0000	2,720.7850	2,720.7850	0.0956	0.0000	2,722.7930
Mitigated	0.5240	0.8725	9.3965	0.0432	4.3608	0.0223	4.3831	1.1575	0.0207	1.1782	0.0000	2,667.1709	2,667.1709	0.0938	0.0000	2,669.1403

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	671.41	671.41	671.41	3,783,816	3,708,140
General Light Industry	532.77	532.77	532.77	3,002,470	2,942,420
General Light Industry	909.73	909.73	909.73	5,126,929	5,024,390
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	2,113.91	2,113.91	2,113.91	11,913,215	11,674,950

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	100.00	0.00	0.00	92	5	3
General Light Industry	16.60	8.40	6.90	100.00	0.00	0.00	92	5	3
General Light Industry	16.60	8.40	6.90	100.00	0.00	0.00	92	5	3
Parking Lot	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
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
1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	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	tons/yr										MT/yr					
NaturalGas Unmitigated	0.0636	0.5782	0.4857	3.4700e-003		0.0440	0.0440		0.0440	0.0440	0.0000	629.4888	629.4888	0.0121	0.0115	633.3197
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	901.8016	901.8016	0.0560	0.0116	906.5703
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	901.8016	901.8016	0.0560	0.0116	906.5703
NaturalGas Mitigated	0.0636	0.5782	0.4857	3.4700e-003		0.0440	0.0440		0.0440	0.0440	0.0000	629.4888	629.4888	0.0121	0.0115	633.3197

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	2.97305e+006	0.0160	0.1457	0.1224	8.7000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	158.6532	158.6532	3.0400e-003	2.9100e-003	159.6187
General Light Industry	3.74654e+006	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9296	199.9296	3.8300e-003	3.6700e-003	201.1463
General Light Industry	5.07659e+006	0.0274	0.2489	0.2090	1.4900e-003		0.0189	0.0189		0.0189	0.0189	0.0000	270.9060	270.9060	5.1900e-003	4.9700e-003	272.5546
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0636**	**0.5782**	**0.4857**	**3.4600e-003**		**0.0440**	**0.0440**		**0.0440**	**0.0440**	**0.0000**	**629.4888**	**629.4888**	**0.0121**	**0.0116**	**633.3197**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Light Industry	2.97305e+006	0.0160	0.1457	0.1224	8.7000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	158.6532	158.6532	3.0400e-003	2.9100e-003	159.6187
General Light Industry	3.74654e+006	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	199.9296	199.9296	3.8300e-003	3.6700e-003	201.1463
General Light Industry	5.07659e+006	0.0274	0.2489	0.2090	1.4900e-003		0.0189	0.0189		0.0189	0.0189	0.0000	270.9060	270.9060	5.1900e-003	4.9700e-003	272.5546
Total		**0.0636**	**0.5782**	**0.4857**	**3.4600e-003**		**0.0440**	**0.0440**		**0.0440**	**0.0440**	**0.0000**	**629.4888**	**629.4888**	**0.0121**	**0.0116**	**633.3197**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.01889e+006	215.7867	0.0134	2.7700e-003	216.9278
General Light Industry	1.28397e+006	271.9274	0.0169	3.4900e-003	273.3654
General Light Industry	1.73978e+006	368.4635	0.0229	4.7300e-003	370.4119
Parking Lot	65824	13.9407	8.7000e-004	1.8000e-004	14.0144
Parking Lot	72160	15.2825	9.5000e-004	2.0000e-004	15.3634
Parking Lot	77440	16.4008	1.0200e-003	2.1000e-004	16.4875
Total		**901.8016**	**0.0560**	**0.0116**	**906.5703**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.01889e+006	215.7867	0.0134	2.7700e-003	216.9278
General Light Industry	1.28397e+006	271.9274	0.0169	3.4900e-003	273.3654
General Light Industry	1.73978e+006	368.4635	0.0229	4.7300e-003	370.4119
Parking Lot	65824	13.9407	8.7000e-004	1.8000e-004	14.0144
Parking Lot	72160	15.2825	9.5000e-004	2.0000e-004	15.3634
Parking Lot	77440	16.4008	1.0200e-003	2.1000e-004	16.4875
Total		**901.8016**	**0.0560**	**0.0116**	**906.5703**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	2.7352	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0262
Mitigated	2.7352	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0262

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	0.4555					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.2785					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2100e-003	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0262
Total	**2.7352**	**1.2000e-004**	**0.0128**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0248**	**0.0248**	**7.0000e-005**	**0.0000**	**0.0262**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4555					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.2785					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2100e-003	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0262
Total	**2.7352**	**1.2000e-004**	**0.0128**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0248**	**0.0248**	**7.0000e-005**	**0.0000**	**0.0262**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	16.6903	0.1778	4.3700e-003	21.7783
Mitigated	13.3523	0.1422	3.4900e-003	17.4205

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	5.42787 / 0	16.6903	0.1778	4.3700e-003	21.7783
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**16.6903**	**0.1778**	**4.3700e-003**	**21.7783**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	4.3423 / 0	13.3523	0.1422	3.4900e-003	17.4205
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**13.3523**	**0.1422**	**3.4900e-003**	**17.4205**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	97.0967	5.7383	0.0000	217.5999
Unmitigated	97.0967	5.7383	0.0000	217.5999

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	478.33	97.0967	5.7383	0.0000	217.5999
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**97.0967**	**5.7383**	**0.0000**	**217.5999**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	478.33	97.0967	5.7383	0.0000	217.5999
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**97.0967**	**5.7383**	**0.0000**	**217.5999**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	2	4.00	365	200	0.37	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					
Tractors/Loaders/Backhoes	0.0537	0.6521	0.2849	1.1600e-003		0.0214	0.0214		0.0197	0.0197	0.0000	101.6656	101.6656	0.0329	0.0000	102.3561
Total	**0.0537**	**0.6521**	**0.2849**	**1.1600e-003**		**0.0214**	**0.0214**		**0.0197**	**0.0197**	**0.0000**	**101.6656**	**101.6656**	**0.0329**	**0.0000**	**102.3561**

10.0 Vegetation