

Greenhouse Gas Evaluation

for the

East Otay Mesa Specific Plan Amendment

Submitted To:

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A handwritten signature in black ink that reads "Valorie L. Thompson". The signature is written in a cursive, flowing style.

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Appendix A Greenhouse Gas Emission Calculations

List of Acronyms

APCD	Air Pollution Control District
AB	Assembly Bill
AB 32	Assembly Bill 32, Global Warming Solutions Act of 2006
ARB	Air Resources Board
ASTM	American Society of Testing and Materials
CalEEMod	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CAT	Climate Action Team
CCAP	Center for Clean Air Policy
CCAR	California Climate Action Registry
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH ₄	Methane
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
DWR	Department of Water Resources
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
EV	Electric Vehicles
GCC	Global Climate Change
GHG	Greenhouse Gas
GGEP	Greenhouse Gas Emissions Policy
GGRP	Greenhouse Gas Reduction Plan
GP	General Plan
GWP	Global Warming Potential
HFCs	Hydrofluorocarbons
IPCC	Intergovernmental Panel on Climate Change
LCFS	Low Carbon Fuel Standard
LEED	Leadership in Energy and Environmental Design
MMT	Million Metric Tons
MW	Megawatts
N ₂ O	Nitrous Oxide
NO _x	Oxides of Nitrogen
OPR	State Office of Planning and Research
PDFs	Project Design Features
PFCs	Perfluorocarbons
PM	Particulate Matter
ROG	Reactive Organic Gas
RPS	Renewable Portfolio Standards
S-3-05	Executive Order S-3-05
SB	Senate Bill
SDCGHGI	San Diego County Greenhouse Gas Inventory
SRI	Solar Reflective Index

THC	Total Hydrocarbon
UNFCCC	United Nations Framework Convention on Climate Change
USBGC	U.S. Green Building Council
VMT	Vehicle Miles Traveled

EXECUTIVE SUMMARY

This report presents an assessment of potential greenhouse gas (GHG) impacts associated with the East Otay Mesa Specific Plan Amendment in the County of San Diego. The proposed *Sunroad – East Otay Mesa Specific Plan Amendment* project site is located within the East Otay Mesa Business Park Specific Plan (EOMSP) area and encompasses 253.13 acres of the 3,012.7-acre Specific Plan area, including 218.12 acres of lot area and 35.01 acres of right-of-way area. The EOMSP area is located in the unincorporated portion of southern San Diego County, within the Otay Subregional Plan area. The undeveloped Project site is generally east of State Route 125 (SR-125), north of Otay Mesa Road, west of Vann Centre Boulevard, and south of Zinser Road. The site includes nine individual parcels with the following Assessor's Parcel Numbers (APNs): 646-240-30, 646-310-17, 646-080-26, -27, -28, -29, -31, -32, and -33.

The Project proposes a Specific Plan Amendment (SPA) to the EOMSP to establish a new Mixed-Use Village Core area, which would allow for the establishment of a mix of employment, retail, and residential uses. Approval of the project would allow for the entitlement of a maximum of 3,158 dwelling units, 78,000 square feet of general commercial uses, and 765,000 square feet of employment uses, and approximately 51.3 acres of permanent biological open space.

The proposed Project would include construction of public streets within the Project boundary, including Sunroad Boulevard, Sunroad View Drive, Alejandro Drive, and extensions of Harvest Road and David Ridge Drive. All public Project roadways would include Class 2 bike lanes. Project roadways would be developed as a 4-lane Major Road (Sunroad Boulevard: Lone Star Road to Otay Mesa Road), 4-lane Collectors (Harvest Road: Sunroad Boulevard to Otay Mesa Road, Vann Centre Boulevard: Otay Mesa Road to Lone Star Road, and Zinser Road: west of Sunroad Boulevard), and 2-lane Collectors (David Ridge Drive: Sunroad Boulevard to Alta Road, and Zinser Road: Sunroad Boulevard to Lone Star Road).

The proposed Project would construct off-site half-width improvements to Vann Center Boulevard from Otay Mesa Road to just south of Lone Star Road, and to Zinser Road from west of Sunroad Boulevard to Alejandro Drive. Vann Center Boulevard connects to the Project roadways at David

Ridge Drive and Otay Mesa Road. Zinser Road connects to Project roadways at Sunroad Boulevard and Alejandro Drive.

The Project would require the extension of utility lines including sewer, water, electric, and gas lines. Sewer lines would be provided within all Project roadways (Sunroad Boulevard, Harvest Road, Alejandro Drive, Sunroad View Drive, and David Ridge Drive), as well as the portions of off-site roadways within the Project footprint (Zinser Road, Lone Star Road, Vann Center Road, and Otay Mesa Road). The existing south sewer main connection is located adjacent to the Project site at the intersection of Harvest Road and Otay Mesa Road. The Project would connect to the existing 12-inch sewer main at this location. The existing northern sewer main is located near the SR-125 right-of-way, and the Project would extend a 12-inch sewer connection within Zinser Road approximately 1,800 linear feet to connect with the existing 18-inch sewer main.

Water service would be provided by the Otay Water District. The existing main water supply for the Project site is a 24-inch main located within Otay Mesa Road along the Project's southern boundary. Water supply for the Project would be delivered through a 12-inch conveyance system.

Electric lines would be provided by SDG&E within all Project roadways (Sunroad Boulevard, Harvest Road, Alejandro Drive, Sunroad View Drive, and David Ridge Drive), as well as the portions of off-site roadways within the Project footprint (Zinser Road, Lone Star Road, Vann Center Road, and Otay Mesa Road). Connection for the system is anticipated to be within the existing SDG&E easement that runs north and south through the Project site near Harvest Road.

Gas lines would be provided by SDG&E within all Project roadways (Sunroad Boulevard, Harvest Road, Alejandro Drive, Sunroad View Drive, and David Ridge Drive), as well as the portions of off-site roadways within the Project footprint (Zinser Road, Lone Star Road, Vann Center Road). Connection for the gas system is anticipated to be within Otay Mesa Road adjacent to the Project where facilities exist for that purpose.

The Project would not require off-site improvements for stormwater conveyance. Two 60-inch reinforced concrete pipes (RCPs) located in Otay Mesa Road west of Sunroad Boulevard receive

runoff from the majority of the on-site systems, conveying stormwater from the Project site and public roads. Storm drains would be constructed within on-site roadways and Zinser Road to convey stormwater to the existing natural drainage. A portion of the stormwater runoff from Vann Center Road would be treated within a bioretention basin/easement on the adjacent property east of the Project site. The Project includes a trail segment that would occur in the north-central portion of the Project site, providing pedestrian connectivity along the off-site portion of Zinser Road between the Project's proposed mixed-use neighborhood in the central portion of the site and open space element in the northeastern portion of the site.

The project site is located generally at the northeastern corner of Otay Mesa Road and Harvest Road/SR-125 in the Otay Community Planning area, within unincorporated San Diego County. The site is subject to the County's General Plan Regional Category *Village* and General Plan Land Use Designation *Specific Plan Area*. The project area is assigned S-88 Zoning, and is governed by the East Otay Mesa Business Park Specific Plan. The Specific Plan further designates the site as Technology Business Park. The Technology Business Park Land Use Designation is intended for development of manufacturing options and business offices that research, develop, and produce advanced technologies.

In order to establish consistency with the County's General Plan, the project would create a new mixed-use land use designation allowing for a mix of residential, employment, and retail uses. This new designation is consistent with the General Plan's Thriving Communities goals. The project would include a range of densities and a mix of uses across the planning area as indicated by the new designation and is anticipated to create a catalyst for development within East Otay Mesa. The maximum numbers of residential units will be based upon the approved peak hour traffic volumes and is anticipated to be approximately 3,158 residential units. The amount of development will be limited based on the total amount of trips that would be generated under the current Specific Plan. Thus the project will not exceed the number of trips evaluated under the prior Environmental Impact Report for the site.

The CEQA significance threshold for evaluating impacts is based on the project's efficiency (metric tons of CO₂e per service population) at buildout. It is anticipated that the project will be

built out in 2028. Therefore, the significance metric under CEQA was calculated based on statewide emissions attributable to land use project and population estimates for the year 2028.

A summary of the Project's GHG emissions is provided in Table ES-1. As shown in Table ES-1 and discussed below, with implementation of GHG emission reduction project design features, the project would exceed the 2028 efficiency metric of 3.0 tons per service population. This impact is significant.

Table ES-1 SUMMARY OF PROPOSED PROJECT'S ESTIMATED GREENHOUSE GAS EMISSIONS WITH PROJECT DESIGN FEATURES – BUILDOUT 2028				
Emission Source	Annual Emissions (Metric tons/year)			
	CO₂	CH₄	N₂O	CO₂e
Operational Emissions				
Area Sources	326	0.0417	0.0053	329
Electricity Use	4,463	0.1858	0.0372	4,478
Natural Gas Use	3,075	0.0589	0.0564	3,092
Water Consumption	987	10.1619	0.2463	1,337
Solid Waste Handling	245	14.4607	0.0000	650
Vehicles	26,730	1.3084	0.0000	26,767
Amortized Construction	874	0.0000	0.0000	874
Amortized Land Use Change	28	0.0000	0.0000	28
Total	36,728	26.2174	0.403452	37,554
Global Warming Potential Factor	1	28	265	
CO ₂ Equivalent Emissions	36,728	734	92	37,554
TOTAL CO₂ Equivalent Emissions	37,554			
Service Population	10,816			
Metric Tons per Service Population	3.5			
Project Efficiency Metric	3.0			

Table ES-2 provides a summary of the project design features and state and local measures included in the GHG analysis.

Table ES-2 Proposed Project Design Features to Reduce GHG Emissions			
Strategy to Reduce GHG Emissions	Description	Emission Reduction	Basis for Emission Reduction
Land Use and Community Design			
Mixed Use Development	The East Otay Mesa Specific Plan Amendment provides a mix of uses at the site, including residential, retail, and industrial/employment uses.	Based on CAPCOA's <i>Quantifying Greenhouse Gas Mitigation Measures</i> , the land use index for the project projects a 15.04% reduction in VMT.	CAPCOA
Electric Vehicle Parking	Non-residential and multi-residential units will be conditioned to provide electric vehicle parking. The electric vehicle parking will conform with applicable building code requirements in place at the time of construction.	Because EMFAC2014, which is included in CalEEMod2016, accounts for penetration of electric vehicles into the fleet, no additional reductions were taken.	
Provide Bike Parking in Non-Residential and Multi-Unit Residential Projects	Non-residential and multi-residential units will be conditioned to include bicycle parking. The bicycle parking will conform with applicable building code requirements in place at the time of construction.	Because the reduction in VMT is not quantifiable at this time, no additional reductions were taken.	
Provide Pedestrian Network Improvements	The project will be designed with non-contiguous sidewalks to provide a pedestrian network throughout.	No credit was taken for this measure in the GHG calculations for the mitigated emission calculations.	
Increase Transit Accessibility	The project will provide a new MTS bus stop. The project is within 0.5 miles of MTS bus route 905, which currently provides hourly service to the project area.	CalEEMod model reductions	CalEEMod Model

**Table ES-2
Proposed Project Design Features to Reduce GHG Emissions**

Strategy to Reduce GHG Emissions	Description	Emission Reduction	Basis for Emission Reduction
Traffic Calming Measures	The project will include traffic calming measures on a minimum of 25% of internal streets and 25% of internal intersections.	This measure was accounted for by reducing GHG emissions from vehicles by 0.25% per CAPCOA	CAPCOA 2010
Energy Efficiency			
Limited Outdoor Lighting	The project will limit outdoor lighting requirements. Outdoor lighting will be limited in accordance with the dark skies policy, consistent with applicable code requirements in place at the time of construction	Because the reduction in GHGs is not quantifiable, no additional reductions were taken.	
ENERGYSTAR Appliances	Indoor residential appliances will meet the requirements of Title 24 at the time of construction, which is assumed to be EnergyStar for residential units.	CalEEMod model reductions	CalEEMod Model
High Efficiency Lighting	The project will be equipped with high efficiency public street and area lighting that will reduce energy requirements for lighting by 5 percent.	CalEEMod model reductions	CalEEMod Model
LED Traffic Lights	Traffic lights installed by the project will be LED traffic lights.	Because the reduction in GHGs is not quantifiable, no additional reductions were taken.	
Programmable Thermostat Timers	The project will include installation of programmable thermostat timers in all buildings.	Because the reduction in GHGs is not quantifiable, no additional reductions were taken.	
Water Conservation			
Low Flow Fixtures	Indoor plumbing would include low flow fixtures as required by Title 24 building codes in effect at the time of construction.	CalEEMod model reductions	CalEEMod Model
Water-Efficient Irrigation Systems	The project will install water-efficient irrigation systems that meet at least 6.1% reduction in outdoor water use.	CalEEMod model reductions	CalEEMod Model
Plant Native or Drought-Resistant Trees and Vegetation	All public areas will be planted with native or drought-resistant trees and vegetation.	Because the reduction in GHGs is not quantifiable, no additional reductions were taken.	

Table ES-2 Proposed Project Design Features to Reduce GHG Emissions			
Strategy to Reduce GHG Emissions	Description	Emission Reduction	Basis for Emission Reduction
Water-Efficient Landscapes	The project will be designed to use water-efficient landscapes.	Because the reduction in GHGs is not quantifiable, no additional reductions were taken.	
Building and Site Design			
California 2013 Title 24 Building Energy Efficiency Standards	All buildings would be designed to meet the California 2013 Title 24 Building Energy Efficiency Standards at a minimum. By the time buildings are constructed, it is likely that updated, more stringent energy efficiency standards will be adopted.	CalEEMod 2016.3.1 includes Title 24 as of 2013	CalEEMod Model
Fireplaces	The residences will be constructed either with no fireplace or with natural gas fireplaces. 1,000 of the units will include natural gas fireplaces, with the remaining 2,158 units to be constructed without fireplaces	CalEEMod Model reductions	CalEEMod Model
Use Electric Landscaping Equipment	Landscaping will use electric equipment; it is assumed that 3% of equipment would be electrically powered based on statewide average use of 3%	CalEEMod Model reductions	CalEEMod Model
Solid Waste Diversion	The project would include solid waste diversion practices in accordance with AB 341, which requires 75% solid waste diversion by 2030. Current solid waste diversion rates of 52.6% for multifamily dwellings and 50% for non-residential uses were assumed in the analysis.	75% diversion rates resulting in associated GHG emissions reductions	AB 341 requirements

Because the project's impacts exceed the efficiency metric, the following mitigation measures are proposed to reduce GHG emissions:

Energy Efficiency

Mitigation Measure GHG-1: Exceed Title 24 Building Energy Efficiency Standards. The project buildings will exceed Title 24 as of 2016 by 20%. This measure was included in the mitigation measures in the CalEEMod Model.

Mitigation Measure GHG-2: Provide Solar Power. The project will include photovoltaic solar panels (or their equivalent, as approved by the Development Services Director) designed to provide 50% of the project's commercial use electricity needs, and 50% of the residential dwelling units shall include photovoltaic solar panels (or their equivalent, as approved by the Development Services Director) to provide those residential dwelling units' electricity needs. This measure was included in the CalEEMod model under Renewable Energy.

Table ES-3 presents the results of the GHG calculations with mitigation measures included as described above. As shown in Table ES-3, with mitigation, the project would meet the efficiency metric and would emit 3.0 metric tons per service population. The GHG efficiency of the project would therefore meet the efficiency metric of 3.0 metric tons per service population, and GHG impacts would be less than significant.

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Emission Source	Annual Emissions (Metric tons/year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Operational Emissions				
Area Sources	326	0.0417	0.0053	329
Electricity Use	2,160	0.0899	0.0180	2,167
Natural Gas Use	2,636	0.0505	0.0483	2,650
Water Consumption	987	10.1629	0.2465	1,337
Solid Waste Handling	245	14.4607	0.0000	650
Vehicles	24,717	1.2216	0.0000	24,751
Amortized Construction	874	0.0000	0.0000	874
Amortized Land Use Change	28	0.0000	0.0000	28
Total	31,973	26.0273	0.3181	32,786
Global Warming Potential Factor	1	28	265	
CO ₂ Equivalent Emissions	31, 973	729	84	32,786
TOTAL CO₂ Equivalent Emissions	32,786			
Service Population	10,816			
Metric Tons per Service Population	3.0			
Efficiency Metric	3.0			

1.0 INTRODUCTION

This report presents an assessment of potential global climate change impacts associated with the proposed East Otay Mesa Specific Plan Amendment. The evaluation addresses the potential for greenhouse gas impacts during construction and after full buildout of the proposed Project.

The proposed *Sunroad – East Otay Mesa Specific Plan Amendment* project site is located within the East Otay Mesa Business Park Specific Plan (EOMSP) area and encompasses 253.13 acres of the 3,012.7-acre Specific Plan area, including 218.12 acres of lot area and 35.01 acres of right-of-way area. The EOMSP area is located in the unincorporated portion of southern San Diego County, within the Otay Subregional Plan area. The undeveloped Project site is generally east of State Route 125 (SR-125), north of Otay Mesa Road, west of Vann Centre Boulevard, and south of Zinser Road. The site includes nine individual parcels with the following Assessor's Parcel Numbers (APNs): 646-240-30, 646-310-17, 646-080-26, -27, -28, -29, -31, -32, and -33.

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The project site is located generally at the northeastern corner of Otay Mesa Road and Harvest Road/SR-125 in the Otay Community Planning area, within unincorporated San Diego County. The site is subject to the County's General Plan Regional Category *Village* and General Plan Land Use Designation *Specific Plan Area*. The project area is assigned S-88 Zoning, and is governed by the East Otay Mesa Business Park Specific Plan. The Specific Plan further designates the site as Technology Business Park. The Technology Business Park Land Use Designation is intended for development of manufacturing options and business offices that research, develop, and produce advanced technologies.

In order to establish consistency with the County's General Plan and the East Otay Mesa Business Park Specific Plan, the project would create a new mixed-use land use designation allowing for a mix of residential, employment, and retail uses. This new designation is consistent with the General Plan's Thriving Communities goals. The project would include a range of densities and a mix of uses across the planning area as indicated by the new designation and is anticipated to create a catalyst for development within East Otay Mesa. The maximum numbers of residential units will be based upon the approved peak hour traffic volumes and is anticipated to be approximately 3,158 residential

units. The amount of development will be limited based on the total amount of trips that would be generated under the current Specific Plan. Thus the project will not exceed the number of trips evaluated under the prior Environmental Impact Report for the site.

1.1 Project Setting

The project site is located generally at the northeastern corner of Otay Mesa Road and Harvest Road/SR-125 in the Otay Community Planning area, within unincorporated San Diego County. The site is subject to the County's General Plan Regional Category *Village* and General Plan Land Use Designation *Specific Plan Area*. The project area is assigned S-88 Zoning, and is governed by the East Otay Mesa Business Park Specific Plan. The Specific Plan further designates the site as Technology Business Park. The Technology Business Park Land Use Designation is intended for development of manufacturing options and business offices that research, develop, and produce advanced technologies.

1.2 General Principles and Existing Conditions

Global climate change (GCC) refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation and storms. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), which are known as greenhouse gases (GHGs). These gases allow solar radiation (sunlight) into the Earth's atmosphere, but prevent radiative heat from escaping, thus warming the Earth's atmosphere. Gases that trap heat in the atmosphere are often called greenhouse gases, analogous to a greenhouse. The accumulation of GHGs in the atmosphere regulates the Earth's temperature. Without these natural GHGs, the Earth's temperature would be about 61° Fahrenheit cooler (California Environmental Protection Agency 2006). Emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere.

GCC may result from natural factors, natural processes, and/or human activities that change the composition of the atmosphere and alter the surface and features of land. Although the conceptual existence of GCC is generally accepted, the extent to which global climate change attributable to anthropogenic (human) emissions of GHGs (mainly CO₂, CH₄ and N₂O) is currently one of the most important and widely debated scientific, economic and political issues in the United States. There is consensus among scientific experts that GCC is attributable to human impacts on the earth's environment. Historical records indicate that global climate changes have occurred in the past due to natural phenomena (such as during previous ice ages). Some data indicate that the current global conditions differ from past climate changes in rate and magnitude. The State of California has been at the forefront of developing solutions to address potential anthropogenic impacts to GCC.

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The IPCC concluded that a stabilization of GHGs at 400 to 450 parts per million (ppm) CO₂ equivalent concentration is required to keep global mean warming below 3.6° Fahrenheit (2° Celsius), which is assumed to be necessary to avoid dangerous climate change (Association of Environmental Professionals 2007).

State law defines greenhouse gases as any of the following compounds: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF₆) (California Health and Safety Code Section 38505(g)). CO₂, followed by CH₄ and N₂O, are the most common GHGs that result from human activity.

1.3 Sources and Global Warming Potentials of GHG

As discussed further below, the sources of GHG emissions, GWP, and atmospheric lifetime of GHGs are all important variables to be considered in the process of calculating CO₂e for discretionary land use projects that require a climate change analysis.

The California Air Resources Board (ARB) compiled a statewide inventory of anthropogenic GHG emissions and sinks that includes estimates for CO₂, CH₄, N₂O, SF₆, HFCs, and PFCs (ARB 2015). The current inventory covers the years 1990 to 2013, and is summarized in Table 2. Data sources used to calculate this GHG inventory include California and federal agencies, international organizations, and industry associations. The calculation methodologies are consistent with guidance from the IPCC. The 1990 emissions level is the sum total of sources and sinks from all sectors and categories in the inventory. The inventory is divided into seven broad sectors and categories in the inventory. These sectors include: Agriculture; Commercial; Electricity Generation; Forestry; Industrial; Residential; and Transportation.

Table 2 State of California GHG Emissions by Sector				
Sector	Total 1990 Emissions (MMTCO₂e)	Percent of Total 1990 Emissions	Total 2013 Emissions (MMTCO₂e)	Percent of Total 2013 Emissions
Agriculture	23.4	5%	36.21	8%
Commercial	14.4	3%	15.43	3%
Electricity Generation	110.6	26%	90.45	20%
Forestry (excluding sinks)	0.2	<1%	Not reported	
Industrial	103.0	24%	92.68	20%
Residential	29.7	7%	28.11	6%
Transportation	150.7	35%	169.02	37%
Recycling and Waste			8.87	2%
High GWP Gases			18.50	4%
Forestry Sinks	(6.7)		Not reported	

When accounting for GHGs, all types of GHG emissions are expressed in terms of CO₂ equivalents (CO₂e) and are typically quantified in metric tons (MT) or millions of metric tons (MMT).

GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the “cumulative radiative forcing effect of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas” (USEPA

2006). The reference gas for GWP is CO₂; therefore, CO₂ has a GWP of 1. The other main greenhouse gases that have been attributed to human activity include CH₄, which has a GWP of 28, and N₂O, which has a GWP of 265 (ARB 2014). The CalEEMod Model calculates CO₂e emissions based on previous values for GWPs. This analysis uses the updated ARB GWP values shown above; therefore, CalEEMod Model emission estimates were adjusted based on these GWPs. Table 3 presents the GWP and atmospheric lifetimes of the GHGs that are regulated by the state of California.

Table 3 Global Warming Potentials and Atmospheric Lifetimes of GHGs			
GHG	Formula	100-Year Global Warming Potential	Atmospheric Lifetime (Years)
Carbon Dioxide	CO ₂	1	Variable
Methane	CH ₄	28	12
Nitrous Oxide	N ₂ O	265	121
Sulfur Hexafluoride	SF ₆	23,500	3,200
Hydrofluorocarbons	HFCs	100 to 12,000	1 to 100
Perfluorocarbons	PFCs	7,000 to 11,000	3,000 to 50,000
Nitrogen Trifluoride	NF ₃	16,100	500
<i>Source: First Update to the Climate Change Scoping Plan, ARB 2014</i>			

Human-caused sources of CO₂ include combustion of fossil fuels (coal, oil, natural gas, gasoline and wood). Data from ice cores indicate that CO₂ concentrations remained steady prior to the current period for approximately 10,000 years. Concentrations of CO₂ have increased in the atmosphere since the industrial revolution.

CH₄ is the main component of natural gas and also arises naturally from anaerobic decay of organic matter. Human-caused sources of natural gas include landfills, fermentation of manure and cattle farming. Human-caused sources of N₂O include combustion of fossil fuels and industrial processes such as nylon production and production of nitric acid.

Other GHGs are present in trace amounts in the atmosphere and are generated from various industrial or other uses.

In addition to the State of California GHG Inventory, a more specific regional GHG inventory was prepared by the University of San Diego School of Law Energy Policy Initiative Center, a non-regulatory, academic and research center (University of San Diego 2008). This San Diego County Greenhouse Gas Inventory (SDCGHGI) is a detailed inventory that takes into account the unique characteristics of the region in calculating emissions. The SDCGHGI calculated GHG emissions for 1990, 2006, and projected 2020 emissions.

Areas where feasible reductions can occur and the strategies for achieving those reductions are outlined in the SDCGHGI. A summary of the various sectors that contribute GHG emissions in San Diego County for the year 2006 is provided in Table 4. Total GHGs in San Diego County are estimated at 34 MMTCO₂e.

Table 4 San Diego County 2006 GHG Emissions by Category		
Sector	Total Emissions (MMTCO₂e)	Percent of Total Emissions
On-Road Transportation	16	46%
Electricity	9	25%
Natural Gas Consumption	3	9%
Civil Aviation	1.7	5%
Industrial Processes & Products	1.6	5%
Other Fuels/Other	1.1	4%
Off-Road Equipment & Vehicles	1.3	4%
Waste	0.7	2%
Agriculture/Forestry/Land Use	0.7	2%
Rail	0.3	1%
Water-Born Navigation	0.13	0.4%
<i>Source: EPIC's SDCGHGI, 2008.</i>		

According to the SDCGHGI, a majority of the region's emissions are attributable to on-road transportation, with the next largest source of GHG emissions attributable to electricity generation. Similarly, a majority of the emissions resulting from land development projects will be attributable

to on-road transportation emissions. According to the SDCGHGI study, the emission reductions for on-road transportation will be achieved in a variety of ways, including through regulations aimed at increasing fuel efficiency standards and decreasing vehicle emissions. These regulations are outside the control of project applicants.

Similar to on-road emissions, the SDCGHGI indicated that the necessary emission reductions for electricity generation will be achieved in a variety of ways, including through implementation of the renewable portfolio standard (RPS), cleaner electricity purchases by San Diego Gas & Electric, replacement of the Boardman Contract (which allows the purchase of electricity from coal-fired power plants), and implementation of 400 MW of photovoltaics. These measures are also outside the control of project applicants. The SDCGHGI indicates that reduction in electricity consumption of 10 percent would contribute to the required reduction in GHG emissions required to reduce emissions to 1990 levels by 2020.

1.4 Regulatory Framework

All levels of government have some responsibility for the protection of air quality, and each level (Federal, State, and regional/local) has specific responsibilities relating to air quality regulation. GHG emissions and the regulation of GHGs is a relatively new component of air quality.

1.4.1 National and International Efforts

GCC is being addressed at both the international and federal levels. In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis for human-induced climate change, its potential impacts, and options for adaptation and mitigation. The most recent reports of the IPCC have emphasized the scientific consensus that real and measurable changes to the climate are occurring, that they are caused by human activity, and that significant adverse impacts on the environment, the economy, and human health and welfare are unavoidable.

On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Framework Convention on Climate Change (UNFCCC). Under the Convention, governments agreed to gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of GCC. Recently, the United States Supreme Court declared in the court case of *Massachusetts et al. vs. the Environmental Protection Agency et al.*, 549 C.S. 497 (2007) that the EPA does have the ability to regulate GHG emissions. In addition to the national and international efforts described above, many local jurisdictions have adopted climate change policies and programs.

Endangerment Finding. On April 17, 2009, EPA issued its proposed endangerment finding for GHG emissions. On December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases--carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)--in the atmosphere threaten the public health and welfare of current and future generations.

Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

The endangerment findings do not themselves impose any requirements on industry or other entities. However, this action was a prerequisite to finalizing the EPA's greenhouse gas emission standards for light-duty vehicles, which were jointly proposed by EPA and the Department of Transportation's National Highway Safety Administration on September 15, 2009.

Mandatory GHG Reporting Rule. On March 10, 2009, in response to the FY2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110–161), EPA proposed a rule that requires mandatory reporting of greenhouse gas (GHG) emissions from large sources in the United States. On September 22, 2009, the Final Mandatory Reporting of Greenhouse Gases Rule was signed, and was published in the Federal Register on October 30, 2009. The rule became effective on December 29, 2009. The rule will collect accurate and comprehensive emissions data to inform future policy decisions.

EPA is requiring suppliers of fossil fuels or industrial greenhouse gases, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions to submit annual reports to EPA. The gases covered by the proposed rule are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulfur hexafluoride (SF₆), and other fluorinated gases including nitrogen trifluoride (NF₃) and hydrofluorinated ethers (HFE).

Federal Vehicle Standards. In response to the EPA’s actions discussed above, the Bush Administration issued Executive Order 13432 in 2007 directing the EPA, the Department of Transportation (DOT), and the Department of Energy (DOE) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, President Obama issued a memorandum directing the DOT, DOE, EPA and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams/mile of CO₂ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon (mpg) if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model

years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines.

Currently, the USEPA and the NHTSA are working with CARB to develop the next phase (Phase 2) of the fuel economy and GHG standards for medium- and heavy-duty trucks, which will apply to vehicles with model year 2018 and later. The USEPA and the NHTSA issued a Notice of Proposed Rulemaking for Phase 2 in June 2015 and are expected to issue a final rule in spring 2016. Upon the USEPA's adoption of the Phase 2 standards, CARB staff plan to propose a Phase 2 program for California, most likely in late 2016 or 2017.¹

As discussed above, the CAFE standards are standards that have been adopted by the U.S. Department of Transportation and the EPA. These standards are therefore federal standards and apply to vehicles throughout the United States. As discussed in Section 1.3.2 under State Standards, California implemented its own regulations to implement GHG standards for passenger vehicles. The ARB's Board originally approved regulations to reduce GHGs from passenger vehicles in September 2004, with the regulations to take effect in 2009. These regulations were authorized by the 2002 legislation Assembly Bill 1493 (Pavley).

The first California request to implement GHG standards for passenger vehicles, known as a waiver request, was made in December 2005 and was denied by the EPA in March 2008. That decision was based on a finding that California's request to reduce GHG emissions from passenger vehicles did

¹ CARB Phase 2 GHG. Available at: <http://www.arb.ca.gov/msprog/onroad/caphase2ghg/caphase2ghg.htm>. Accessed: August 2015.

not meet the Clean Air Act requirement of showing that the waiver was needed to meet “compelling and extraordinary conditions.”

As discussed below in Section 1.3.2, State Regulations and Standards, ARB has adopted a second phase of the Pavley regulations, originally termed “Pavley II” but now called the Low Emission Vehicle III” (LEV III) Standards or Advanced Clean Cars (ACC) Program, that covers model years 2017 to 2025. CARB estimates that LEV III will reduce vehicle GHGs by an additional 4.0 MMTCO₂E for an approximately 3 percent reduction over Pavley I. These reductions come from improved vehicle technologies such as smaller engines with superchargers, continuously variable transmissions, and hybrid electric drives. On August 7, 2012, the final regulation for the adoption of LEV III became effective.

1.4.2 State Regulations and Standards

The following subsections describe regulations and standards that have been adopted by the State of California to address GCC issues.

Assembly Bill 32, the California Global Warming Solutions Act of 2006. In September 2006, Governor Schwarzenegger signed California AB 32, the global warming bill, into law. AB 32 directs the ARB to do the following:

- Make publicly available a list of discrete early action GHG emission reduction measures that can be implemented prior to the adoption of the statewide GHG limit and the measures required to achieve compliance with the statewide limit.
- Make publicly available a GHG inventory for the year 1990 and determine target levels for 2020.
- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures.
- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that will achieve the statewide GHG emissions limit by

2020, to become operative on January 1, 2012, at the latest. The emission reduction measures may include direct emission reduction measures, alternative compliance mechanisms, and potential monetary and non-monetary incentives that reduce GHG emissions from any sources or categories of sources that ARB finds necessary to achieve the statewide GHG emissions limit.

- Monitor compliance with and enforce any emission reduction measure adopted pursuant to AB 32.

AB 32 required that by January 1, 2008, ARB determine what the statewide GHG emissions level was in 1990, and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. ARB adopted its Scoping Plan in December 2008, which provided estimates of the 1990 GHG emissions level and identified sectors for the reduction of GHG emissions. The ARB has recently published an update to the Scoping Plan (ARB 2014). The ARB has estimated that the 1990 GHG emissions level was 427 MMT net CO₂e (ARB 2007b). The ARB estimated that a reduction of 169 MMT net CO₂e emissions below business-as-usual would be required by 2020 to meet the 1990 levels (ARB 2008). This estimate was updated in the 2011 *Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document* (ARB 2011a) based on new economic data and the incorporation of three regulatory standards (i.e., 2008 Title 24 standards; Pavley I standards; 20% Renewable Portfolio Standard). Based upon the update, the ARB determined in the 2011 Supplement that the State is projected to emit 507 MMT CO₂e in 2020, and that a reduction of 80 MMT would be required by 2020 in order to return to the 1990 levels. The 80 MMT reduction correlates to a 16% reduction in GHG emissions.

Senate Bill 97. Senate Bill 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directs OPR to develop draft CEQA guidelines “for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions” by July 1, 2009 and directs the Resources Agency to certify and adopt the CEQA guidelines by January 1, 2010.

The Governor's Office of Planning and Research (OPR) published a technical advisory on CEQA and Climate Change on June 19, 2008. The guidance did not include a suggested threshold. The OPR does recommend that CEQA analyses include the following components:

- Identify greenhouse gas emissions
- Determine Significance
- Mitigate Impacts

In April 2009, the OPR published its proposed revisions to CEQA to address GHG emissions. The amendments to CEQA indicate the following:

- Climate action plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the greenhouse gas emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.
- New amendments include guidelines for determining methods to mitigate the effects of greenhouse gas emissions in Appendix F of the CEQA Guidelines.
- OPR is clear to state that “to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation.”

- OPR's emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.
- Environmental impact reports (EIRs) must specifically consider a project's energy use and energy efficiency potential.

On July 3, 2009, the California Natural Resources Agency published proposed amendment of regulations based on OPR's proposed revisions to CEQA to address GHG emissions. On that date, the Natural Resources Agency commenced the Administrative Procedure Act rulemaking process for certifying and adopting these amendments pursuant to Public Resources Code section 21083.05. Having reviewed and considered all comments received, on December 30, 2009, the Natural Resources Agency adopted the proposed amendments to the state CEQA guidelines in the California Code of Regulations. The amendments were formally adopted on March 18, 2010.

Executive Order S-3-05. Executive Order S-3-05, signed by Governor Schwarzenegger on June 1, 2005, calls for a reduction in GHG emissions to 1990 levels by 2020 and for an 80 percent reduction in GHG emissions by 2050. Executive Order S-3-05 also calls for the California EPA (CalEPA) to prepare biennial science reports on the potential impact of continued GCC on certain sectors of the California economy. The first of these reports, "Our Changing Climate: Assessing Risks to California", and its supporting document "Scenarios of Climate Change in California: An Overview" were published by the California Climate Change Center in 2006.

Executive Order B-30-15. Executive Order B-30-15 was enacted by the Governor on April 29, 2015. Executive Order B-30-15 establishes an interim GHG emission reduction goal for the state of California to reduce GHG emissions to 40 percent below 1990 levels by the year 2030. This Executive Order directs all state agencies with jurisdiction over GHG-emitting sources to implement measures designed to achieve the new interim 2030 goal, as well as the pre-existing, long-term 2050 goal identified in Executive Order S-3-05 to reduce GHG emissions to 80 percent below 1990 levels by the year 2050. The Executive Order directs ARB to update its Scoping Plan to address the 2030

goal. It is anticipated that ARB will develop statewide inventory projection data for 2030 and commence efforts to identify reduction strategies capable of securing emission reductions that allow for achievement of the new interim goal for 2030.

Senate Bill 32. Senate Bill 32 was enacted by the California Legislature on September 8, 2016 to require the ARB to approve a statewide GHG emissions limit to reduce GHG emissions to 40% below 1990 levels by 2030. The bill codified the target identified in Executive Order B-30-15 and authorizes the ARB to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions and ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030.

Executive Order S-21-09. Executive Order S-21-09 was enacted by the Governor on September 15, 2009. Executive Order S-21-09 requires that the ARB, under its AB 32 authority, adopt a regulation by July 31, 2010 that sets a 33 percent renewable energy target as established in Executive Order S-14-08. Under Executive Order S-21-09, the ARB will work with the Public Utilities Commission and California Energy Commission to encourage the creation and use of renewable energy sources, and will regulate all California utilities. The ARB will also consult with the Independent System Operator and other load balancing authorities on the impacts on reliability, renewable integration requirements, and interactions with wholesale power markets in carrying out the provisions of the Executive Order. The order requires the ARB to establish highest priority for those resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health.

California Code of Regulations Title 24. Although not originally intended to reduce greenhouse gas emissions, California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The GHG emission inventory was based on Title 24 as of 2008.. According to the

California Energy Commission (CEC 2012), the California Energy Commission's (CEC) 2013 Building Energy Efficiency Standards (effective July 1, 2014) are 25 percent and 30 percent more efficient than the 2008 Title 24 standards for residential and nonresidential construction, respectively. The 2013 standards require higher efficiency windows, insulation, lighting, ventilation systems and other features that further reduce energy consumption in homes and businesses. Additionally, the Standards will save 200 million gallons of water per year (equal to more than 6.5 million wash loads) and avoid 170,500 tons of greenhouse gas emissions per year. Energy efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in greenhouse gas emissions. Therefore, increased energy efficiency results in decreased greenhouse gas emissions.

State Standards Addressing Vehicular Emissions. California Assembly Bill 1493 (Pavley) enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce greenhouse gases emitted by passenger vehicles and light duty trucks. Regulations adopted by ARB would apply to 2009 and later model year vehicles. ARB estimated that the regulation would reduce climate change emissions from light duty passenger vehicle fleet by an estimated 18% in 2020 and by 27% in 2030 (AEP 2007). Once implemented, emissions from new light-duty vehicles are expected to be reduced in San Diego County by 21 percent by 2020. The ARB has adopted amendments to the "Pavley" regulations that reduce greenhouse gas (GHG) emissions in new passenger vehicles from 2009 through 2016. The amendments, approved by the Board on September 24, 2009, are part of California's commitment toward a nation-wide program to reduce new passenger vehicle GHGs from 2012 through 2016. ARB's September 2009 amendments will cement California's enforcement of the Pavley rule starting in 2009 while providing vehicle manufacturers with new compliance flexibility. The amendments will also prepare California to harmonize its rules with the federal rules for passenger vehicles. It is expected that the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016, all while improving fuel efficiency.

Implementation of the Pavley II standards will commence in 2017 and cover vehicles manufactured from 2017 through 2025. Based on information from the ARB (ARB 2011b), the Pavley II program

(now referred to as the “Advanced Clean Cars” program) would reduce GHG emissions from the fleet by 3% by 2020, and by 12% by 2025, with continuing reductions in emissions of 27% by 2035 and 33% by 2050.

Executive Order S-01-07. Executive Order S-01-07 was enacted by the Governor on January 18, 2007. Essentially, the order mandates the following: 1) that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020; and 2) that a Low Carbon Fuel Standard ("LCFS") for transportation fuels be established for California. It is assumed that the effects of the LCFS would be a 10% reduction in GHG emissions from fuel use by 2020. On April 23, 2009, ARB adopted regulations to implement the LCFS.

Senate Bill 375. Senate Bill 375 requires that regions within the state which have a metropolitan planning organization must adopt a sustainable communities strategy as part of their regional transportation plans. The strategy must be designed to achieve certain goals for the reduction of GHG emissions. The bill finds that GHG from autos and light trucks can be substantially reduced by new vehicle technology, but even so “it will be necessary to achieve significant additional greenhouse gas reductions from changed land use patterns and improved transportation. Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.” SB 375 provides that new CEQA provisions be enacted to “encourage developers to submit applications and local governments to make land use decisions that will help the state achieve its goals under AB 32,” and that “current planning models and analytical techniques used for making transportation infrastructure decisions and for air quality planning should be able to assess the effects of policy choices, such as residential development patterns, expanded transit service and accessibility, the walkability of communities, and the use of economic incentives and disincentives.”

The Sustainable Communities and Climate Protection Act of 2008 (SB 375) coordinates land use planning, regional transportation plans, and funding priorities to reduce GHG emissions from passenger vehicles through better-integrated regional transportation, land use, and housing planning that provides easier access to jobs, services, public transit, and active transportation options. SB 375 specifically requires the Metropolitan Planning Organization (MPO) relevant to the Project area

(here, the San Diego Association of Governments [SANDAG]) to include a Sustainable Communities Strategy in its Regional Transportation Plan that will achieve GHG emission reduction targets set by the ARB by reducing vehicle miles traveled from light-duty vehicles through the development of more compact, complete, and efficient communities.

For the area under SANDAG's jurisdiction, including the Project Site, the ARB adopted regional targets for reduction of mobile source-related GHG emissions by 7 percent for 2020 and by 13 percent for 2035. (These targets are expressed by the ARB as a percent change in per capita GHG emissions relative to 2005 levels.) In October 2011, SANDAG's Board adopted its 2050 Regional Transportation Plan and Sustainable Communities Strategy. Subsequently, in November 2011, the ARB - by resolution – accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the Sustainable Communities Strategy would achieve the ARB's 2020 and 2035 GHG emission reduction targets for the region.

Pursuant to Government Code Section 65080(b)(2)(K), SANDAG's Sustainable Communities Strategy does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing Sustainable Communities Strategy as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

1.4.3 Local Regulations and Standards

The County has adopted its General Plan Update (County of San Diego 2011), which provides smart growth and land use planning principles designed to reduce vehicle miles traveled (VMT) and result in a reduction in GHG emissions. As discussed in the General Plan Update, climate change and GHG reduction policies are addressed in plans and programs in multiple elements of the General Plan. The strategies for reduction of GHG emissions in the General Plan Update are as follows:

- Strategy A-1: Reduce vehicle trips generated, gasoline/energy consumption, and greenhouse gas emissions.

- Strategy A-2: Reduce non-renewable electrical and natural gas energy consumption and generation (energy efficiency).
- Strategy A-3: Increase generation and use of renewable energy sources.
- Strategy A-4: Reduce water consumption.
- Strategy A-5: Reduce and maximize reuse of solid wastes.
- Strategy A-6: Promote carbon dioxide consuming landscapes.
- Strategy A-7: Maximize preservation of open spaces, natural areas, and agricultural lands.

The General Plan Update also includes climate adaptation strategies to deal with potential adverse effects of climate change. The climate adaptation strategies include the following:

- Strategy B-1: Reduce risk from wildfire, flooding, and other hazards resulting from climate change.
- Strategy B-2: Conserve and improve water supply due to shortages from climate change.
- Strategy B-3: Promote agricultural lands for local food production.
- Strategy B-4: Provide education and leadership.

The County has also implemented a number of outreach programs such as the Green Building Program, lawn mower trade-in program, and reduction of solid waste by recycling to reduce air quality impacts as well as GHG emissions.

The County is working on developing a new Climate Action Plan that is anticipated to be released in 2017. The Climate Action Plan will include an updated GHG Inventory; GHG reduction targets and an analysis of the gap that will need to be filled to meet statewide goals set forth in S-3-05 and B-30-15 as implemented in SB 32; GHG reduction measures; and a recommended method(s) for analysis of projects subject to CEQA.

2.0 POTENTIAL CLIMATE CHANGE IMPACTS TO PROJECT SITE

2.1 Existing Conditions

The site is currently undeveloped and includes disturbed areas and native vegetation, consisting mainly of coastal sage scrub and grassland. Natural vegetation and soils temporarily store carbon as part of the terrestrial carbon cycle. Carbon is assimilated into plants and animals as they grow and then dispersed back into the environment when they die. There are two existing sources of carbon storage at the Project site: natural vegetation and soils. It is difficult to assess net changes in carbon storage associated with the proposed Project, but carbon sequestration rates for native vegetation in the Otay Mesa region are relatively low in comparison to heavily vegetated areas such as forests. For example, according to the U.S. EPA (<http://www.epa.gov/sequestration/rates.html>), riparian areas are estimated to sequester from 0.1 to 0.3 metric tons of CO₂e per acre per year in comparison to forests, which are estimated to sequester 0.6 to 2.6 metric tons of CO₂e per acre per year. Native vegetation in the Otay Mesa region, which consists mainly of scrub, native- and non-native grassland, and disturbed areas, would be expected to provide a low level of carbon sequestration. The key issue is the balance between the loss of natural vegetation and future carbon storage associated with landscaping. The situation is further complicated by changes in fire regime. Carbon in natural vegetation is likely to be released into the atmosphere through wildfire every 20 to 150 years. Carbon in landscaped areas will be protected from wildfire. The balance between these factors will influence the long-term carbon budget on the site. As discussed in Section 4.0, the impacts of carbon sequestration loss have been evaluated in the GHG inventory.

The majority of carbon within the site is stored in the soil. Soil carbon accumulates from inputs of plant and animal matter, roots, and other living components of the soil ecosystem (e.g., bacteria, worms, etc.). Soil carbon is lost through biological respiration, erosion, and other forms of disturbance. Overall, soil carbon moves more slowly through the carbon cycle, and it offers greater potential for long-term carbon storage. Field observations suggest that urban soils can sequester relatively large amounts of carbon. Observations from across the United States suggest that warmer

and drier climates (such as southern California) may have slightly higher soil organic matter levels when compared to equivalent areas before development.

Based on the site's current conditions and the absence of development, existing GHG emissions are negligible and assumed to be zero.

2.2 Typical Adverse Effects

The Climate Scenarios Report (CCCC 2006), uses a range of emissions scenarios developed by the IPCC to project a series of potential warming ranges (i.e., temperature increases) that may occur in California during the 21st century. Three warming ranges were identified: Lower warming range (3.0 to 5.5 degrees Fahrenheit (°F)); medium warming range (5.5 to 8.0 °F); and higher warming range (8.0 to 10.5°F). The Climate Scenarios Report then presents an analysis of the future projected climate changes in California under each warming range scenario.

According to the report, substantial temperature increases would result in a variety of impacts to the people, economy, and environment of California. These impacts would result from a projected increase in extreme conditions, with the severity of the impacts depending upon actual future emissions of GHGs and associated warming. These impacts are described below.

Public Health. Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to O₃ formation are projected to increase by 25 to 35 percent under the lower warming range and 75 to 85 percent under the medium warming range. In addition, if global background O₃ levels increase as is predicted in some scenarios, it may become impossible to meet local air quality standards. An increase in wildfires could also occur, and the corresponding increase in the release of pollutants including PM_{2.5} could further compromise air quality. The Climate Scenarios Report indicates that large wildfires could become up to 55 percent more frequent if GHG emissions are not significantly reduced.

Potential health effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems (e.g., heat rash and heat stroke). In addition, climate sensitive diseases (such as malaria, dengue fever, yellow fever, and encephalitis) may increase, such as those spread by mosquitoes and other disease-carrying insects.

Potential public health impacts from climate change would be global in nature rather than site-specific. That being said, because the project site is not located in an area that is subject to climate sensitive diseases (such as the tropics), it is unlikely that risks associated with these diseases would increase substantially. It is too speculative to estimate the potential frequency of heat waves at the project site that would be associated with global climate change.

Water Resources. A vast network of reservoirs and aqueducts capture and transport water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada mountain 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. In addition, if temperatures continue to rise more precipitation would fall as rain instead of snow, further reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. The State's water resources are also at risk from rising sea levels. An influx of seawater would degrade California's estuaries, wetlands, and groundwater aquifers.

Impacts to water resources could affect the project site through decreased availability of water in southern California overall. Decreased availability could lead to higher prices and water rationing. However, due to the scientific and factual uncertainties regarding the effects of climate change at a regional level, it is too speculative to quantify the effect of this impact.

Agriculture. Increased GHG and associated increases in temperature are expected to cause widespread changes to the agricultural industry, reducing the quantity and quality of agricultural products statewide. Significant reductions in available water supply to support agriculture would also impact production. Crop growth and development will change as will the intensity and frequency of pests and diseases.

This potential effect of climate change would not impact the proposed project because the project does not involve agricultural uses.

Ecosystems/Habitats. Continued global warming will likely shift the ranges of existing invasive plants and weeds, thus alternating competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Continued global warming is also likely to increase the populations of and types of pests. Continued global warming would also affect natural ecosystems and biological habitats throughout the State.

Due to the scientific and factual uncertainties regarding the effects of climate change at a regional and site-specific level, particularly as to sensitive biological resources, it is too speculative to assess the effect of this impact on the project site.

Wildland Fires. Global warming is expected to increase the risk of wildfire and alter 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.

The project site generally has a low potential for fire risks due to the type of on-site native vegetation.

Sea Level Rising and Coastal Flooding. Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the State's coastal regions. Under the high warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. A sea level risk of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten levees and inland water systems, and disrupt wetlands and natural habitats.

Because the site is not located in a coastal area, it is unlikely to be affected by rising sea levels.

2.3 California Climate Adaptation Strategy

As part of its climate change planning process, the California Natural Resources Agency prepared its California Climate Adaptation Strategy (CNRA 2009) to summarize the best known science on climate change impacts in California, with the goal of assessing vulnerability to climate change impacts. According to the ARB, some of the potential California-specific impacts of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. To protect the State's public health and safety, resources, and economy, the California Natural Resources Agency—in coordination with other state agencies—has updated the 2009 *California Climate Adaptation Strategy* that is titled, *Safeguarding California: Reducing Climate Risk*. The final *Safeguarding California* plan is dated July 2014, and provides policy guidance for state decision makers relative to climate risks in nine sectors: agriculture; biodiversity and habitat; emergency management; energy; forestry; ocean and coastal ecosystems and resources; public health; transportation; and water. It also identifies policies for reducing GHG emissions and accelerating the transition to a clean-energy economy through reductions in emissions, readiness, and continued research.

The California Climate Adaptation Strategy takes into account the long-term, complex, and uncertain nature of climate change and establishes a proactive foundation for an ongoing adaptation process. The strategy made preliminary recommendations as a first step in addressing responses to impacts of global climate change within the state. Key recommendations include:

1. A Climate Adaptation Advisory Panel (CAAP) will be appointed to assess the greatest risks to California from climate change and recommend strategies to reduce those risks building on California's Climate Adaptation Strategy.
2. Identify necessary changes to California's water management and uses.
3. Consider project alternatives that avoid significant new development in areas that cannot be adequately protected (planning, permitting, development, and building) from flooding, wildfire and erosion due to climate change.
4. All state agencies responsible for the management and regulation of public health, infrastructure or habitat subject to significant climate change should prepare as appropriate agency-specific adaptation plans, guidance, or criteria by September 2010.
5. To the extent required by CEQA Guidelines Section 15126.2, all significant state projects, including infrastructure projects, must consider the potential impacts of locating such projects in areas susceptible to hazards resulting from climate change.
6. The California Emergency Management Agency (Cal EMA) will collaborate with the California Natural Resources Agency, the Climate Action Team, the Energy Commission, and the CAAP to assess California's vulnerability to climate change, identify impacts to state assets, and promote climate adaptation/mitigation awareness through the Hazard Mitigation Web Portal and My Hazards Website as well as other appropriate sites.
7. Using existing research the state should identify key California land and aquatic habitats that could change significantly during this century due to climate change. Based on this identification, the state should develop a plan for expanding existing protected areas or altering land and water management practices to minimize adverse effects from climate change induced phenomena.
8. The best long-term strategy to avoid increased health impacts associated with climate change is to ensure communities are healthy to build resilience to increased spread of disease and temperature increases.
9. Communities with General Plans and Local Coastal Plans should begin, when possible, to amend their plans to assess climate change impacts, identify areas most vulnerable to these impacts, and develop reasonable and rational risk reduction strategies using the CAS as guidance.

10. State fire fighting agencies should begin immediately to include climate change impact information into fire program planning to inform future planning efforts.
11. State agencies should meet projected population growth and increased energy demand with greater energy conservation and an increased use of renewable energy.
12. Existing and planned climate change research can and should be used for state planning and public outreach purposes; new climate change impact research should be broadened and funded.

3.0 CLIMATE CHANGE SIGNIFICANCE CRITERIA

According to Appendix G of the CEQA Guidelines, the following criteria are considered to establish a significance threshold for GCC impacts:

Would the project:

- 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?

As described in Section 2.2, Executive Order B-30-15 established a statewide emissions reduction target of 40% below 1990 levels by 2030. SB 32 implements this goal and authorizes the ARB to adopt rules and regulations to achieve the maximum technology feasible and cost-effective greenhouse gas emissions reductions and ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030. This mid-term goal was identified to keep the State on a trajectory needed to meet the 2050 goal of reducing GHG emissions to 80% below 1990 levels by 2050 pursuant to Executive Order S-3-05.

This project has been evaluated on the basis of an efficiency metric, which assesses the annual GHG emissions per service population. Service population is defined as the residents plus full-time employees. The efficiency metric is derived based on the future statewide GHG emissions reduction goals divided the statewide service population, derived as discussed below.

The efficiency metric assesses the GHG efficiency of a project on a “service population (SP)” basis (efficiency metric = project emissions divided by the sum of the number of jobs and the number of residents provided by a project). The metric represents the rate of emissions needed to achieve a fair share of the State’s emissions mandate embodied in AB 32. The use of “fair share” in this instance indicates the GHG efficiency level that, if applied statewide, would meet the AB 32 emissions target

and support efforts to reduce emissions beyond 2020. With a reduced rate of emissions per service population, California can accommodate expected population growth and achieve economic development objectives, while also abiding by AB 32's emissions target and supporting efforts to reduce emissions beyond 2020.

The efficiency metric is based on the AB 32 GHG reduction target and GHG emissions inventory prepared for ARB's 2008 Scoping Plan. To develop the efficiency metric for 2020, land-use driven sectors in ARB's 1990 GHG inventory were identified and separated to tailor the inventory to land use projects. This process removes emission sources not applicable to land use projects. The land-use driven sector inventory for 1990 was divided by the service population projections for California in 2020. The efficiency metric allows the threshold to be applied evenly to most project types (residential, commercial/retail and mixed use) and employs an emissions inventory comprised only of emission sources from land-use related sectors. The efficiency metric allows lead agencies to assess whether any given project or plan would accommodate population and employment growth in a way that is consistent with the emissions limit established under AB 32.

ARB has indicated that an average statewide GHG reduction of 5.2 percent per year between 2020 and 2050 is necessary to achieve the 2030 and 2050 emissions reduction goals of Executive Orders B-30-15 and S-3-05 (ARB 2015). Efficiency metrics can be derived for each year between 2020 and 2050 based on this identified reduction downward direction, or based on other sources if supported by substantial evidence. As previously noted, the intent of the 5.2 percent annual reduction data is not to establish interim year reduction targets for the State; rather it is meant to allow projects to develop and apply interim year efficiency metrics at their buildout year and demonstrate consistency with the overall State reduction downward direction.

Because the project will be built out by 2028, the efficiency metric is derived for 2028. Based on population projections and employment projections (assuming 1.491% growth in employment from 2012 through 2022), the derivation of the 2028 efficiency metric is shown in Table 5. The 2028 efficiency metric has been used in this analysis to evaluate significance of impacts.

Table 5 Derivation of Efficiency Metric, 2028 Buildout	
Emissions, MT/yr ^a	187.02
Population ^b	43,424,440
Employment (assuming 1.491% change as from 2012-2022) ^c	19,738,382
Total	63,162,822
Metric Tons/Service Population	3.0

^aAssuming 5.2% reduction per year from 2020 baseline levels of 286.70 MT CO₂e

^bCalifornia Department of Finance, Demographic Research Unit Report P-2, State and County Population Projections by Race/Ethnicity and Age (5-year groups) 2010 through 2060 (as of July1); December 15, 2014

^cCalifornia Department of Finance, Employment Development Department Industry Employment Projections, Labor Market Information Division, 2010-2020, May 23, 2012, assuming 1.491% growth in employment

Based on the projections of statewide emissions and population and employment projections, the 2028 efficiency metric is 3.0 metric tons of CO₂e per service population. This efficiency metric was used to evaluate the project's impact.

4.0 GREENHOUSE GAS INVENTORY

GHG emissions associated with the proposed Project were estimated separately for six categories of emissions: (1) construction; (2) area sources; (3) energy use, including electricity and natural gas usage; (4) water consumption; (5) solid waste handling; and (6) transportation.

The complete emissions inventory is summarized below and included in Appendix A.

4.1 Existing Greenhouse Gas Emissions

As discussed in Section 2.1, the site is currently undeveloped and existing site GHG emissions are negligible. Minor amounts of GHG emissions may be associated with intermittent on-site activities (e.g., vehicle use). This analysis includes an evaluation of the carbon sequestration loss at the site using the CalEEMod Model.

The carbon sequestration loss calculations are based on the biological survey report for the project site. Table 6 presents a summary of the existing on-site vegetation, and the classification within the CalEEMod model to calculate sequestration loss.

Table 6 East Otay Mesa Specific Plan Amendment On-site Vegetation		
Habitat	Acres On Site	CalEEMod Category
Wetland Habitat Types		
Disturbed Wetland ¹	0.83	Wetlands
Non-Native Riparian	0.51	Scrub
Upland Habitat Types		
Native Grassland	1.65	Grassland
Non-Native Grassland ¹	239.91	Grassland
Other Upland Habitats/Land Cover		
Developed Land	2.97	Others
Disturbed Habitat	7.26	Others
Total	253.13	

¹The project will preserve 0.3 acres of wetlands and 51.33 acres of grassland.

4.2 Construction Greenhouse Gas Emissions

Construction GHG emissions include emissions from heavy construction equipment, truck traffic, and worker trips. Specific information on construction schedule and activities is not known at this time. Therefore, emissions were calculated using the CalEEMod Model, based on the default assumptions within the model, which assumes a construction schedule and tempo based on the size of the development. Table 7 presents the assumed construction schedule for the project.

The total construction emissions were estimated to be 17,485 metric tons of CO₂e. The County Department of Planning & Development Services (PDS) follows recommendations by the SCAQMD for purposes of evaluating construction-related GHGs under CEQA (SCAQMD 2008). Specifically, emissions are amortized over 20 years and added to operational emissions, as appropriate. Amortized over 20 years, construction would contribute 874 metric tons per year of CO₂e emissions. These emissions were added to the operational GHG emissions to evaluate their significance.

Table 7¹ Assumed Construction Schedule											
Project Element	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL
Technology Park (square feet)		95,625	95,625	95,625	95,625	95,625	95,625	95,625	47,813	47,812	765,000 sq. ft.
Residential (units)	875	697	337	837	312	100					3,158 units
Retail (square feet)						78,000					78,000 sq. ft.
Park (acres)	8	10		9							27 acres

¹This table provides an assumed phasing for the purpose of the GHG analysis to address emissions from construction on a programmatic level. Emissions are calculated and disclosed on this basis.

4.3 Operational Greenhouse Gas Emissions

Operational GHG emissions were calculated using the CalEEMod Model, with adjustments to account for site-specific conditions.

Area Source Emissions. The CalEEMod Model calculates emissions associated with area sources, including landscaping equipment and hearth (fireplace) use. For this analysis, it was assumed that residential units would include a natural gas fireplace.

Energy Use Emissions. Energy use generates GHGs through emissions from power plants that generate electricity as well as emissions from natural gas usage at the facility itself.

The CalEEMod model includes energy intensity factors for utilities that are based on emission factors for electricity are based on Power Utility Protocol reports submitted to the California Climate Action Registry (CCAR) with the most recent years around 2006-2008 or from the Local Government Operations Protocol. Implementation of the RPS will affect indirect GHG emissions associated with electricity use for the proposed Project because electricity will be purchased from San Diego Gas and Electric. According to the SDCGHGI (USD 2008), implementation of the 20% RPS mandate by 2010, as established by Senate Bill 107, would reduce GHG emissions by 14% from 2006 levels; credit was taken for these GHG savings in this analysis. As of September 23, 2010, the ARB has adopted the regulation that implements the 33% renewable energy standard. Implementation of the 33% target by 2020 will reduce GHG emissions by an additional 13% per the SDCGHGI. Thus, implementation of Executive Order S-21-09 would serve to reduce GHG emissions by a total of 27% below 2006 levels. The emission factors for utility energy use have been adjusted to account for implementation of the 33% RPS by 2020. In addition, SDG&E is required to meet a target of 50% RPS by 2030. To account for the additional GHG reductions due to implementation of the 50% RPS, it was assumed that the state would achieve this goal in a linear fashion. It was therefore assumed that the state of California would meet a goal of 46.6% RPS by 2028, the buildout year.

At a minimum, buildings would meet the energy efficiency requirements of Title 24 as of 2013, which results in a 21.8% decrease in electricity use over Title 24 as of 2008 and 16.8% decrease in natural gas use over Title 24 as of 2008 (CEC 2013) for non-residential uses, and a 23.3% decrease in electricity use over Title 24 as of 2008 and 3.8% decrease in natural gas use over Title 24 as of 2008 for multi-family residential units. These decreases in energy use were accounted for in the model. The buildings would be constructed post-2016 and would therefore be required to meet the requirements of Title 24 as of 2016. According to the California Energy Commission (CEC 2015), Title 24 as of 2016 would improve residential energy efficiency by 28%, and non-residential energy efficiency by 5%.

It was also assumed that the residences would be equipped with EnergyStar appliances. The reductions for EnergyStar appliances was accounted for within the CalEEMod model under Energy Mitigation.

Water. Water use and energy use are often closely linked. The provision of potable water to commercial users consumes large amounts of energy associated with five stages: source and conveyance, treatment, distribution, end use, and wastewater treatment. GHG emissions from water use were calculated based on the CalEEMod model, assuming that low-flow fixtures would be used, and that water-efficient irrigation systems would be employed that would reduce outdoor water use by 6.1% (CalEEMod default mitigation measure).

Solid Waste. The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, transportation of waste, and disposal. Solid waste generation rates were estimated from CalEEMod Model, and GHG emissions from solid waste management were estimated using the model, assuming landfilling of solid waste with flaring.

AB 341 sets forth a legislative declaration that it is the policy goal of the state that not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020. The County achieves a high diversion rate currently and is working on developing a high diversion plan to meet the 75% goal. Jurisdictions were required to meet a 50% reduction goal under AB 75

by the year 2000. Therefore, for conservative purposes, solid waste was assumed to be reduced by 50% for this analysis.

Transportation. Several regulatory initiatives have been passed to reduce emissions from on-road vehicles, as discussed in Section 1.3. The EMFAC2014 emission factors, which are included in CalEEMod Version 2016.3.1, were used in the analysis. The EMFAC2014 emission factors include reductions in GHG emissions for the Pavley I and Advanced Clean Cars programs.

To calculate emissions associated with vehicle trips generated by the proposed Project, the trip generation rates from the Traffic Impact Analysis – East Otay Mesa Specific Plan Amendment (Linscott, Law, and Greenspan 2016) were used. Vehicle miles traveled (VMT) were calculated based on the CalEEMod Model assumptions. To account for the mix of uses at the site, which is a project design feature, the reduction in VMT was calculated based on the land use index as recommended by CAPCOA (CAPCOA 2010). The land use index indicates that the mix of uses results in a reduction in VMT of 15.04%. The 15.04% reduction was applied to the emissions for both the unmitigated and mitigated conditions, because the mix of uses is a feature of the project. Based on CalEEMod default values, for the unmitigated emissions, CO₂ emissions from vehicles total 31,462 metric tons/year and CH₄ emissions from vehicles 1.5400 metric tons/year. Applying the 15.04% reduction to both emission estimates, the CO₂ emissions total 26,730 metric tons/year and the CH₄ emissions from vehicles total 1.3084 metric tons/year. A paragraph has been added to the text to explain this.

Table 8 presents a summary of the project design features that were included in this analysis to reduce GHG emissions.

Table 8 Proposed Project Design Features to Reduce GHG Emissions			
Strategy to Reduce GHG Emissions	Description	Emission Reduction	Basis for Emission Reduction
Land Use and Community Design			
Mixed Use Development	The East Otay Mesa Specific Plan Amendment provides a mix of uses at the site, including residential, retail, and industrial/employment uses.	Based on CAPCOA's <i>Quantifying Greenhouse Gas Mitigation Measures</i> , the land use index for the project projects a 15.04% reduction in VMT.	CAPCOA
Electric Vehicle Parking	Non-residential and multi-residential units will be conditioned to provide electric vehicle parking. The electric vehicle parking will conform with applicable building code requirements in place at the time of construction.	Because EMFAC2014, which is included in CalEEMod2016, accounts for penetration of electric vehicles into the fleet, no additional reductions were taken.	
Provide Bike Parking in Non-Residential and Multi-Unit Residential Projects	Non-residential and multi-residential units will be conditioned to include bicycle parking. The bicycle parking will conform with applicable building code requirements in place at the time of construction.	Because the reduction in VMT is not quantifiable at this time, no additional reductions were taken.	
Provide Pedestrian Network Improvements	The project will be designed with non-contiguous sidewalks to provide a pedestrian network throughout.	No credit was taken for this measure in the GHG calculations for the mitigated emission calculations.	
Increase Transit Accessibility	The project will provide a new MTS bus stop. The project is within 0.5 miles of MTS bus route 905, which currently provides hourly service to the project area.	CalEEMod model reductions	CalEEMod Model
Traffic Calming Measures	The project will include traffic calming measures on a minimum of 25% of internal streets and 25% of internal intersections.	This measure was accounted for by reducing GHG emissions from vehicles by 0.25% per CAPCOA	CAPCOA 2010

Table 8
Proposed Project Design Features to Reduce GHG Emissions

Strategy to Reduce GHG Emissions	Description	Emission Reduction	Basis for Emission Reduction
Energy Efficiency			
Limited Outdoor Lighting	The project will limit outdoor lighting requirements. Outdoor lighting will be limited in accordance with the dark skies policy, consistent with applicable code requirements in place at the time of construction	Because the reduction in GHGs is not quantifiable, no additional reductions were taken.	
ENERGYSTAR Appliances	Indoor residential appliances will meet the requirements of Title 24 at the time of construction, which is assumed to be EnergyStar for residential units.	CalEEMod model reductions	CalEEMod Model
High Efficiency Lighting	The project will be equipped with high efficiency public street and area lighting that will reduce energy requirements for lighting by 5 percent.	CalEEMod model reductions	CalEEMod Model
LED Traffic Lights	Traffic lights installed by the project will be LED traffic lights.	Because the reduction in GHGs is not quantifiable, no additional reductions were taken.	
Programmable Thermostat Timers	The project will include installation of programmable thermostat timers in all buildings.	Because the reduction in GHGs is not quantifiable, no additional reductions were taken.	
Water Conservation			
Low Flow Fixtures	Indoor plumbing would include low flow fixtures as required by Title 24 building codes in effect at the time of construction.	CalEEMod model reductions	CalEEMod Model
Water-Efficient Irrigation Systems	The project will install water-efficient irrigation systems that meet at least 6.1% reduction in outdoor water use.	CalEEMod model reductions	CalEEMod Model
Plant Native or Drought-Resistant Trees and Vegetation	All public areas will be planted with native or drought-resistant trees and vegetation.	Because the reduction in GHGs is not quantifiable, no additional reductions were taken.	
Water-Efficient Landscapes	The project will be designed to use water-efficient landscapes.	Because the reduction in GHGs is not quantifiable, no additional	

Table 8 Proposed Project Design Features to Reduce GHG Emissions			
Strategy to Reduce GHG Emissions	Description	Emission Reduction	Basis for Emission Reduction
		reductions were taken.	
Building and Site Design			
California 2013 Title 24 Building Energy Efficiency Standards	All buildings would be designed to meet the California 2013 Title 24 Building Energy Efficiency Standards at a minimum. By the time buildings are constructed, it is likely that updated, more stringent energy efficiency standards will be adopted.	CalEEMod 2016.3.1 includes Title 24 as of 2013	CalEEMod Model
Fireplaces	The residences will be constructed either with no fireplace or with natural gas fireplaces. 1,000 of the units will include natural gas fireplaces, with the remaining 2,158 units to be constructed without fireplaces	CalEEMod Model reductions	CalEEMod Model
Use Electric Landscaping Equipment.	Landscaping will use electric equipment; it is assumed that 3% of equipment would be electrically powered based on statewide average use of 3%.	CalEEMod model reductions	CalEEMod Model
Solid Waste Diversion	The project would include solid waste diversion practices in accordance with AB 341, which requires 75% solid waste diversion by 2030. Current solid waste diversion rates of 52.6% for multifamily dwellings and 50% for non-residential uses were assumed in the analysis.	75% diversion rates resulting in associated GHG emissions reductions	AB 341 requirements

To account for the inclusion of a mix of uses at the site, the Traffic Impact Analysis assumed a reduction in trips of 10%. This reduction was not included in the GHG analysis. The CalEEMod Model assumes some reductions in VMT for internal trips; however, according to the CAPCOA guidance document, *Quantifying Greenhouse Gas Reductions from Mitigation Measures* (CAPCOA 2010), under GHG Reduction Measure LUT-3, the reduction in vehicles miles traveled (VMT) associated with a mix of uses at the site can be calculated using the Land Use Index approach. The Land Use Index provides a means of estimating the reductions anticipated due to the mix of uses. The Land Use Index calculation for this project is provided in Appendix A. For the East Otay Mesa Specific Plan Amendment, the mix of uses at the site would result in a reduction in VMT of 15.04%.

The results of the GHG inventory for buildout emissions (2028) with implementation of GHG reduction measures are presented in Table 9.

The site residential service population was calculated based on the SANDAG population projections for residential population in the Otay Subregional Plan Area for 2030, for an average of 2.87 residents per dwelling unit for a total of 9,063 residents. The occupational service population was calculated based on the City of San Diego's Jobs-Housing Nexus Study (Keyser Marston 2013). While the analysis evaluated jobs and housing within the City of San Diego, it represents the most recent regional data on employment by land use. Based on the Keyser Marston study, Research and Development/Manufacturing/Industrial land uses such as that proposed for the Technology Park portion of the project would generate 1 job per 500 square feet for a total of 1,530 jobs. Retail uses would generate 1 job per 350 square feet for a total of 223 jobs. No data were available for employees for the park uses; therefore, park employees were not considered in the service population calculation. The total service population for the East Otay Mesa Specific Plan Amendment is 10,816.

The project has been evaluated on the basis of a buildout year of 2028 efficiency metric of 3.0 metric tons per service population. As shown in Table 9, the project would not meet this efficiency metric and would emit 3.5 metric tons per service population. GHG impacts would therefore be significant.

Table 9 SUMMARY OF PROPOSED PROJECT'S ESTIMATED GREENHOUSE GAS EMISSIONS WITH PROJECT DESIGN FEATURES – BUILDOUT 2028				
Emission Source	Annual Emissions (Metric tons/year)			
	CO₂	CH₄	N₂O	CO₂e
Operational Emissions				
Area Sources	326	0.0417	0.0053	329
Electricity Use	4,463	0.1858	0.0372	4,478
Natural Gas Use	3,075	0.0589	0.0564	3,092
Water Consumption	987	10.1619	0.2463	1,337
Solid Waste Handling	245	14.4607	0.0000	650
Vehicles	26,730	1.3084	0.0000	26,767
Amortized Construction	874	0.0000	0.0000	874
Amortized Land Use Change	28	0.0000	0.0000	28
Total	36,728	26.2174	0.40.3452	37,554
Global Warming Potential Factor	1	28	265	
CO ₂ Equivalent Emissions	36,728	734	92	37,554
TOTAL CO₂ Equivalent Emissions	37,554			
Service Population	10,816			
Metric Tons per Service Population	3.5			
Project Efficiency Metric	3.0			

5.0 SUMMARY OF PROJECT DESIGN FEATURES AND MITIGATION MEASURES

As stated in the introduction, each phase of the project would be required to undergo a site plan review, and at that time, may be required to demonstrate that each site plan's emissions would meet the County's GHG requirements. At this time, the analysis demonstrates that reductions would not meet the efficiency metric of 3.0 metric tons per service population in 2028. This impact is significant.

Because the project would result in a significant impact, the following mitigation measures are proposed to reduce the potential for GHG impacts:

Energy Efficiency

Mitigation Measure GHG-1: Exceed Title 24 Building Energy Efficiency Standards. The project buildings will exceed Title 24 as of 2016 by 20%. This measure was included in the mitigation measures in the CalEEMod Model.

Mitigation Measure GHG-2: Provide Solar Power. The project will include photovoltaic solar panels or their equivalent, as approved by the Development Services Director) designed to provide 50% of the project's commercial use electricity needs, and 50% of the residential dwelling units shall include photovoltaic solar panels (or their equivalent, as approved by the Development Services Director) to provide those residential dwelling units' electricity needs. This measure was included in the CalEEMod model under Renewable Energy.

Table 10 presents the results of the GHG calculations with mitigation measures included as described above. As shown in table 10, with mitigation, the project would meet the efficiency metric of 3.0 metric tons perservice population. The GHG efficiency of the project would therefore meet the efficiency metric of 3.0 metric tons per service population, and GHG impacts would be less than significant.

Table 10 SUMMARY OF PROPOSED PROJECT'S ESTIMATED GREENHOUSE GAS EMISSIONS WITH PROJECT DESIGN FEATURES AND MITIGATION MEASURES – BUILDOUT 2028				
Emission Source	Annual Emissions (Metric tons/year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Operational Emissions				
Area Sources	326	0.0417	0.0053	329
Electricity Use	2,160	0.0899	0.0180	2,167
Natural Gas Use	2,636	0.0505	0.0483	2,650
Water Consumption	987	10.1629	0.2465	1,337
Solid Waste Handling	245	14.4607	0.0000	650
Vehicles	24,717	1.2216	0.0000	24,751
Amortized Construction	874	0.0000	0.0000	874
Amortized Land Use Change	28	0.0000	0.0000	28
Total	31,973	26.0273	0.3181	32,786
Global Warming Potential Factor	1	28	265	
CO ₂ Equivalent Emissions	31, 973	729	84	32,786
TOTAL CO₂ Equivalent Emissions	32,786			
Service Population	10,816			
Metric Tons per Service Population	3.0			
Efficiency Metric	3.0			

With respect to the second significance criterion, the proposed Project will be consistent with applicable plans, policies, and regulations discussed in Section 1.3, including:

- ARB Scoping plan – to the extent required by law, the proposed Project will comply with all applicable regulations adopted by the ARB and other regulatory agencies to implement the Scoping Plan pursuant to AB 32.
- Executive Order S-3-05 – the proposed Project, through implementation of project design features and compliance with vehicle standards, will enable achievement of the statewide goal of reducing GHG emissions to 1990 levels by 2020, and 80% below 1990 levels by 2050.

- Executive Order B-30-15 – the proposed Project would achieve substantial progress toward meeting the targets of Executive Order B-30-15 and S-3-05 for milestone years 2030 and 2050 by further reducing GHG emissions from the Project site.
- Executive Order S-21-09 – the proposed Project will purchase power from San Diego Gas and Electric, which is developing its renewable portfolio standard in accordance with state mandates.
- California Code of Regulations Title 24 – the proposed Project will comply with the then-applicable Title 24 standards, thereby demonstrating a commitment to the energy efficient design, construction and operation of residential and non-residential structures.
- State Vehicle Standards – vehicles operating within the proposed Project will meet Pavley and LCFS standards to the extent required by law.
- Senate Bill 375 – the proposed Project is part of a master-planned community that provides a mix of uses serving the community, consistent with the general objectives of SB 375, as discussed below.
- County General Plan Policies: Policy COS-14.1 (Land Use Development), Policy COS-14.2 (Villages and Rural Villages), Policy COS-14.3 (Sustainable Development), Policy COS-15.1 (Design and Construction of New Buildings), COS-15.4 (Title 24 Energy Standards), and COS-19.1 (Sustainable Water Supply – Sustainable Development Practices).

SANDAG’s inclusion of the proposed land use development on the Project site in the Sustainable Communities Strategy’s forecasted development pattern for the region (see Gov. Code, §65080(b)(2)(B)(vii)) is consistent with the fact that SANDAG was required to utilize the “most recent planning assumptions considering local general plans and other factors” when preparing the Sustainable Communities Strategy (Gov. Code, §65080(b)(2)(B)). Here, the Otay 250 – Sunroad East Otay Mesa Business Park Specific Plan Amendment project (i.e., the proposed Project) is part of the Otay Subregional Plan, as adopted in 2011. The County and other regional planning agencies (i.e., SANDAG) have been anticipating development on the Project site since that time.

Additionally, for purposes of SB 375's underlying policy goals, it is important to recognize that the proposed Project is part of the planned and approved East Otay Mesa Business Park Specific Plan community, which contains a mix of residential, commercial, civic, recreational, and public facilities, all of which – when viewed from an integrated perspective – reduce the amount of vehicle miles traveled and corresponding GHG emissions. The proposed Project would further reduce the amount of vehicle miles traveled by incorporating into the Specific Plan an increase in residential units at high densities mixed with supporting retail and employment uses, adding to what was previously a primarily light industrial/technology center to create a Village setting.

In addition to being part of a larger Specific Plan area, the proposed Project itself contributes a more integrated and balanced mix of uses, including community-serving commercial, light industrial employment uses, a 50.3-acre open space preserve, and trail amenities. The Project's mix of uses allows for the Project to internally capture approximately 15.04 percent of all vehicle trips (i.e., these trips remain within the boundaries of the Project site). Further, the Project's mix of land uses, including residential in conjunction with the retail and employment, is coupled with an integrated pathway and trail plan and traffic calming features along internal streets and roads that promote a pedestrian experience for the Project's residents and visitors and facilitate non-vehicular travel, consistent with SB 375.

The Project will be consistent with the County's General Plan policies that are designed to reduce GHG emissions through implementation of the measures identified above.

The proposed Project would be consistent with the targets of Executive Order B-30-15 and SB 32 because it would meet the efficiency metric for GHGs with mitigation measures implemented. Impacts would therefore be less than significant.

6.0 COMPARISON WITH EXISTING ENTITLEMENT

If constructed as currently approved, the East Otay Mesa Specific Plan Area's existing entitlement would result in emissions of GHGs. The existing entitlement includes 27.37 acres of approved commercial uses (383,180 square feet) and 130.18 acres of approved technology park uses (1,562,200 square feet). The service population is based on the employment of the existing entitlement and was calculated as 4,219.

Table 11 presents a summary of the emissions from the existing entitlement and the existing entitlement's efficiency, assuming buildout in 2028.

Table 11 SUMMARY OF EXISTING ENTITLEMENT'S ESTIMATED GREENHOUSE GAS EMISSIONS WITH PROJECT DESIGN FEATURES AND MITIGATION MEASURES – BUILDOUT 2028				
Emission Source	Annual Emissions (Metric tons/year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Operational Emissions				
Area Sources	0.0343	0.0001	0.0000	0
Electricity Use	4,320	0.1799	0.0360	4,750
Natural Gas Use	1,736	0.0333	0.0318	1,568
Water Consumption	792	10.1860	0.2456	1,206
Solid Waste Handling	237	14.0326	0.0000	315
Vehicles	19,881	1.0089	0	19,909
Amortized Construction	622	0.0000	0.0000	622
Amortized Land Use Change	28	0.0000	0.0000	28
Total	27,615	25.4408	0.3134	28,411
Global Warming Potential Factor	1	28	265	
CO ₂ Equivalent Emissions	27,615	712	83	28,411
TOTAL CO₂ Equivalent Emissions	28,411			
Service Population	4,219			
Metric Tons per Service Population	6.7			
Project Efficiency Metric	3.0			

As shown in Table 11, the CO₂e per service population of the existing entitlement is far higher than the CO₂e per service population of the proposed project. The proposed project includes a mix of uses and would also site residential uses in an area that is an employment center, reducing VMT within the Otay Mesa area. Therefore, the project represents an increase in efficiency relative to GHG emissions per service population over the existing entitlement.

7.0 CONCLUSIONS

Emissions of GHGs would result in a net increase in emissions from construction and operations. As discussed in Section 5.0, however, emissions would exceed the 2028 efficiency metric of 3.0 metric tons CO₂e per service population. The project would implement Mitigation Measures GHG-1 and GHG-2 to reduce GHG emissions to the extent feasible. With mitigation, the project's GHG efficiency would meet the 2028 efficiency metric of 3.0 metric tons CO₂e per service population. Therefore, the project would not generate GHG emissions that may have a significant impact on the environment.

Because the proposed Project is consistent with the applicable plans, policies, and regulations adopted for regulations of GHG emissions, the Project would not:

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

Because the project would meet the efficiency metric of 3.0 metric tons of CO₂e per service population, the project would be consistent with the goals of Executive Order B-30-15 and SB32 that requires the state to reduce its GHG emission to 40% below 1990 levels by 2030. This impact is less than significant.

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Appendix A

Greenhouse Gas Emission Calculations

Table A-1
Service Population Calculation
East Otay Mesa Specific Plan Amendment

Service Population Calculation - East Otay Mesa

Land Use	Service Population	Basis
Technology Park	1530	Keyser Marston Data
Retail	223	Keyser Marston Data
Park	0	No data available
Residential	9063	CalEEMod Defaults
Total	10816	

Table A-2
Calculation of Land Use Index
Mixed Uses

Category	Land Use Type	Number		Acres	Square Feet
Residential	Condo/Townhouse	3158	Dwelling Unit	124.4	3158000
Industrial	Industrial Park	765	1000sqft	47.72	765000
Retail	Regional Shopping Cen	68	1000sqft	6.8	68000
Retail	Strip Mall	10	1000sqft	1	10000
Total					4001000

Land Use Type	Symbol	Value	LNValue	ai x LN(ai)
Single Family	a1	0.01	-4.605170186	-0.04605
Multifamily	a2	0.789303	-0.236605414	-0.18675
Commercial	a3	0.019495	-3.937590782	-0.07676
Industrial	a4	0.191202	-1.654423775	-0.31633
Institutional	a5	0.01	-4.605170186	-0.04605
Park	a6	0.01	-4.605170186	-0.04605

Calculation of Land Use Index

	a			-0.718
	-a/LN(6)			0.400724
	(land use index - .15)/.15			1.671496
Land Use Index				0.150435

Solid Waste Generation and Diversion Rate Calculation

Based on information in the CalRecycle database for unincorporated San Diego County for the year 2015 (included as Attachment A), multi-family dwelling units generate a total of 30,158 tons per year. With a total of 34,495 occupied units, the average solid waste generation rate is 0.8742 tons per unit per year.

The CalEEMod default waste disposal rate for multi-family units is based on a waste generation rate of 0.46 tons per unit per year. Thus the CalEEMod default disposal rates would assume that within the unincorporated County, the waste diversion rate that is accounted for within the CalEEMod model is calculated to be approximately 52.6% based on County-specific data.

The CalRecycle database does not provide information on solid waste generation rates based on square footage in the same manner that CalEEMod calculates variables. Within the unincorporated County, the current solid waste diversion rate for non-residential uses is 34.2%, based on a comparison of waste generation and waste disposal rates. For conservative purposes, this was assumed to be 50%.

To account for a 75% solid waste diversion rate, which will be achieved within the County by the buildout year of 2028, the unmitigated solid waste disposal rates and associated GHG emissions were reduced as follows: to reduce non-residential disposal rates from 50% to 25%, the additional diversion rate would be 50%.

To reduce multi-family residential disposal rates from 0.46 tons per residence per year to 25% of 0.8742 tons per residence per year, the reduction would be as follows:

$0.8742 \times .25 = 0.21855$ tons per residence per year at 75% diversion rate

$0.46 \text{ tons per residence per year} \times .4751 = 0.21855 \text{ tons per residence per year}$

Therefore, to reduce residential disposal rates from 52.6% to 25%, the additional diversion rate would be 47.51%.

Table A presents a summary of the GHG emissions for the unmitigated and mitigated case for the East Otay Mesa Specific Plan Area.

Table A Solid Waste Disposal Rates and GHG Calculations					
Land Use	Waste Generation Rate, total tons	CO₂	CH₄	N₂O	CO₂e
<i>Unmitigated</i>					
Multi-family dwellings	1452.68	294.8809	17.4270	0.0000	783
Industrial Park	948.6	192.5572	11.3798	0.0000	511
Regional Shopping Center	71.4	14.4936	0.8565	0.0000	38
Strip Mall	10.5	2.1314	0.1260	0.0000	6
Total		504.0631	29.7893	0.0000	1,338
<i>Mitigated</i>					
Multi-family dwellings	690.1683	140.0979	8.279568	0.0000	372
Industrial Park	474.3	96.2786	5.6899	0.0000	256
Regional Shopping Center	35.7	7.2468	0.42825	0.0000	19
Strip Mall	5.25	1.0657	0.063	0.0000	3
Total		244.689	14.46072	0.0000	650

Business Group	Jurisdiction(s)	Material Type	Employee Count	Occupied Multifamily Units	TPEPY Disposed	Tons Disposed	Tons Total Generation	Percent of Total Generation
Multifamily	San Diego County (Unincorporated)	All Material Types	0	34,495	0.00	25,508	30,158	19.2%
Arts, Entertainment, & Recreation	San Diego County (Unincorporated)	All Material Types	11,213	0	1.94	21,767	25,808	16.4%
Services - Professional, Technical, & Financial	San Diego County (Unincorporated)	All Material Types	7,919	0	1.61	12,757	16,036	10.2%
Retail Trade - Food & Beverage Stores	San Diego County (Unincorporated)	All Material Types	2,441	0	0.94	2,294	12,412	7.9%
Restaurants	San Diego County (Unincorporated)	All Material Types	6,215	0	1.57	9,769	11,945	7.6%
Services - Management, Administrative, Support, & Social	San Diego County (Unincorporated)	All Material Types	8,152	0	0.60	4,896	9,622	6.1%
Retail Trade - All Other	San Diego County (Unincorporated)	All Material Types	4,651	0	1.74	8,089	9,113	5.8%
Not Elsewhere Classified	San Diego County (Unincorporated)	All Material Types	8,188	0	0.46	3,799	8,961	5.7%
Hotels & Lodging	San Diego County (Unincorporated)	All Material Types	3,685	0	1.40	5,175	6,503	4.1%
Durable Wholesale & Trucking	San Diego County (Unincorporated)	All Material Types	2,120	0	0.57	1,212	6,168	3.9%
Education	San Diego County (Unincorporated)	All Material Types	8,361	0	0.38	3,209	3,762	2.4%
Medical & Health	San Diego County (Unincorporated)	All Material Types	5,821	0	0.57	3,318	3,642	2.3%
Manufacturing - All Other	San Diego County (Unincorporated)	All Material Types	2,156	0	0.44	942	3,169	2.0%
Services - Repair & Personal	San Diego County (Unincorporated)	All Material Types	2,194	0	0.85	1,866	2,980	1.9%
Manufacturing - Food & Nondurable Wholesale	San Diego County (Unincorporated)	All Material Types	1,422	0	1.23	1,750	2,540	1.6%
Manufacturing -Electronic Equipment	San Diego County (Unincorporated)	All Material Types	3,177	0	0.31	994	2,367	1.5%
Public Administration	San Diego County (Unincorporated)	All Material Types	6,096	0	0.30	1,848	2,226	1.4%
								Diversio
Multifamily Total per Unit						0.7395	0.8742	15.4%
Non-Residential Total all categories						83,684	127,255	34.2%

East Otay Mesa Specific Plan Amendment - San Diego Air Basin, Annual

East Otay Mesa Specific Plan Amendment

San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	519.67	1000sqft	47.72	519,670.00	0
Condo/Townhouse	3,158.00	Dwelling Unit	124.40	3,158,000.00	9032
Regional Shopping Center	74.05	1000sqft	6.80	74,050.00	0
Strip Mall	10.89	1000sqft	1.00	10,890.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13	Operational Year	2020		
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	619.62	CH4 Intensity (lb/MW hr)	0.025	N2O Intensity (lb/MW hr)	0.005

1.3 User Entered Comments & Non-Default Data

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	250	0
tblAreaCoating	Area_Nonresidential_Exterior	302305	0
tblAreaCoating	Area_Nonresidential_Interior	906915	0
tblAreaCoating	Area_Residential_Exterior	2131650	0
tblAreaCoating	Area_Residential_Interior	6394950	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0

tblAreaMitigation	UseLowVOCPaintNonresidentialInterior	Value	250	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	Value	250	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	Value	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	Use	40	15
tblGrading	AcresOfGrading		1,550.00	180.00
tblGrading	AcresOfGrading		0.00	180.00
tblGrading	MaterialImported		0.00	1,350,000.00
tblLandUse	LotAcreage		11.93	47.72
tblLandUse	LotAcreage		197.38	124.40
tblLandUse	LotAcreage		1.70	6.80
tblLandUse	LotAcreage		0.25	1.00
tblOffRoadEquipment	HorsePower		158.00	162.00
tblOffRoadEquipment	HorsePower		187.00	174.00
tblOffRoadEquipment	HorsePower		247.00	255.00
tblOffRoadEquipment	HorsePower		247.00	255.00
tblOffRoadEquipment	HorsePower		367.00	361.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount		2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount		1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount		1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount		2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount		2.00	4.00
tblProjectCharacteristics	CH4IntensityFactor		0.029	0.025
tblProjectCharacteristics	CO2IntensityFactor		720.49	619.62
tblProjectCharacteristics	N2OIntensityFactor		0.006	0.005
tblProjectCharacteristics	OperationalYear		2018	2020
tblTripsAndVMT	HaulingTripLength		20.00	0.50
tblTripsAndVMT	WorkerTripNumber		43.00	20.00

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	1.4372	19.1360	11.0614	0.0162	4.2220	0.7380	4.9599	2.1838	0.6793	2.8631	0.0000	1,543.6748	1,543.6748	0.4331	0.0000	1,554.5015
2017	1.2621	17.9528	9.7021	0.0167	3.0371	0.6209	3.6580	1.5763	0.5715	2.1478	0.0000	1,574.4298	1,574.4298	0.4302	0.0000	1,585.1844
Maximum	1.4372	19.1360	11.0614	0.0167	4.2220	0.7380	4.9599	2.1838	0.6793	2.8631	0.0000	1,574.4298	1,574.4298	0.4331	0.0000	1,585.1844

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	1.4372	19.1359	11.0614	0.0162	1.6783	0.7380	2.4162	0.8601	0.6793	1.5394	0.0000	1,543.6735	1,543.6735	0.4331	0.0000	1,554.5002
2017	1.2621	17.9527	9.7021	0.0167	1.2128	0.6209	1.8337	0.6223	0.5715	1.1938	0.0000	1,574.4286	1,574.4286	0.4302	0.0000	1,585.1831
Maximum	1.4372	19.1359	11.0614	0.0167	1.6783	0.7380	2.4162	0.8601	0.6793	1.5394	0.0000	1,574.4286	1,574.4286	0.4331	0.0000	1,585.1831

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	60.17	0.00	50.68	60.58	0.00	45.46	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-24-2016	1-23-2017	7.6746	7.6746
2	1-24-2017	4-23-2017	7.2034	7.2034
3	4-24-2017	7-23-2017	7.4152	7.4152

4	7-24-2017	9-30-2017	2.5261	2.5261
		Highest	7.6746	7.6746

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	213.5643	4.1419	268.1298	0.4444		34.4243	34.4243		34.4243	34.4243	3,262.080 4	1,406.382 5	4,668.4629	3.0477	0.2566	4,821.119 4
Energy	0.3489	3.0133	1.5001	0.0190		0.2411	0.2411		0.2411	0.2411	0.0000	10,535.12 22	10,535.122 2	0.3519	0.1205	10,579.81 61
Mobile	7.7273	34.2094	90.8546	0.2922	24.2221	0.2947	24.5168	6.4870	0.2765	6.7636	0.0000	26,904.08 68	26,904.086 8	1.4782	0.0000	26,941.04 23
Waste						0.0000	0.0000		0.0000	0.0000	443.7890	0.0000	443.7890	26.2272	0.0000	1,099.468 4
Water						0.0000	0.0000		0.0000	0.0000	105.3987	1,632.886 2	1,738.2848	10.8913	0.2688	2,090.667 3
Total	221.6405	41.3645	360.4845	0.7556	24.2221	34.9601	59.1822	6.4870	34.9419	41.4290	3,811.268 1	40,478.47 77	44,289.745 8	41.9964	0.6458	45,532.11 35

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	213.5643	4.1419	268.1298	0.4444		34.4243	34.4243		34.4243	34.4243	3,262.080 4	1,406.382 5	4,668.4629	3.0477	0.2566	4,821.119 4
Energy	0.3489	3.0133	1.5001	0.0190		0.2411	0.2411		0.2411	0.2411	0.0000	10,535.12 22	10,535.122 2	0.3519	0.1205	10,579.81 61
Mobile	7.7273	34.2094	90.8546	0.2922	24.2221	0.2947	24.5168	6.4870	0.2765	6.7636	0.0000	26,904.08 68	26,904.086 8	1.4782	0.0000	26,941.04 23

Waste						0.0000	0.0000		0.0000	0.0000	443.7890	0.0000	443.7890	26.2272	0.0000	1,099.4684
Water						0.0000	0.0000		0.0000	0.0000	105.3987	1,632.8862	1,738.2848	10.8913	0.2688	2,090.6673
Total	221.6405	41.3645	360.4845	0.7556	24.2221	34.9601	59.1822	6.4870	34.9419	41.4290	3,811.2681	40,478.4777	44,289.7458	41.9964	0.6458	45,532.1135

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2016	6/16/2016	5	120	
2	Grading	Grading	6/17/2016	8/24/2017	5	310	

Acres of Grading (Site Preparation Phase): 180

Acres of Grading (Grading Phase): 180

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	4	8.00	162	0.38
Grading	Graders	2	8.00	174	0.41
Grading	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	4	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	17	20.00	0.00	168,750.00	10.80	7.30	0.50	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 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					1.1794	0.0000	1.1794	0.6062	0.0000	0.6062	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3046	3.2779	2.4663	2.3400e-003		0.1763	0.1763		0.1622	0.1622	0.0000	221.2626	221.2626	0.0667	0.0000	222.9312
Total	0.3046	3.2779	2.4663	2.3400e-003	1.1794	0.1763	1.3557	0.6062	0.1622	0.7684	0.0000	221.2626	221.2626	0.0667	0.0000	222.9312

Unmitigated Construction Off-Site

[illegible]

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6700e-003	4.6700e-003	0.0449	1.0000e-004	8.6600e-003	7.0000e-005	8.7300e-003	2.3000e-003	6.0000e-005	2.3600e-003	0.0000	8.8011	8.8011	3.6000e-004	0.0000	8.8101
Total	5.6700e-003	4.6700e-003	0.0449	1.0000e-004	8.6600e-003	7.0000e-005	8.7300e-003	2.3000e-003	6.0000e-005	2.3600e-003	0.0000	8.8011	8.8011	3.6000e-004	0.0000	8.8101

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					0.4600	0.0000	0.4600	0.2364	0.0000	0.2364	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3046	3.2779	2.4663	2.3400e-003		0.1763	0.1763		0.1622	0.1622	0.0000	221.2624	221.2624	0.0667	0.0000	222.9309
Total	0.3046	3.2779	2.4663	2.3400e-003	0.4600	0.1763	0.6363	0.2364	0.1622	0.3986	0.0000	221.2624	221.2624	0.0667	0.0000	222.9309

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6700e-003	4.6700e-003	0.0449	1.0000e-004	8.6600e-003	7.0000e-005	8.7300e-003	2.3000e-003	6.0000e-005	2.3600e-003	0.0000	8.8011	8.8011	3.6000e-004	0.0000	8.8101
Total	5.6700e-003	4.6700e-003	0.0449	1.0000e-004	8.6600e-003	7.0000e-005	8.7300e-003	2.3000e-003	6.0000e-005	2.3600e-003	0.0000	8.8011	8.8011	3.6000e-004	0.0000	8.8101

3.3 Grading - 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					2.9906	0.0000	2.9906	1.5639	0.0000	1.5639	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0009	11.5266	7.6676	9.3300e-003		0.5509	0.5509		0.5068	0.5068	0.0000	879.6192	879.6192	0.2653	0.0000	886.2524
Total	1.0009	11.5266	7.6676	9.3300e-003	2.9906	0.5509	3.5415	1.5639	0.5068	2.0707	0.0000	879.6192	879.6192	0.2653	0.0000	886.2524

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	0.1186	4.3206	0.8239	4.3200e-003	0.0320	0.0106	0.0426	8.4300e-003	0.0101	0.0186	0.0000	422.5016	422.5016	0.1002	0.0000	425.0059
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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-003	6.1000e-003	0.0587	1.3000e-004	0.0113	9.0000e-005	0.0114	3.0000e-003	8.0000e-005	3.0900e-003	0.0000	11.4903	11.4903	4.7000e-004	0.0000	11.5020
Total	0.1260	4.3267	0.8826	4.4500e-003	0.0433	0.0107	0.0540	0.0114	0.0102	0.0217	0.0000	433.9918	433.9918	0.1006	0.0000	436.5080

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
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Category	tons/yr										MT/yr					
Fugitive Dust					1.1663	0.0000	1.1663	0.6099	0.0000	0.6099	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0009	11.5266	7.6676	9.3300e-003		0.5509	0.5509		0.5068	0.5068	0.0000	879.6182	879.6182	0.2653	0.0000	886.2513
Total	1.0009	11.5266	7.6676	9.3300e-003	1.1663	0.5509	1.7172	0.6099	0.5068	1.1167	0.0000	879.6182	879.6182	0.2653	0.0000	886.2513

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	0.1186	4.3206	0.8239	4.3200e-003	0.0320	0.0106	0.0426	8.4300e-003	0.0101	0.0186	0.0000	422.5016	422.5016	0.1002	0.0000	425.0059
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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-003	6.1000e-003	0.0587	1.3000e-004	0.0113	9.0000e-005	0.0114	3.0000e-003	8.0000e-005	3.0900e-003	0.0000	11.4903	11.4903	4.7000e-004	0.0000	11.5020
Total	0.1260	4.3267	0.8826	4.4500e-003	0.0433	0.0107	0.0540	0.0114	0.0102	0.0217	0.0000	433.9918	433.9918	0.1006	0.0000	436.5080

3.3 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.9906	0.0000	2.9906	1.5639	0.0000	1.5639	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1313	12.8758	8.7500	0.0112		0.6124	0.6124		0.5634	0.5634	0.0000	1,037.6879	1,037.6879	0.3180	0.0000	1,045.6365

Total	1.1313	12.8758	8.7500	0.0112	2.9906	0.6124	3.6030	1.5639	0.5634	2.1273	0.0000	1,037.687 9	1,037.6879	0.3180	0.0000	1,045.636 5
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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	0.1228	5.0705	0.8899	5.3400e-003	0.0330	8.3900e-003	0.0414	8.7800e-003	8.0300e-003	0.0168	0.0000	523.3214	523.3214	0.1117	0.0000	526.1148
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9800e-003	6.4700e-003	0.0621	1.5000e-004	0.0136	1.0000e-004	0.0137	3.6000e-003	9.0000e-005	3.7000e-003	0.0000	13.4205	13.4205	5.0000e-004	0.0000	13.4331
Total	0.1308	5.0769	0.9520	5.4900e-003	0.0465	8.4900e-003	0.0550	0.0124	8.1200e-003	0.0205	0.0000	536.7419	536.7419	0.1122	0.0000	539.5478

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					1.1663	0.0000	1.1663	0.6099	0.0000	0.6099	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1313	12.8758	8.7500	0.0112		0.6124	0.6124		0.5634	0.5634	0.0000	1,037.686 7	1,037.6867	0.3180	0.0000	1,045.635 3
Total	1.1313	12.8758	8.7500	0.0112	1.1663	0.6124	1.7787	0.6099	0.5634	1.1733	0.0000	1,037.686 7	1,037.6867	0.3180	0.0000	1,045.635 3

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	0.1228	5.0705	0.8899	5.3400e-003	0.0330	8.3900e-003	0.0414	8.7800e-003	8.0300e-003	0.0168	0.0000	523.3214	523.3214	0.1117	0.0000	526.1148
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9800e-003	6.4700e-003	0.0621	1.5000e-004	0.0136	1.0000e-004	0.0137	3.6000e-003	9.0000e-005	3.7000e-003	0.0000	13.4205	13.4205	5.0000e-004	0.0000	13.4331
Total	0.1308	5.0769	0.9520	5.4900e-003	0.0465	8.4900e-003	0.0550	0.0124	8.1200e-003	0.0205	0.0000	536.7419	536.7419	0.1122	0.0000	539.5478

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	7.7273	34.2094	90.8546	0.2922	24.2221	0.2947	24.5168	6.4870	0.2765	6.7636	0.0000	26,904.0868	26,904.0868	1.4782	0.0000	26,941.0423
Unmitigated	7.7273	34.2094	90.8546	0.2922	24.2221	0.2947	24.5168	6.4870	0.2765	6.7636	0.0000	26,904.0868	26,904.0868	1.4782	0.0000	26,941.0423

4.2 Trip Summary Information

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

Condo/Townhouse	18,347.98	17,905.86	15284.72	50,959,203	50,959,203
Industrial Park	3,549.35	1,293.98	379.36	7,273,726	7,273,726
Regional Shopping Center	3,161.94	3,700.28	1869.02	5,354,837	5,354,837
Strip Mall	482.64	457.82	222.48	680,590	680,590
Total	25,541.91	23,357.93	17,755.58	64,268,356	64,268,356

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Condo/Townhouse	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Regional Shopping Center	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Strip Mall	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7,081.9492	7,081.9492	0.2857	0.0572	7,106.1226
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7,081.9492	7,081.9492	0.2857	0.0572	7,106.1226
NaturalGas Mitigated	0.3489	3.0133	1.5001	0.0190		0.2411	0.2411		0.2411	0.2411	0.0000	3,453.1730	3,453.1730	0.0662	0.0633	3,473.6935
NaturalGas Unmitigated	0.3489	3.0133	1.5001	0.0190		0.2411	0.2411		0.2411	0.2411	0.0000	3,453.1730	3,453.1730	0.0662	0.0633	3,473.6935

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	5.3986e+07	0.2911	2.4876	1.0586	0.0159		0.2011	0.2011		0.2011	0.2011	0.0000	2,880.9008	2,880.9008	0.0552	0.0528	2,898.0205
Industrial Park	1.05337e+007	0.0568	0.5164	0.4337	3.1000e-003		0.0392	0.0392		0.0392	0.0392	0.0000	562.1189	562.1189	0.0108	0.0103	565.4593
Regional Shopping Center	165872	8.9000e-004	8.1300e-003	6.8300e-003	5.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	8.8516	8.8516	1.7000e-004	1.6000e-004	8.9042
Strip Mall	24393.6	1.3000e-004	1.2000e-003	1.0000e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.3017	1.3017	2.0000e-005	2.0000e-005	1.3095
Total		0.3489	3.0133	1.5001	0.0190		0.2411	0.2411		0.2411	0.2411	0.0000	3,453.1730	3,453.1730	0.0662	0.0633	3,473.6935

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	5.3986e+07	0.2911	2.4876	1.0586	0.0159		0.2011	0.2011		0.2011	0.2011	0.0000	2,880.9008	2,880.9008	0.0552	0.0528	2,898.0205
Industrial Park	1.05337e+007	0.0568	0.5164	0.4337	3.1000e-003		0.0392	0.0392		0.0392	0.0392	0.0000	562.1189	562.1189	0.0108	0.0103	565.4593

Regional Shopping Center	165872	8.9000e-004	8.1300e-003	6.8300e-003	5.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	8.8516	8.8516	1.7000e-004	1.6000e-004	8.9042
Strip Mall	24393.6	1.3000e-004	1.2000e-003	1.0000e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.3017	1.3017	2.0000e-005	2.0000e-005	1.3095
Total		0.3489	3.0133	1.5001	0.0190		0.2411	0.2411		0.2411	0.2411	0.0000	3,453.1730	3,453.1730	0.0662	0.0633	3,473.6935

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	1.69522e+007	4,764.5010	0.1922	0.0385	4,780.7640
Industrial Park	7.15066e+006	2,009.7278	0.0811	0.0162	2,016.5878
Regional Shopping Center	954505	268.2682	0.0108	2.1600e-003	269.1839
Strip Mall	140372	39.4523	1.5900e-003	3.2000e-004	39.5869
Total		7,081.9492	0.2857	0.0572	7,106.1226

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	1.69522e+007	4,764.5010	0.1922	0.0385	4,780.7640
Industrial Park	7.15066e+006	2,009.7278	0.0811	0.0162	2,016.5878
Regional Shopping Center	954505	268.2682	0.0108	2.1600e-003	269.1839

Strip Mall	140372	39.4523	1.5900e-003	3.2000e-004	39.5869
Total		7,081.9492	0.2857	0.0572	7,106.1226

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	213.5643	4.1419	268.1298	0.4444		34.4243	34.4243		34.4243	34.4243	3,262.0804	1,406.3825	4,668.4629	3.0477	0.2566	4,821.1194
Unmitigated	213.5643	4.1419	268.1298	0.4444		34.4243	34.4243		34.4243	34.4243	3,262.0804	1,406.3825	4,668.4629	3.0477	0.2566	4,821.1194

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	14.6949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	198.1525	3.8697	244.5977	0.4431		34.2949	34.2949		34.2949	34.2949	3,262.0804	1,368.0690	4,630.1494	3.0104	0.2566	4,781.8714

Landscaping	0.7169	0.2722	23.5321	1.2400e-003		0.1294	0.1294		0.1294	0.1294	0.0000	38.3135	38.3135	0.0374	0.0000	39.2480
Total	213.5643	4.1419	268.1298	0.4444		34.4243	34.4243		34.4243	34.4243	3,262.0804	1,406.3825	4,668.4629	3.0477	0.2566	4,821.1193

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	14.6949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	198.1525	3.8697	244.5977	0.4431		34.2949	34.2949		34.2949	34.2949	3,262.0804	1,368.0690	4,630.1494	3.0104	0.2566	4,781.8714
Landscaping	0.7169	0.2722	23.5321	1.2400e-003		0.1294	0.1294		0.1294	0.1294	0.0000	38.3135	38.3135	0.0374	0.0000	39.2480
Total	213.5643	4.1419	268.1298	0.4444		34.4243	34.4243		34.4243	34.4243	3,262.0804	1,406.3825	4,668.4629	3.0477	0.2566	4,821.1193

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,738.2848	10.8913	0.2688	2,090.6673
Unmitigated	1,738.2848	10.8913	0.2688	2,090.6673

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	205.756 / 129.716	1,223.3073	6.7513	0.1677	1,442.0507
Industrial Park	120.174 / 0	477.9151	3.9336	0.0960	604.8665
Regional Shopping Center	5.48507 / 3.36182	32.3108	0.1800	4.4700e-003	38.1410
Strip Mall	0.80665 / 0.494398	4.7517	0.0265	6.6000e-004	5.6091
Total		1,738.2848	10.8913	0.2688	2,090.6673

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	205.756 / 129.716	1,223.3073	6.7513	0.1677	1,442.0507
Industrial Park	120.174 / 0	477.9151	3.9336	0.0960	604.8665
Regional Shopping Center	5.48507 / 3.36182	32.3108	0.1800	4.4700e-003	38.1410
Strip Mall	0.80665 / 0.494398	4.7517	0.0265	6.6000e-004	5.6091
Total		1,738.2848	10.8913	0.2688	2,090.6673

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	443.7890	26.2272	0.0000	1,099.4684
Unmitigated	443.7890	26.2272	0.0000	1,099.4684

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	1452.68	294.8809	17.4270	0.0000	730.5550
Industrial Park	644.39	130.8054	7.7304	0.0000	324.0647
Regional Shopping Center	77.75	15.7826	0.9327	0.0000	39.1006
Strip Mall	11.43	2.3202	0.1371	0.0000	5.7482
Total		443.7890	26.2272	0.0000	1,099.4684

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	1452.68	294.8809	17.4270	0.0000	730.5550
Industrial Park	644.39	130.8054	7.7304	0.0000	324.0647
Regional Shopping Center	77.75	15.7826	0.9327	0.0000	39.1006
Strip Mall	11.43	2.3202	0.1371	0.0000	5.7482
Total		443.7890	26.2272	0.0000	1,099.4684

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

East Otay Mesa Specific Plan Amendment Phase 1 Construction - San Diego Air Basin, Annual

East Otay Mesa Specific Plan Amendment Phase 1 Construction

San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	8.00	Acre	8.00	348,480.00	0
Condo/Townhouse	875.00	Dwelling Unit	54.69	875,000.00	2503

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13	Operational Year	2018		
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Architectural Coating - Rule 67.0.1 coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Parking	250	0
tblAreaCoating	Area_Nonresidential_Exterior	174240	0

tblAreaCoating	Area_Nonresidential_Interior	522720	0
tblAreaCoating	Area_Residential_Exterior	590625	0
tblAreaCoating	Area_Residential_Interior	1771875	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	75.00	131.00
tblConstructionPhase	NumDays	1,110.00	261.00

tblConstructionPhase	NumDays	75.00	261.00
tblLandUse	BuildingSpaceSquareFeet	0.00	348,480.00
tblLandUse	GreenSpaceAllowEdit	1.00	0.00
tblLandUse	GreenSpaceSquareFeet	348,480.00	0.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	132.00	130.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

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					
2018	8.2596	12.1780	11.8174	0.0267	1.0888	0.5976	1.6864	0.2923	0.5611	0.8534	0.0000	2,432.2085	2,432.2085	0.3268	0.0000	2,440.3782
Maximum	8.2596	12.1780	11.8174	0.0267	1.0888	0.5976	1.6864	0.2923	0.5611	0.8534	0.0000	2,432.2085	2,432.2085	0.3268	0.0000	2,440.3782

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					
2018	7.5126	8.6704	12.1247	0.0267	1.0888	0.3754	1.4642	0.2923	0.3740	0.6663	0.0000	2,432.2074	2,432.2074	0.3268	0.0000	2,440.3770
Maximum	7.5126	8.6704	12.1247	0.0267	1.0888	0.3754	1.4642	0.2923	0.3740	0.6663	0.0000	2,432.2074	2,432.2074	0.3268	0.0000	2,440.3770

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	9.04	28.80	-2.60	0.00	0.00	37.18	13.18	0.00	33.35	21.93	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
5	10-24-2017	1-23-2018	0.8355	0.5787
6	1-24-2018	4-23-2018	3.8294	2.8209
7	4-24-2018	7-23-2018	5.6649	4.5910
8	7-24-2018	9-30-2018	4.2331	3.4306
		Highest	5.6649	4.5910

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	59.8829	1.1481	74.3147	0.1231		9.5380	9.5380		9.5380	9.5380	903.8380	389.6693	1,293.5073	0.8446	0.0711	1,335.8085
Energy	0.0807	0.6893	0.2933	4.4000e-003		0.0557	0.0557		0.0557	0.0557	0.0000	2,333.2495	2,333.2495	0.0771	0.0274	2,343.3469
Mobile	1.9691	8.5919	23.7119	0.0684	5.3682	0.0817	5.4500	1.4380	0.0771	1.5151	0.0000	6,279.3613	6,279.3613	0.3676	0.0000	6,288.5517

Waste						0.0000	0.0000		0.0000	0.0000	81.8439	0.0000	81.8439	4.8368	0.0000	202.7649
Water						0.0000	0.0000		0.0000	0.0000	18.0866	407.7028	425.7893	1.8741	0.0473	486.7243
Total	61.9327	10.4293	98.3199	0.1959	5.3682	9.6754	15.0436	1.4380	9.6707	11.1088	1,003.7685	9,409.9829	10,413.7514	8.0002	0.1458	10,657.1962

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	59.8829	1.1481	74.3147	0.1231		9.5380	9.5380		9.5380	9.5380	903.8380	389.6693	1,293.5073	0.8446	0.0711	1,335.8085
Energy	0.0807	0.6893	0.2933	4.4000e-003		0.0557	0.0557		0.0557	0.0557	0.0000	2,333.2495	2,333.2495	0.0771	0.0274	2,343.3469
Mobile	1.9691	8.5919	23.7119	0.0684	5.3682	0.0817	5.4500	1.4380	0.0771	1.5151	0.0000	6,279.3613	6,279.3613	0.3676	0.0000	6,288.5517
Waste						0.0000	0.0000		0.0000	0.0000	81.8439	0.0000	81.8439	4.8368	0.0000	202.7649
Water						0.0000	0.0000		0.0000	0.0000	18.0866	407.7028	425.7893	1.8741	0.0473	486.7243
Total	61.9327	10.4293	98.3199	0.1959	5.3682	9.6754	15.0436	1.4380	9.6707	11.1088	1,003.7685	9,409.9829	10,413.7514	8.0002	0.1458	10,657.1962

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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	Building Construction	Building Construction	1/1/2018	12/31/2018	5	261	
2	Paving	Paving	1/1/2018	12/31/2018	5	261	

3	Architectural Coating	Architectural Coating	4/1/2018	12/31/2018	5	131
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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 1,771,875; Residential Outdoor: 590,625; Non-Residential Indoor: 522,720; Non-Residential Outdoor: 174,240;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	2	7.00	226	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	18	776.00	151.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	155.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.6965	6.0711	4.5760	7.0000e-003		0.3900	0.3900		0.3667	0.3667	0.0000	617.9689	617.9689	0.1512	0.0000	621.7496
Total	0.6965	6.0711	4.5760	7.0000e-003		0.3900	0.3900		0.3667	0.3667	0.0000	617.9689	617.9689	0.1512	0.0000	621.7496

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	0.1034	2.6305	0.7235	5.4300e-003	0.1308	0.0205	0.1512	0.0378	0.0196	0.0573	0.0000	527.4351	527.4351	0.0435	0.0000	528.5217
Worker	0.4328	0.3427	3.2871	8.6500e-003	0.8121	5.9900e-003	0.8181	0.2158	5.5200e-003	0.2213	0.0000	781.5614	781.5614	0.0270	0.0000	782.2357
Total	0.5362	2.9732	4.0105	0.0141	0.9429	0.0264	0.9693	0.2536	0.0251	0.2786	0.0000	1,308.9964	1,308.9964	0.0704	0.0000	1,310.7574

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	0.1752	3.6995	4.6499	7.0000e-003		0.2353	0.2353		0.2353	0.2353	0.0000	617.9681	617.9681	0.1512	0.0000	621.7489
Total	0.1752	3.6995	4.6499	7.0000e-003		0.2353	0.2353		0.2353	0.2353	0.0000	617.9681	617.9681	0.1512	0.0000	621.7489

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	0.1034	2.6305	0.7235	5.4300e-003	0.1308	0.0205	0.1512	0.0378	0.0196	0.0573	0.0000	527.4351	527.4351	0.0435	0.0000	528.5217
Worker	0.4328	0.3427	3.2871	8.6500e-003	0.8121	5.9900e-003	0.8181	0.2158	5.5200e-003	0.2213	0.0000	781.5614	781.5614	0.0270	0.0000	782.2357
Total	0.5362	2.9732	4.0105	0.0141	0.9429	0.0264	0.9693	0.2536	0.0251	0.2786	0.0000	1,308.9964	1,308.9964	0.0704	0.0000	1,310.7574

3.3 Paving - 2018

Unmitigated Construction On-Site

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

Off-Road	0.2604	2.6790	2.2770	3.5000e-003		0.1506	0.1506		0.1388	0.1388	0.0000	314.8019	314.8019	0.0955	0.0000	317.1899
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.2604	2.6790	2.2770	3.5000e-003		0.1506	0.1506		0.1388	0.1388	0.0000	314.8019	314.8019	0.0955	0.0000	317.1899

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	0.0128	0.0102	0.0974	2.6000e-004	0.0241	1.8000e-004	0.0243	6.4000e-003	1.6000e-004	6.5600e-003	0.0000	23.1648	23.1648	8.0000e-004	0.0000	23.1848
Total	0.0128	0.0102	0.0974	2.6000e-004	0.0241	1.8000e-004	0.0243	6.4000e-003	1.6000e-004	6.5600e-003	0.0000	23.1648	23.1648	8.0000e-004	0.0000	23.1848

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	0.0816	1.6703	2.5147	3.5000e-003		0.0939	0.0939		0.0939	0.0939	0.0000	314.8015	314.8015	0.0955	0.0000	317.1895
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0816	1.6703	2.5147	3.5000e-003		0.0939	0.0939		0.0939	0.0939	0.0000	314.8015	314.8015	0.0955	0.0000	317.1895

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	0.0128	0.0102	0.0974	2.6000e-004	0.0241	1.8000e-004	0.0243	6.4000e-003	1.6000e-004	6.5600e-003	0.0000	23.1648	23.1648	8.0000e-004	0.0000	23.1848
Total	0.0128	0.0102	0.0974	2.6000e-004	0.0241	1.8000e-004	0.0243	6.4000e-003	1.6000e-004	6.5600e-003	0.0000	23.1648	23.1648	8.0000e-004	0.0000	23.1848

3.4 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.6302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0585	0.3931	0.3634	5.8000e-004		0.0295	0.0295		0.0295	0.0295	0.0000	50.0439	50.0439	4.7600e-003	0.0000	50.1627
Total	6.6888	0.3931	0.3634	5.8000e-004		0.0295	0.0295		0.0295	0.0295	0.0000	50.0439	50.0439	4.7600e-003	0.0000	50.1627

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
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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	0.0649	0.0514	0.4931	1.3000e-003	0.1218	9.0000e-004	0.1227	0.0324	8.3000e-004	0.0332	0.0000	117.2327	117.2327	4.0500e-003	0.0000	117.3338
Total	0.0649	0.0514	0.4931	1.3000e-003	0.1218	9.0000e-004	0.1227	0.0324	8.3000e-004	0.0332	0.0000	117.2327	117.2327	4.0500e-003	0.0000	117.3338

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	6.6302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0117	0.2660	0.3592	5.8000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	50.0438	50.0438	4.7600e-003	0.0000	50.1627
Total	6.6419	0.2660	0.3592	5.8000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	50.0438	50.0438	4.7600e-003	0.0000	50.1627

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	0.0649	0.0514	0.4931	1.3000e-003	0.1218	9.0000e-004	0.1227	0.0324	8.3000e-004	0.0332	0.0000	117.2327	117.2327	4.0500e-003	0.0000	117.3338

Total	0.0649	0.0514	0.4931	1.3000e-003	0.1218	9.0000e-004	0.1227	0.0324	8.3000e-004	0.0332	0.0000	117.2327	117.2327	4.0500e-003	0.0000	117.3338
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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	1.9691	8.5919	23.7119	0.0684	5.3682	0.0817	5.4500	1.4380	0.0771	1.5151	0.0000	6,279.3613	6,279.3613	0.3676	0.0000	6,288.5517
Unmitigated	1.9691	8.5919	23.7119	0.0684	5.3682	0.0817	5.4500	1.4380	0.0771	1.5151	0.0000	6,279.3613	6,279.3613	0.3676	0.0000	6,288.5517

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	15.12	182.00	133.92	119,405	119,405
Condo/Townhouse	5,083.75	4,961.25	4235.00	14,119,475	14,119,475
Total	5,098.87	5,143.25	4,368.92	14,238,880	14,238,880

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Condo/Townhouse	1.49581e+007	0.0807	0.6893	0.2933	4.4000e-003		0.0557	0.0557		0.0557	0.0557	0.0000	798.2230	798.2230	0.0153	0.0146	802.9664
Total		0.0807	0.6893	0.2933	4.4000e-003		0.0557	0.0557		0.0557	0.0557	0.0000	798.2230	798.2230	0.0153	0.0146	802.9664

Mitigated

	Natural Gas 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					
City Park	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
Condo/Townhouse	1.49581e+007	0.0807	0.6893	0.2933	4.4000e-003		0.0557	0.0557		0.0557	0.0557	0.0000	798.2230	798.2230	0.0153	0.0146	802.9664
Total		0.0807	0.6893	0.2933	4.4000e-003		0.0557	0.0557		0.0557	0.0557	0.0000	798.2230	798.2230	0.0153	0.0146	802.9664

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	4.69702e+006	1,535.0265	0.0618	0.0128	1,540.3805
Total		1,535.0265	0.0618	0.0128	1,540.3805

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	4.69702e+006	1,535.0265	0.0618	0.0128	1,540.3805
Total		1,535.0265	0.0618	0.0128	1,540.3805

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	59.8829	1.1481	74.3147	0.1231		9.5380	9.5380		9.5380	9.5380	903.8380	389.6693	1,293.5073	0.8446	0.0711	1,335.8085
Unmitigated	59.8829	1.1481	74.3147	0.1231		9.5380	9.5380		9.5380	9.5380	903.8380	389.6693	1,293.5073	0.8446	0.0711	1,335.8085

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
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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	4.7783					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	54.9029	1.0722	67.7717	0.1228		9.5022	9.5022		9.5022	9.5022	903.8380	379.0565	1,282.8945	0.8341	0.0711	1,324.9327
Landscaping	0.2017	0.0759	6.5430	3.4000e-004		0.0357	0.0357		0.0357	0.0357	0.0000	10.6128	10.6128	0.0105	0.0000	10.8758
Total	59.8829	1.1481	74.3147	0.1231		9.5380	9.5380		9.5380	9.5380	903.8380	389.6693	1,293.5073	0.8446	0.0711	1,335.8085

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	4.7783					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	54.9029	1.0722	67.7717	0.1228		9.5022	9.5022		9.5022	9.5022	903.8380	379.0565	1,282.8945	0.8341	0.0711	1,324.9327
Landscaping	0.2017	0.0759	6.5430	3.4000e-004		0.0357	0.0357		0.0357	0.0357	0.0000	10.6128	10.6128	0.0105	0.0000	10.8758
Total	59.8829	1.1481	74.3147	0.1231		9.5380	9.5380		9.5380	9.5380	903.8380	389.6693	1,293.5073	0.8446	0.0711	1,335.8085

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	425.7893	1.8741	0.0473	486.7243
Unmitigated	425.7893	1.8741	0.0473	486.7243

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 9.53185	34.6087	1.3900e-003	2.9000e-004	34.7294
Condo/Townhouse	57.0098 / 35.9409	391.1807	1.8727	0.0470	451.9949
Total		425.7893	1.8741	0.0473	486.7243

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 9.53185	34.6087	1.3900e-003	2.9000e-004	34.7294
Condo/Townhouse	57.0098 / 35.9409	391.1807	1.8727	0.0470	451.9949

Total		425.7893	1.8741	0.0473	486.7243
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8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	81.8439	4.8368	0.0000	202.7649
Unmitigated	81.8439	4.8368	0.0000	202.7649

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.69	0.1401	8.2800e-003	0.0000	0.3470
Condo/Townhouse	402.5	81.7039	4.8286	0.0000	202.4179
Total		81.8439	4.8368	0.0000	202.7649

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.69	0.1401	8.2800e-003	0.0000	0.3470
Condo/Townhouse	402.5	81.7039	4.8286	0.0000	202.4179
Total		81.8439	4.8368	0.0000	202.7649

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

East Otay Mesa Specific Plan Amendment Phase 2 Construction - San Diego Air Basin, Annual

East Otay Mesa Specific Plan Amendment Phase 2 Construction

San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	95.63	1000sqft	4.00	95,625.00	0
City Park	10.00	Acre	10.00	435,600.00	0
Condo/Townhouse	697.00	Dwelling Unit	43.56	697,000.00	1993

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2019
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Architectural Coating - Rule 67.0.1 coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_ Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_ Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_ Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_ Interior	250.00	50.00
tblAreaCoating	Area_EF_Parking	250	0

tblAreaCoating	Area_Nonresidential_Exterior	265613	0
tblAreaCoating	Area_Nonresidential_Interior	796838	0
tblAreaCoating	Area_Residential_Exterior	470475	0
tblAreaCoating	Area_Residential_Interior	1411425	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeedUP	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	75.00	132.00

tblConstructionPhase	NumDays	1,110.00	261.00
tblConstructionPhase	NumDays	75.00	261.00
tblLandUse	BuildingSpaceSquareFeet	95,630.00	95,625.00
tblLandUse	BuildingSpaceSquareFeet	0.00	435,600.00
tblLandUse	GreenSpaceAllowEdit	1.00	0.00
tblLandUse	GreenSpaceSquareFeet	435,600.00	0.00
tblLandUse	LandUseSquareFeet	95,630.00	95,625.00
tblLandUse	LotAcreage	2.20	4.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	132.00	130.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	OperationalYear	2018	2019

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					
2019	9.9375	11.6130	11.6354	0.0271	1.0769	0.5443	1.6213	0.2894	0.5113	0.8007	0.0000	2,459.8897	2,459.8897	0.3345	0.0000	2,468.2525
Maximum	9.9375	11.6130	11.6354	0.0271	1.0769	0.5443	1.6213	0.2894	0.5113	0.8007	0.0000	2,459.8897	2,459.8897	0.3345	0.0000	2,468.2525

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					
2019	9.2742	8.9571	12.0788	0.0271	1.0769	0.3951	1.4721	0.2894	0.3938	0.6832	0.0000	2,459.8885	2,459.8885	0.3345	0.0000	2,468.2512
Maximum	9.2742	8.9571	12.0788	0.0271	1.0769	0.3951	1.4721	0.2894	0.3938	0.6832	0.0000	2,459.8885	2,459.8885	0.3345	0.0000	2,468.2512

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	6.67	22.87	-3.81	0.00	0.00	27.41	9.20	0.00	22.98	14.67	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
9	10-24-2018	1-23-2019	1.3588	1.1499
10	1-24-2019	4-23-2019	5.2513	4.4428
11	4-24-2019	7-23-2019	5.3497	4.5231
12	7-24-2019	9-30-2019	3.9976	3.3799
		Highest	5.3497	4.5231

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	48.6902	0.9143	59.1869	0.0981		7.5977	7.5977		7.5977	7.5977	719.9715	310.4012	1,030.3727	0.6727	0.0566	1,064.0668
Energy	0.0747	0.6441	0.3134	4.0700e-003		0.0516	0.0516		0.0516	0.0516	0.0000	2,392.0509	2,392.0509	0.0807	0.0273	2,402.2088
Mobile	1.6171	7.2101	19.3288	0.0594	4.8003	0.0679	4.8682	1.2857	0.0639	1.3496	0.0000	5,466.5595	5,466.5595	0.3092	0.0000	5,474.2894
Waste						0.0000	0.0000		0.0000	0.0000	89.3282	0.0000	89.3282	5.2792	0.0000	221.3068
Water						0.0000	0.0000		0.0000	0.0000	21.4231	434.5622	455.9853	2.2179	0.0556	527.9928
Total	50.3820	8.7685	78.8291	0.1616	4.8003	7.7172	12.5175	1.2857	7.7132	8.9989	830.7229	8,603.5738	9,434.2967	8.5596	0.1395	9,689.8645

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	48.6902	0.9143	59.1869	0.0981		7.5977	7.5977		7.5977	7.5977	719.9715	310.4012	1,030.3727	0.6727	0.0566	1,064.0668
Energy	0.0747	0.6441	0.3134	4.0700e-003		0.0516	0.0516		0.0516	0.0516	0.0000	2,392.0509	2,392.0509	0.0807	0.0273	2,402.2088
Mobile	1.6171	7.2101	19.3288	0.0594	4.8003	0.0679	4.8682	1.2857	0.0639	1.3496	0.0000	5,466.5595	5,466.5595	0.3092	0.0000	5,474.2894
Waste						0.0000	0.0000		0.0000	0.0000	89.3282	0.0000	89.3282	5.2792	0.0000	221.3068
Water						0.0000	0.0000		0.0000	0.0000	21.4231	434.5622	455.9853	2.2179	0.0556	527.9928
Total	50.3820	8.7685	78.8291	0.1616	4.8003	7.7172	12.5175	1.2857	7.7132	8.9989	830.7229	8,603.5738	9,434.2967	8.5596	0.1395	9,689.8645

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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	Building Construction	Building Construction	1/1/2019	12/31/2019	5	261	
2	Paving	Paving	1/1/2019	12/31/2019	5	261	
3	Architectural Coating	Architectural Coating	1/1/2019	12/31/2019	5	132	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 1,411,425; Residential Outdoor: 470,475; Non-Residential Indoor: 796,838; Non-Residential Outdoor: 265,613;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	2	7.00	226	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	18	725.00	162.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Architectural Coating	2	145.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
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3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.6138	5.4719	4.4684	7.0000e-003		0.3354	0.3354		0.3154	0.3154	0.0000	611.0604	611.0604	0.1487	0.0000	614.7773
Total	0.6138	5.4719	4.4684	7.0000e-003		0.3354	0.3354		0.3154	0.3154	0.0000	611.0604	611.0604	0.1487	0.0000	614.7773

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	0.0990	2.6535	0.7129	5.7800e-003	0.1403	0.0184	0.1587	0.0405	0.0176	0.0581	0.0000	561.6698	561.6698	0.0451	0.0000	562.7967
Worker	0.3730	0.2862	2.7683	7.8400e-003	0.7587	5.5400e-003	0.7643	0.2016	5.1000e-003	0.2067	0.0000	708.1713	708.1713	0.0228	0.0000	708.7406

Total	0.4720	2.9398	3.4812	0.0136	0.8990	0.0239	0.9229	0.2421	0.0227	0.2648	0.0000	1,269.841 1	1,269.8411	0.0679	0.0000	1,271.537 2
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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	0.1752	3.6995	4.6499	7.0000e-003		0.2353	0.2353		0.2353	0.2353	0.0000	611.0597	611.0597	0.1487	0.0000	614.7765
Total	0.1752	3.6995	4.6499	7.0000e-003		0.2353	0.2353		0.2353	0.2353	0.0000	611.0597	611.0597	0.1487	0.0000	614.7765

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	0.0990	2.6535	0.7129	5.7800e-003	0.1403	0.0184	0.1587	0.0405	0.0176	0.0581	0.0000	561.6698	561.6698	0.0451	0.0000	562.7967
Worker	0.3730	0.2862	2.7683	7.8400e-003	0.7587	5.5400e-003	0.7643	0.2016	5.1000e-003	0.2067	0.0000	708.1713	708.1713	0.0228	0.0000	708.7406
Total	0.4720	2.9398	3.4812	0.0136	0.8990	0.0239	0.9229	0.2421	0.0227	0.2648	0.0000	1,269.841 1	1,269.8411	0.0679	0.0000	1,271.537 2

3.3 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2622	2.6552	2.5561	3.9100e-003		0.1501	0.1501		0.1384	0.1384	0.0000	346.2944	346.2944	0.1070	0.0000	348.9699
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.2622	2.6552	2.5561	3.9100e-003		0.1501	0.1501		0.1384	0.1384	0.0000	346.2944	346.2944	0.1070	0.0000	348.9699

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	0.0129	9.8700e-003	0.0955	2.7000e-004	0.0262	1.9000e-004	0.0264	6.9500e-003	1.8000e-004	7.1300e-003	0.0000	24.4197	24.4197	7.9000e-004	0.0000	24.4393
Total	0.0129	9.8700e-003	0.0955	2.7000e-004	0.0262	1.9000e-004	0.0264	6.9500e-003	1.8000e-004	7.1300e-003	0.0000	24.4197	24.4197	7.9000e-004	0.0000	24.4393

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	0.0915	1.8966	2.8203	3.9100e-003		0.1098	0.1098		0.1098	0.1098	0.0000	346.2939	346.2939	0.1070	0.0000	348.9695
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0915	1.8966	2.8203	3.9100e-003		0.1098	0.1098		0.1098	0.1098	0.0000	346.2939	346.2939	0.1070	0.0000	348.9695

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	0.0129	9.8700e-003	0.0955	2.7000e-004	0.0262	1.9000e-004	0.0264	6.9500e-003	1.8000e-004	7.1300e-003	0.0000	24.4197	24.4197	7.9000e-004	0.0000	24.4393
Total	0.0129	9.8700e-003	0.0955	2.7000e-004	0.0262	1.9000e-004	0.0264	6.9500e-003	1.8000e-004	7.1300e-003	0.0000	24.4197	24.4197	7.9000e-004	0.0000	24.4393

3.4 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	8.4325					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0695	0.4790	0.4806	7.8000e-004		0.0336	0.0336		0.0336	0.0336	0.0000	66.6399	66.6399	5.6300e-003	0.0000	66.7806
Total	8.5020	0.4790	0.4806	7.8000e-004		0.0336	0.0336		0.0336	0.0336	0.0000	66.6399	66.6399	5.6300e-003	0.0000	66.7806

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	0.0746	0.0573	0.5537	1.5700e-003	0.1517	1.1100e-003	0.1529	0.0403	1.0200e-003	0.0413	0.0000	141.6343	141.6343	4.5500e-003	0.0000	141.7481
Total	0.0746	0.0573	0.5537	1.5700e-003	0.1517	1.1100e-003	0.1529	0.0403	1.0200e-003	0.0413	0.0000	141.6343	141.6343	4.5500e-003	0.0000	141.7481

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	8.4325					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	5.6300e-003	0.0000	66.7806
Total	8.4480	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	5.6300e-003	0.0000	66.7806

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
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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	0.0746	0.0573	0.5537	1.5700e-003	0.1517	1.1100e-003	0.1529	0.0403	1.0200e-003	0.0413	0.0000	141.6343	141.6343	4.5500e-003	0.0000	141.7481
Total	0.0746	0.0573	0.5537	1.5700e-003	0.1517	1.1100e-003	0.1529	0.0403	1.0200e-003	0.0413	0.0000	141.6343	141.6343	4.5500e-003	0.0000	141.7481

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	1.6171	7.2101	19.3288	0.0594	4.8003	0.0679	4.8682	1.2857	0.0639	1.3496	0.0000	5,466.5595	5,466.5595	0.3092	0.0000	5,474.2894
Unmitigated	1.6171	7.2101	19.3288	0.0594	4.8003	0.0679	4.8682	1.2857	0.0639	1.3496	0.0000	5,466.5595	5,466.5595	0.3092	0.0000	5,474.2894

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	18.90	227.50	167.40	149,257	149,257
Condo/Townhouse	4,049.57	3,951.99	3373.48	11,247,170	11,247,170
Industrial Park	653.15	238.12	69.81	1,338,516	1,338,516
Total	4,721.62	4,417.61	3,610.69	12,734,943	12,734,943

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
City Park	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
Condo/Townhouse	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,652.7732	1,652.7732	0.0665	0.0138	1,658.5379
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,652.7732	1,652.7732	0.0665	0.0138	1,658.5379
NaturalGas Mitigated	0.0747	0.6441	0.3134	4.0700e-003		0.0516	0.0516		0.0516	0.0516	0.0000	739.2777	739.2777	0.0142	0.0136	743.6709
NaturalGas Unmitigated	0.0747	0.6441	0.3134	4.0700e-003		0.0516	0.0516		0.0516	0.0516	0.0000	739.2777	739.2777	0.0142	0.0136	743.6709

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					
City Park	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
Condo/Townhouse	1.19152e+007	0.0643	0.5490	0.2336	3.5000e-003		0.0444	0.0444		0.0444	0.0444	0.0000	635.8416	635.8416	0.0122	0.0117	639.6201
Industrial Park	1.93832e+006	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
Total		0.0747	0.6441	0.3134	4.0700e-003		0.0516	0.0516		0.0516	0.0516	0.0000	739.2777	739.2777	0.0142	0.0136	743.6709

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					
City Park	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
Condo/Townhouse	1.19152e+007	0.0643	0.5490	0.2336	3.5000e-003		0.0444	0.0444		0.0444	0.0444	0.0000	635.8416	635.8416	0.0122	0.0117	639.6201
Industrial Park	1.93832e+006	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
Total		0.0747	0.6441	0.3134	4.0700e-003		0.0516	0.0516		0.0516	0.0516	0.0000	739.2777	739.2777	0.0142	0.0136	743.6709

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	3.74151e+006	1,222.7583	0.0492	0.0102	1,227.0231
Industrial Park	1.3158e+006	430.0150	0.0173	3.5800e-003	431.5148
Total		1,652.7732	0.0665	0.0138	1,658.5379

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	3.74151e+006	1,222.7583	0.0492	0.0102	1,227.0231
Industrial Park	1.3158e+006	430.0150	0.0173	3.5800e-003	431.5148
Total		1,652.7732	0.0665	0.0138	1,658.5379

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	48.6902	0.9143	59.1869	0.0981		7.5977	7.5977		7.5977	7.5977	719.9715	310.4012	1,030.3727	0.6727	0.0566	1,064.0668
Unmitigated	48.6902	0.9143	59.1869	0.0981		7.5977	7.5977		7.5977	7.5977	719.9715	310.4012	1,030.3727	0.6727	0.0566	1,064.0668

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	4.7968					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	43.7341	0.8541	53.9850	0.0978		7.5692	7.5692		7.5692	7.5692	719.9715	301.9456	1,021.9171	0.6644	0.0566	1,055.4035
Landscaping	0.1593	0.0603	5.2019	2.7000e-004		0.0285	0.0285		0.0285	0.0285	0.0000	8.4557	8.4557	8.3000e-003	0.0000	8.6632
Total	48.6902	0.9143	59.1869	0.0981		7.5977	7.5977		7.5977	7.5977	719.9715	310.4012	1,030.3727	0.6727	0.0566	1,064.0668

Mitigated

[illegible]

Consumer Products	4.7968					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	43.7341	0.8541	53.9850	0.0978		7.5692	7.5692		7.5692	7.5692	719.9715	301.9456	1,021.9171	0.6644	0.0566	1,055.4035
Landscaping	0.1593	0.0603	5.2019	2.7000e-004		0.0285	0.0285		0.0285	0.0285	0.0000	8.4557	8.4557	8.3000e-003	0.0000	8.6632
Total	48.6902	0.9143	59.1869	0.0981		7.5977	7.5977		7.5977	7.5977	719.9715	310.4012	1,030.3727	0.6727	0.0566	1,064.0668

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	455.9853	2.2179	0.0556	527.9928
Unmitigated	455.9853	2.2179	0.0556	527.9928

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 11.9148	43.2609	1.7400e-003	3.6000e-004	43.4117
Condo/Townhouse	45.4124 / 28.6295	311.6033	1.4917	0.0374	360.0462

Industrial Park	22.1144 / 0	101.1212	0.7244	0.0178	124.5348
Total		455.9853	2.2179	0.0556	527.9928

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 11.9148	43.2609	1.7400e-003	3.6000e-004	43.4117
Condo/Townhouse	45.4124 / 28.6295	311.6033	1.4917	0.0374	360.0462
Industrial Park	22.1144 / 0	101.1212	0.7244	0.0178	124.5348
Total		455.9853	2.2179	0.0556	527.9928

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	89.3282	5.2792	0.0000	221.3068
Unmitigated	89.3282	5.2792	0.0000	221.3068

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.86	0.1746	0.0103	0.0000	0.4325
Condo/Townhouse	320.62	65.0830	3.8463	0.0000	161.2403
Industrial Park	118.58	24.0707	1.4225	0.0000	59.6341
Total		89.3282	5.2792	0.0000	221.3068

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.86	0.1746	0.0103	0.0000	0.4325
Condo/Townhouse	320.62	65.0830	3.8463	0.0000	161.2403
Industrial Park	118.58	24.0707	1.4225	0.0000	59.6341
Total		89.3282	5.2792	0.0000	221.3068

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

East Otay Mesa Specific Plan Amendment Phase 3 Construction - San Diego Air Basin, Annual

East Otay Mesa Specific Plan Amendment Phase 3 Construction

San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	95.63	1000sqft	4.00	95,625.00	0
Condo/Townhouse	337.00	Dwelling Unit	21.06	337,000.00	964

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13	Operational Year	2020		
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Architectural Coating - Rule 67.0.1 coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Parking	250	0
tblAreaCoating	Area_Nonresidential_Exterior	47813	0

tblAreaCoating	Area_Nonresidential_Interior	143438	0
tblAreaCoating	Area_Residential_Exterior	227475	0
tblAreaCoating	Area_Residential_Interior	682425	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	35.00	132.00
tblConstructionPhase	NumDays	440.00	262.00

tblConstructionPhase	NumDays	35.00	262.00
tblLandUse	BuildingSpaceSquareFeet	95,630.00	95,625.00
tblLandUse	LandUseSquareFeet	95,630.00	95,625.00
tblLandUse	LotAcreage	2.20	4.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	132.00	130.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblTripsAndVMT	WorkerTripNumber	20.00	25.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	4.1742	8.2503	8.3304	0.0166	0.4287	0.4277	0.8564	0.1149	0.4022	0.5172	0.0000	1,466.3334	1,466.3334	0.2609	0.0000	1,472.8556
Maximum	4.1742	8.2503	8.3304	0.0166	0.4287	0.4277	0.8564	0.1149	0.4022	0.5172	0.0000	1,466.3334	1,466.3334	0.2609	0.0000	1,472.8556

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	3.6313	6.4255	8.8511	0.0166	0.4287	0.3460	0.7747	0.1149	0.3457	0.4606	0.0000	1,466.3323	1,466.3323	0.2609	0.0000	1,472.8545
Maximum	3.6313	6.4255	8.8511	0.0166	0.4287	0.3460	0.7747	0.1149	0.3457	0.4606	0.0000	1,466.3323	1,466.3323	0.2609	0.0000	1,472.8545

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	13.01	22.12	-6.25	0.00	0.00	19.10	9.54	0.00	14.06	10.94	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
13	10-24-2019	1-23-2020	0.7801	0.6316
14	1-24-2020	4-23-2020	3.0502	2.4692
15	4-24-2020	7-23-2020	3.0770	2.4896
16	7-24-2020	9-30-2020	2.2993	1.8603
		Highest	3.0770	2.4896

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	22.9116	0.4420	28.6133	0.0474		3.6735	3.6735		3.6735	3.6735	348.1068	150.0800	498.1868	0.3252	0.0274	514.4772
Energy	0.0415	0.3605	0.1928	2.2600e-003		0.0287	0.0287		0.0287	0.0287	0.0000	1,432.0854	1,432.0854	0.0490	0.0160	1,438.0889

Mobile	0.7907	3.5361	9.4619	0.0307	2.5540	0.0309	2.5849	0.6840	0.0290	0.7130	0.0000	2,828.3015	2,828.3015	0.1542	0.0000	2,832.1570
Waste						0.0000	0.0000		0.0000	0.0000	55.5383	0.0000	55.5383	3.2822	0.0000	137.5939
Water						0.0000	0.0000		0.0000	0.0000	13.9818	237.7998	251.7816	1.4456	0.0359	298.6174
Total	23.7439	4.3385	38.2680	0.0804	2.5540	3.7331	6.2871	0.6840	3.7312	4.4152	417.6269	4,648.2668	5,065.8936	5.2563	0.0793	5,220.9344

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	22.9116	0.4420	28.6133	0.0474		3.6735	3.6735		3.6735	3.6735	348.1068	150.0800	498.1868	0.3252	0.0274	514.4772
Energy	0.0415	0.3605	0.1928	2.2600e-003		0.0287	0.0287		0.0287	0.0287	0.0000	1,432.0854	1,432.0854	0.0490	0.0160	1,438.0889
Mobile	0.7907	3.5361	9.4619	0.0307	2.5540	0.0309	2.5849	0.6840	0.0290	0.7130	0.0000	2,828.3015	2,828.3015	0.1542	0.0000	2,832.1570
Waste						0.0000	0.0000		0.0000	0.0000	55.5383	0.0000	55.5383	3.2822	0.0000	137.5939
Water						0.0000	0.0000		0.0000	0.0000	13.9818	237.7998	251.7816	1.4456	0.0359	298.6174
Total	23.7439	4.3385	38.2680	0.0804	2.5540	3.7331	6.2871	0.6840	3.7312	4.4152	417.6269	4,648.2668	5,065.8936	5.2563	0.0793	5,220.9344

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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	Building Construction	Building Construction	1/1/2020	12/31/2020	5	262	

2	Paving	Paving	1/1/2020	12/31/2020	5	262	
3	Architectural Coating	Architectural Coating	1/1/2020	12/31/2020	5	132	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 682,425; Residential Outdoor: 227,475; Non-Residential Indoor: 143,438; Non-Residential Outdoor: 47,813; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	2	7.00	226	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	18	283.00	52.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	57.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.5532	5.0000	4.4038	7.0200e-003		0.2916	0.2916		0.2742	0.2742	0.0000	604.3027	604.3027	0.1472	0.0000	607.9835
Total	0.5532	5.0000	4.4038	7.0200e-003		0.2916	0.2916		0.2742	0.2742	0.0000	604.3027	604.3027	0.1472	0.0000	607.9835

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	0.0260	0.7765	0.2063	1.8500e-003	0.0452	3.7900e-003	0.0490	0.0131	3.6200e-003	0.0167	0.0000	179.7424	179.7424	0.0138	0.0000	180.0868
Worker	0.1367	0.1012	0.9920	2.9700e-003	0.2973	2.1400e-003	0.2994	0.0790	1.9700e-003	0.0810	0.0000	268.7331	268.7331	8.0700e-003	0.0000	268.9348
Total	0.1626	0.8776	1.1983	4.8200e-003	0.3425	5.9300e-003	0.3484	0.0921	5.5900e-003	0.0977	0.0000	448.4755	448.4755	0.0219	0.0000	449.0216

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	0.1759	3.7136	4.6677	7.0200e-003		0.2362	0.2362		0.2362	0.2362	0.0000	604.3020	604.3020	0.1472	0.0000	607.9827
Total	0.1759	3.7136	4.6677	7.0200e-003		0.2362	0.2362		0.2362	0.2362	0.0000	604.3020	604.3020	0.1472	0.0000	607.9827

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	0.0260	0.7765	0.2063	1.8500e-003	0.0452	3.7900e-003	0.0490	0.0131	3.6200e-003	0.0167	0.0000	179.7424	179.7424	0.0138	0.0000	180.0868
Worker	0.1367	0.1012	0.9920	2.9700e-003	0.2973	2.1400e-003	0.2994	0.0790	1.9700e-003	0.0810	0.0000	268.7331	268.7331	8.0700e-003	0.0000	268.9348
Total	0.1626	0.8776	1.1983	4.8200e-003	0.3425	5.9300e-003	0.3484	0.0921	5.5900e-003	0.0977	0.0000	448.4755	448.4755	0.0219	0.0000	449.0216

3.3 Paving - 2020

Unmitigated Construction On-Site

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

Off-Road	0.1896	1.9022	1.9610	3.1100e-003		0.1006	0.1006		0.0928	0.0928	0.0000	268.7938	268.7938	0.0843	0.0000	270.9012
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1896	1.9022	1.9610	3.1100e-003		0.1006	0.1006		0.0928	0.0928	0.0000	268.7938	268.7938	0.0843	0.0000	270.9012

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	0.0121	8.9400e-003	0.0876	2.6000e-004	0.0263	1.9000e-004	0.0265	6.9800e-003	1.7000e-004	7.1500e-003	0.0000	23.7397	23.7397	7.1000e-004	0.0000	23.7575
Total	0.0121	8.9400e-003	0.0876	2.6000e-004	0.0263	1.9000e-004	0.0265	6.9800e-003	1.7000e-004	7.1500e-003	0.0000	23.7397	23.7397	7.1000e-004	0.0000	23.7575

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	0.0719	1.4494	2.2175	3.1100e-003		0.0784	0.0784		0.0784	0.0784	0.0000	268.7935	268.7935	0.0843	0.0000	270.9009
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0719	1.4494	2.2175	3.1100e-003		0.0784	0.0784		0.0784	0.0784	0.0000	268.7935	268.7935	0.0843	0.0000	270.9009

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	0.0121	8.9400e-003	0.0876	2.6000e-004	0.0263	1.9000e-004	0.0265	6.9800e-003	1.7000e-004	7.1500e-003	0.0000	23.7397	23.7397	7.1000e-004	0.0000	23.7575
Total	0.0121	8.9400e-003	0.0876	2.6000e-004	0.0263	1.9000e-004	0.0265	6.9800e-003	1.7000e-004	7.1500e-003	0.0000	23.7397	23.7397	7.1000e-004	0.0000	23.7575

3.4 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.1657					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0635	0.4412	0.4798	7.8000e-004		0.0291	0.0291		0.0291	0.0291	0.0000	66.8953	66.8953	5.1800e-003	0.0000	67.0247
Total	3.2292	0.4412	0.4798	7.8000e-004		0.0291	0.0291		0.0291	0.0291	0.0000	66.8953	66.8953	5.1800e-003	0.0000	67.0247

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
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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	0.0275	0.0204	0.1998	6.0000e-004	0.0599	4.3000e-004	0.0603	0.0159	4.0000e-004	0.0163	0.0000	54.1265	54.1265	1.6200e-003	0.0000	54.1671
Total	0.0275	0.0204	0.1998	6.0000e-004	0.0599	4.3000e-004	0.0603	0.0159	4.0000e-004	0.0163	0.0000	54.1265	54.1265	1.6200e-003	0.0000	54.1671

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	3.1657					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0156	0.3555	0.4801	7.8000e-004		0.0249	0.0249		0.0249	0.0249	0.0000	66.8952	66.8952	5.1800e-003	0.0000	67.0247
Total	3.1813	0.3555	0.4801	7.8000e-004		0.0249	0.0249		0.0249	0.0249	0.0000	66.8952	66.8952	5.1800e-003	0.0000	67.0247

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	0.0275	0.0204	0.1998	6.0000e-004	0.0599	4.3000e-004	0.0603	0.0159	4.0000e-004	0.0163	0.0000	54.1265	54.1265	1.6200e-003	0.0000	54.1671

Total	0.0275	0.0204	0.1998	6.0000e-004	0.0599	4.3000e-004	0.0603	0.0159	4.0000e-004	0.0163	0.0000	54.1265	54.1265	1.6200e-003	0.0000	54.1671
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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	0.7907	3.5361	9.4619	0.0307	2.5540	0.0309	2.5849	0.6840	0.0290	0.7130	0.0000	2,828.3015	2,828.3015	0.1542	0.0000	2,832.1570
Unmitigated	0.7907	3.5361	9.4619	0.0307	2.5540	0.0309	2.5849	0.6840	0.0290	0.7130	0.0000	2,828.3015	2,828.3015	0.1542	0.0000	2,832.1570

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	1,957.97	1,910.79	1631.08	5,438,015	5,438,015
Industrial Park	653.15	238.12	69.81	1,338,516	1,338,516
Total	2,611.12	2,148.91	1,700.89	6,776,531	6,776,531

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Condo/Townhouse	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,021.2195	1,021.2195	0.0411	8.5000e-003	1,024.7814
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,021.2195	1,021.2195	0.0411	8.5000e-003	1,024.7814
NaturalGas Mitigated	0.0415	0.3605	0.1928	2.2600e-003		0.0287	0.0287		0.0287	0.0287	0.0000	410.8660	410.8660	7.8700e-003	7.5300e-003	413.3075
NaturalGas Unmitigated	0.0415	0.3605	0.1928	2.2600e-003		0.0287	0.0287		0.0287	0.0287	0.0000	410.8660	410.8660	7.8700e-003	7.5300e-003	413.3075

5.2 Energy by Land Use - NaturalGas
Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	5.76102e+006	0.0311	0.2655	0.1130	1.6900e-003		0.0215	0.0215		0.0215	0.0215	0.0000	307.4299	307.4299	5.8900e-003	5.6400e-003	309.2568

Industrial Park	1.93832e+006	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
Total		0.0415	0.3605	0.1928	2.2600e-003		0.0287	0.0287		0.0287	0.0287	0.0000	410.8660	410.8660	7.8700e-003	7.5400e-003	413.3075

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	5.76102e+006	0.0311	0.2655	0.1130	1.6900e-003		0.0215	0.0215		0.0215	0.0215	0.0000	307.4299	307.4299	5.8900e-003	5.6400e-003	309.2568
Industrial Park	1.93832e+006	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
Total		0.0415	0.3605	0.1928	2.2600e-003		0.0287	0.0287		0.0287	0.0287	0.0000	410.8660	410.8660	7.8700e-003	7.5400e-003	413.3075

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	1.80902e+006	591.2045	0.0238	4.9200e-003	593.2666
Industrial Park	1.3158e+006	430.0150	0.0173	3.5800e-003	431.5148
Total		1,021.2195	0.0411	8.5000e-003	1,024.7814

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	1.80902e+006	591.2045	0.0238	4.9200e-003	593.2666
Industrial Park	1.3158e+006	430.0150	0.0173	3.5800e-003	431.5148
Total		1,021.2195	0.0411	8.5000e-003	1,024.7814

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	22.9116	0.4420	28.6133	0.0474		3.6735	3.6735		3.6735	3.6735	348.1068	150.0800	498.1868	0.3252	0.0274	514.4772
Unmitigated	22.9116	0.4420	28.6133	0.0474		3.6735	3.6735		3.6735	3.6735	348.1068	150.0800	498.1868	0.3252	0.0274	514.4772

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
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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	1.6896					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	21.1455	0.4130	26.1018	0.0473		3.6597	3.6597		3.6597	3.6597	348.1068	145.9909	494.0976	0.3212	0.0274	510.2884
Landscaping	0.0765	0.0291	2.5115	1.3000e-004		0.0138	0.0138		0.0138	0.0138	0.0000	4.0891	4.0891	3.9900e-003	0.0000	4.1889
Total	22.9116	0.4420	28.6133	0.0474		3.6735	3.6735		3.6735	3.6735	348.1068	150.0800	498.1868	0.3252	0.0274	514.4772

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	1.6896					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	21.1455	0.4130	26.1018	0.0473		3.6597	3.6597		3.6597	3.6597	348.1068	145.9909	494.0976	0.3212	0.0274	510.2884
Landscaping	0.0765	0.0291	2.5115	1.3000e-004		0.0138	0.0138		0.0138	0.0138	0.0000	4.0891	4.0891	3.9900e-003	0.0000	4.1889
Total	22.9116	0.4420	28.6133	0.0474		3.6735	3.6735		3.6735	3.6735	348.1068	150.0800	498.1868	0.3252	0.0274	514.4772

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	251.7816	1.4456	0.0359	298.6174
Unmitigated	251.7816	1.4456	0.0359	298.6174

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	21.9569 / 13.8424	150.6604	0.7213	0.0181	174.0826
Industrial Park	22.1144 / 0	101.1212	0.7244	0.0178	124.5348
Total		251.7816	1.4456	0.0359	298.6174

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	21.9569 / 13.8424	150.6604	0.7213	0.0181	174.0826
Industrial Park	22.1144 / 0	101.1212	0.7244	0.0178	124.5348

Total		251.7816	1.4456	0.0359	298.6174
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8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	55.5383	3.2822	0.0000	137.5939
Unmitigated	55.5383	3.2822	0.0000	137.5939

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	155.02	31.4677	1.8597	0.0000	77.9598
Industrial Park	118.58	24.0707	1.4225	0.0000	59.6341
Total		55.5383	3.2822	0.0000	137.5939

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	155.02	31.4677	1.8597	0.0000	77.9598
Industrial Park	118.58	24.0707	1.4225	0.0000	59.6341
Total		55.5383	3.2822	0.0000	137.5939

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

East Otay Mesa Specific Plan Amendment Phase 4 Construction - San Diego Air Basin, Annual

East Otay Mesa Specific Plan Amendment Phase 4 Construction

San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	95.63	1000sqft	4.00	95,625.00	0
City Park	9.00	Acre	9.00	392,040.00	0
Condo/Townhouse	837.00	Dwelling Unit	52.31	837,000.00	2394

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Architectural Coating - Rule 67.0.1 coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_ Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_ Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_ Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_ Interior	250.00	50.00
tblAreaCoating	Area_EF_Parking	250	0

tblAreaCoating	Area_Nonresidential_Exterior	243833	0
tblAreaCoating	Area_Nonresidential_Interior	731498	0
tblAreaCoating	Area_Residential_Exterior	564975	0
tblAreaCoating	Area_Residential_Interior	1694925	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeedUP	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	75.00	132.00

tblConstructionPhase	NumDays	1,110.00	261.00
tblConstructionPhase	NumDays	75.00	261.00
tblLandUse	BuildingSpaceSquareFeet	95,630.00	95,625.00
tblLandUse	BuildingSpaceSquareFeet	0.00	392,040.00
tblLandUse	GreenSpaceAllowEdit	1.00	0.00
tblLandUse	GreenSpaceSquareFeet	392,040.00	0.00
tblLandUse	LandUseSquareFeet	95,630.00	95,625.00
tblLandUse	LotAcreage	2.20	4.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	132.00	130.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	OperationalYear	2018	2021

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					
2021	10.5603	9.7553	11.1760	0.0276	1.1856	0.4057	1.5912	0.3184	0.3807	0.6991	0.0000	2,492.0372	2,492.0372	0.3254	0.0000	2,500.1729
Maximum	10.5603	9.7553	11.1760	0.0276	1.1856	0.4057	1.5912	0.3184	0.3807	0.6991	0.0000	2,492.0372	2,492.0372	0.3254	0.0000	2,500.1729

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					
2021	10.0801	8.5579	11.7802	0.0276	1.1856	0.3809	1.5664	0.3184	0.3790	0.6974	0.0000	2,492.0360	2,492.0360	0.3254	0.0000	2,500.1717
Maximum	10.0801	8.5579	11.7802	0.0276	1.1856	0.3809	1.5664	0.3184	0.3790	0.6974	0.0000	2,492.0360	2,492.0360	0.3254	0.0000	2,500.1717

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.55	12.27	-5.41	0.00	0.00	6.11	1.56	0.00	0.45	0.25	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
17	10-24-2020	1-23-2021	1.2812	1.1756
18	1-24-2021	4-23-2021	4.9518	4.5432
19	4-24-2021	7-23-2021	5.0458	4.6281
20	7-24-2021	9-30-2021	3.7705	3.4583
		Highest	5.0458	4.6281

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	57.8808	1.0975	71.0578	0.1178		9.1239	9.1239		9.1239	9.1239	864.5856	372.7483	1,237.3339	0.8077	0.0680	1,277.7925
Energy	0.0876	0.7543	0.3604	4.7800e-003		0.0605	0.0605		0.0605	0.0605	0.0000	2,765.3708	2,765.3708	0.0930	0.0317	2,777.1443
Mobile	1.6117	7.1625	19.4590	0.0659	5.6451	0.0561	5.7012	1.5117	0.0524	1.5641	0.0000	6,069.1800	6,069.1800	0.3226	0.0000	6,077.2440
Waste						0.0000	0.0000		0.0000	0.0000	102.3826	0.0000	102.3826	6.0506	0.0000	253.6484
Water						0.0000	0.0000		0.0000	0.0000	24.3170	489.9312	514.2482	2.5173	0.0631	595.9708
Total	59.5802	9.0144	90.8771	0.1884	5.6451	9.2405	14.8856	1.5117	9.2368	10.7486	991.2851	9,697.2302	10,688.5154	9.7913	0.1628	10,981.8001

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	57.8808	1.0975	71.0578	0.1178		9.1239	9.1239		9.1239	9.1239	864.5856	372.7483	1,237.3339	0.8077	0.0680	1,277.7925
Energy	0.0876	0.7543	0.3604	4.7800e-003		0.0605	0.0605		0.0605	0.0605	0.0000	2,765.3708	2,765.3708	0.0930	0.0317	2,777.1443
Mobile	1.6117	7.1625	19.4590	0.0659	5.6451	0.0561	5.7012	1.5117	0.0524	1.5641	0.0000	6,069.1800	6,069.1800	0.3226	0.0000	6,077.2440
Waste						0.0000	0.0000		0.0000	0.0000	102.3826	0.0000	102.3826	6.0506	0.0000	253.6484
Water						0.0000	0.0000		0.0000	0.0000	24.3170	489.9312	514.2482	2.5173	0.0631	595.9708
Total	59.5802	9.0144	90.8771	0.1884	5.6451	9.2405	14.8856	1.5117	9.2368	10.7486	991.2851	9,697.2302	10,688.5154	9.7913	0.1628	10,981.8001

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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	Building Construction	Building Construction	1/1/2021	12/31/2021	5	261	
2	Paving	Paving	1/1/2021	12/31/2021	5	261	
3	Architectural Coating	Architectural Coating	1/1/2021	12/31/2021	5	132	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 1,694,925; Residential Outdoor: 564,975; Non-Residential Indoor: 731,498; Non-Residential Outdoor: 243,833;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	2	7.00	226	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	18	807.00	169.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Architectural Coating	2	161.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
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3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4941	4.5258	4.3163	7.0000e-003		0.2492	0.2492		0.2343	0.2343	0.0000	602.0677	602.0677	0.1451	0.0000	605.6939
Total	0.4941	4.5258	4.3163	7.0000e-003		0.2492	0.2492		0.2343	0.2343	0.0000	602.0677	602.0677	0.1451	0.0000	605.6939

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	0.0682	2.2665	0.6044	5.9100e-003	0.1464	4.8000e-003	0.1512	0.0423	4.5900e-003	0.0469	0.0000	576.5929	576.5929	0.0428	0.0000	577.6628
Worker	0.3661	0.2612	2.6310	8.1600e-003	0.8445	5.9800e-003	0.8505	0.2244	5.5000e-003	0.2299	0.0000	737.7449	737.7449	0.0212	0.0000	738.2735

Total	0.4343	2.5277	3.2354	0.0141	0.9909	0.0108	1.0017	0.2667	0.0101	0.2768	0.0000	1,314.3378	1,314.3378	0.0639	0.0000	1,315.9363
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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	0.1851	3.7138	4.6426	7.0000e-003		0.2344	0.2344		0.2337	0.2337	0.0000	602.0670	602.0670	0.1451	0.0000	605.6931
Total	0.1851	3.7138	4.6426	7.0000e-003		0.2344	0.2344		0.2337	0.2337	0.0000	602.0670	602.0670	0.1451	0.0000	605.6931

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	0.0682	2.2665	0.6044	5.9100e-003	0.1464	4.8000e-003	0.1512	0.0423	4.5900e-003	0.0469	0.0000	576.5929	576.5929	0.0428	0.0000	577.6628
Worker	0.3661	0.2612	2.6310	8.1600e-003	0.8445	5.9800e-003	0.8505	0.2244	5.5000e-003	0.2299	0.0000	737.7449	737.7449	0.0212	0.0000	738.2735
Total	0.4343	2.5277	3.2354	0.0141	0.9909	0.0108	1.0017	0.2667	0.0101	0.2768	0.0000	1,314.3378	1,314.3378	0.0639	0.0000	1,315.9363

3.3 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2248	2.2431	2.5434	3.9100e-003		0.1197	0.1197		0.1104	0.1104	0.0000	338.9539	338.9539	0.1070	0.0000	341.6288
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.2248	2.2431	2.5434	3.9100e-003		0.1197	0.1197		0.1104	0.1104	0.0000	338.9539	338.9539	0.1070	0.0000	341.6288

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	0.0113	8.0900e-003	0.0815	2.5000e-004	0.0262	1.9000e-004	0.0264	6.9500e-003	1.7000e-004	7.1200e-003	0.0000	22.8546	22.8546	6.6000e-004	0.0000	22.8709
Total	0.0113	8.0900e-003	0.0815	2.5000e-004	0.0262	1.9000e-004	0.0264	6.9500e-003	1.7000e-004	7.1200e-003	0.0000	22.8546	22.8546	6.6000e-004	0.0000	22.8709

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	0.0953	1.9021	2.8176	3.9100e-003		0.1095	0.1095		0.1092	0.1092	0.0000	338.9535	338.9535	0.1070	0.0000	341.6284
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0953	1.9021	2.8176	3.9100e-003		0.1095	0.1095		0.1092	0.1092	0.0000	338.9535	338.9535	0.1070	0.0000	341.6284

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	0.0113	8.0900e-003	0.0815	2.5000e-004	0.0262	1.9000e-004	0.0264	6.9500e-003	1.7000e-004	7.1200e-003	0.0000	22.8546	22.8546	6.6000e-004	0.0000	22.8709
Total	0.0113	8.0900e-003	0.0815	2.5000e-004	0.0262	1.9000e-004	0.0264	6.9500e-003	1.7000e-004	7.1200e-003	0.0000	22.8546	22.8546	6.6000e-004	0.0000	22.8709

3.4 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.2656					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0571	0.3985	0.4744	7.8000e-004		0.0246	0.0246		0.0246	0.0246	0.0000	66.6399	66.6399	4.5700e-003	0.0000	66.7543
Total	9.3227	0.3985	0.4744	7.8000e-004		0.0246	0.0246		0.0246	0.0246	0.0000	66.6399	66.6399	4.5700e-003	0.0000	66.7543

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	0.0730	0.0521	0.5249	1.6300e-003	0.1685	1.1900e-003	0.1697	0.0448	1.1000e-003	0.0459	0.0000	147.1833	147.1833	4.2200e-003	0.0000	147.2888
Total	0.0730	0.0521	0.5249	1.6300e-003	0.1685	1.1900e-003	0.1697	0.0448	1.1000e-003	0.0459	0.0000	147.1833	147.1833	4.2200e-003	0.0000	147.2888

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	9.2656					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	4.5700e-003	0.0000	66.7542
Total	9.2811	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	4.5700e-003	0.0000	66.7542

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
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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	0.0730	0.0521	0.5249	1.6300e-003	0.1685	1.1900e-003	0.1697	0.0448	1.1000e-003	0.0459	0.0000	147.1833	147.1833	4.2200e-003	0.0000	147.2888
Total	0.0730	0.0521	0.5249	1.6300e-003	0.1685	1.1900e-003	0.1697	0.0448	1.1000e-003	0.0459	0.0000	147.1833	147.1833	4.2200e-003	0.0000	147.2888

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	1.6117	7.1625	19.4590	0.0659	5.6451	0.0561	5.7012	1.5117	0.0524	1.5641	0.0000	6,069.1800	6,069.1800	0.3226	0.0000	6,077.2440
Unmitigated	1.6117	7.1625	19.4590	0.0659	5.6451	0.0561	5.7012	1.5117	0.0524	1.5641	0.0000	6,069.1800	6,069.1800	0.3226	0.0000	6,077.2440

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	17.01	204.75	150.66	134,331	134,331
Condo/Townhouse	4,862.97	4,745.79	4051.08	13,506,286	13,506,286
Industrial Park	653.15	238.12	69.81	1,338,516	1,338,516
Total	5,533.13	5,188.66	4,271.55	14,979,133	14,979,133

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
City Park	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Condo/Townhouse	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,898.3775	1,898.3775	0.0764	0.0158	1,904.9988
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,898.3775	1,898.3775	0.0764	0.0158	1,904.9988
NaturalGas Mitigated	0.0876	0.7543	0.3604	4.7800e-003		0.0605	0.0605		0.0605	0.0605	0.0000	866.9934	866.9934	0.0166	0.0159	872.1455
NaturalGas Unmitigated	0.0876	0.7543	0.3604	4.7800e-003		0.0605	0.0605		0.0605	0.0605	0.0000	866.9934	866.9934	0.0166	0.0159	872.1455

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					
City Park	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
Condo/Townhouse	1.43085e+007	0.0772	0.6593	0.2806	4.2100e-003		0.0533	0.0533		0.0533	0.0533	0.0000	763.5573	763.5573	0.0146	0.0140	768.0947
Industrial Park	1.93832e+006	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
Total		0.0876	0.7543	0.3604	4.7800e-003		0.0605	0.0605		0.0605	0.0605	0.0000	866.9934	866.9934	0.0166	0.0159	872.1455

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					
City Park	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
Condo/Townhouse	1.43085e+007	0.0772	0.6593	0.2806	4.2100e-003		0.0533	0.0533		0.0533	0.0533	0.0000	763.5573	763.5573	0.0146	0.0140	768.0947
Industrial Park	1.93832e+006	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
Total		0.0876	0.7543	0.3604	4.7800e-003		0.0605	0.0605		0.0605	0.0605	0.0000	866.9934	866.9934	0.0166	0.0159	872.1455

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	4.49303e+006	1,468.3625	0.0591	0.0122	1,473.4840
Industrial Park	1.3158e+006	430.0150	0.0173	3.5800e-003	431.5148
Total		1,898.3775	0.0764	0.0158	1,904.9988

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	4.49303e+006	1,468.3625	0.0591	0.0122	1,473.4840
Industrial Park	1.3158e+006	430.0150	0.0173	3.5800e-003	431.5148
Total		1,898.3775	0.0764	0.0158	1,904.9988

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	57.8808	1.0975	71.0578	0.1178		9.1239	9.1239		9.1239	9.1239	864.5856	372.7483	1,237.3339	0.8077	0.0680	1,277.7925
Unmitigated	57.8808	1.0975	71.0578	0.1178		9.1239	9.1239		9.1239	9.1239	864.5856	372.7483	1,237.3339	0.8077	0.0680	1,277.7925

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	5.1735					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	52.5186	1.0256	64.8285	0.1175		9.0896	9.0896		9.0896	9.0896	864.5856	362.5946	1,227.1802	0.7979	0.0680	1,267.3928
Landscaping	0.1888	0.0719	6.2293	3.3000e-004		0.0343	0.0343		0.0343	0.0343	0.0000	10.1537	10.1537	9.8400e-003	0.0000	10.3997
Total	57.8808	1.0975	71.0578	0.1178		9.1239	9.1239		9.1239	9.1239	864.5856	372.7483	1,237.3339	0.8077	0.0680	1,277.7925

Mitigated

[illegible]

Consumer Products	5.1735					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	52.5186	1.0256	64.8285	0.1175		9.0896	9.0896		9.0896	9.0896	864.5856	362.5946	1,227.1802	0.7979	0.0680	1,267.3928
Landscaping	0.1888	0.0719	6.2293	3.3000e-004		0.0343	0.0343		0.0343	0.0343	0.0000	10.1537	10.1537	9.8400e-003	0.0000	10.3997
Total	57.8808	1.0975	71.0578	0.1178		9.1239	9.1239		9.1239	9.1239	864.5856	372.7483	1,237.3339	0.8077	0.0680	1,277.7925

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	514.2482	2.5173	0.0631	595.9708
Unmitigated	514.2482	2.5173	0.0631	595.9708

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 10.7233	38.9348	1.5700e-003	3.2000e-004	39.0706
Condo/Townhouse	54.5339 / 34.3801	374.1922	1.7914	0.0449	432.3654

Industrial Park	22.1144 / 0	101.1212	0.7244	0.0178	124.5348
Total		514.2482	2.5173	0.0631	595.9708

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 10.7233	38.9348	1.5700e-003	3.2000e-004	39.0706
Condo/Townhouse	54.5339 / 34.3801	374.1922	1.7914	0.0449	432.3654
Industrial Park	22.1144 / 0	101.1212	0.7244	0.0178	124.5348
Total		514.2482	2.5173	0.0631	595.9708

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	102.3826	6.0506	0.0000	253.6484
Unmitigated	102.3826	6.0506	0.0000	253.6484

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.77	0.1563	9.2400e-003	0.0000	0.3872
Condo/Townhouse	385.02	78.1556	4.6189	0.0000	193.6271
Industrial Park	118.58	24.0707	1.4225	0.0000	59.6341
Total		102.3826	6.0506	0.0000	253.6484

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.77	0.1563	9.2400e-003	0.0000	0.3872
Condo/Townhouse	385.02	78.1556	4.6189	0.0000	193.6271
Industrial Park	118.58	24.0707	1.4225	0.0000	59.6341
Total		102.3826	6.0506	0.0000	253.6484

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

East Otay Mesa Specific Plan Amendment Phase 5 Construction - San Diego Air Basin, Annual

East Otay Mesa Specific Plan Amendment Phase 5 Construction

San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	95.63	1000sqft	4.00	95,625.00	0
Condo/Townhouse	312.00	Dwelling Unit	19.50	312,000.00	892

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13	Operational Year	2022		
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Architectural Coating - Rule 67.0.1 coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Parking	250	0
tblAreaCoating	Area_Nonresidential_Exterior	47813	0

tblAreaCoating	Area_Nonresidential_Interior	143438	0
tblAreaCoating	Area_Residential_Exterior	210600	0
tblAreaCoating	Area_Residential_Interior	631800	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	131.00
tblConstructionPhase	NumDays	370.00	260.00

tblConstructionPhase	NumDays	20.00	260.00
tblLandUse	BuildingSpaceSquareFeet	95,630.00	95,625.00
tblLandUse	LandUseSquareFeet	95,630.00	95,625.00
tblLandUse	LotAcreage	2.20	4.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	132.00	130.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	OperationalYear	2018	2022

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					
2022	3.8302	7.0745	8.4349	0.0167	0.3999	0.3341	0.7339	0.1072	0.3138	0.4210	0.0000	1,470.0328	1,470.0328	0.2747	0.0000	1,476.8992
Maximum	3.8302	7.0745	8.4349	0.0167	0.3999	0.3341	0.7339	0.1072	0.3138	0.4210	0.0000	1,470.0328	1,470.0328	0.2747	0.0000	1,476.8992

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					
2022	3.4285	6.6392	9.1047	0.0167	0.3999	0.3683	0.7682	0.1072	0.3672	0.4744	0.0000	1,470.0316	1,470.0316	0.2747	0.0000	1,476.8980
Maximum	3.4285	6.6392	9.1047	0.0167	0.3999	0.3683	0.7682	0.1072	0.3672	0.4744	0.0000	1,470.0316	1,470.0316	0.2747	0.0000	1,476.8980

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	10.49	6.15	-7.94	0.00	0.00	-10.26	-4.67	0.00	-17.03	-12.69	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
21	10-24-2021	1-23-2022	0.6899	0.6370
22	1-24-2022	4-23-2022	2.6678	2.4632
23	4-24-2022	7-23-2022	2.7222	2.5129
24	7-24-2022	9-30-2022	2.0342	1.8778
		Highest	2.7222	2.5129

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	21.2389	0.4091	26.4855	0.0439		3.4010	3.4010		3.4010	3.4010	322.2828	138.9466	461.2294	0.3011	0.0254	476.3104
Energy	0.0392	0.3408	0.1844	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	1,365.4211	1,365.4211	0.0468	0.0153	1,371.1361
Mobile	0.6432	2.8699	7.7214	0.0271	2.4017	0.0227	2.4244	0.6431	0.0212	0.6643	0.0000	2,503.7588	2,503.7588	0.1303	0.0000	2,507.0158

Waste						0.0000	0.0000		0.0000	0.0000	53.2039	0.0000	53.2039	3.1443	0.0000	131.8105
Water						0.0000	0.0000		0.0000	0.0000	13.4651	227.1400	240.6050	1.3921	0.0346	285.7033
Total	21.9213	3.6197	34.3913	0.0732	2.4017	3.4508	5.8526	0.6431	3.4493	4.0925	388.9518	4,235.2665	4,624.2183	5.0145	0.0752	4,771.9761

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	21.2389	0.4091	26.4855	0.0439		3.4010	3.4010		3.4010	3.4010	322.2828	138.9466	461.2294	0.3011	0.0254	476.3104
Energy	0.0392	0.3408	0.1844	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	1,365.4211	1,365.4211	0.0468	0.0153	1,371.1361
Mobile	0.6432	2.8699	7.7214	0.0271	2.4017	0.0227	2.4244	0.6431	0.0212	0.6643	0.0000	2,503.7588	2,503.7588	0.1303	0.0000	2,507.0158
Waste						0.0000	0.0000		0.0000	0.0000	53.2039	0.0000	53.2039	3.1443	0.0000	131.8105
Water						0.0000	0.0000		0.0000	0.0000	13.4651	227.1400	240.6050	1.3921	0.0346	285.7033
Total	21.9213	3.6197	34.3913	0.0732	2.4017	3.4508	5.8526	0.6431	3.4493	4.0925	388.9518	4,235.2665	4,624.2183	5.0145	0.0752	4,771.9761

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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	Building Construction	Building Construction	1/1/2022	12/31/2022	5	260	
2	Paving	Paving	1/1/2022	12/31/2022	5	260	

3	Architectural Coating	Architectural Coating	1/1/2022	12/31/2022	5	131
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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 631,800; Residential Outdoor: 210,600; Non-Residential Indoor: 143,438; Non-Residential Outdoor: 47,813; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	2	7.00	226	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	18	265.00	49.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	53.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4418	4.0395	4.2452	6.9700e-003		0.2095	0.2095		0.1971	0.1971	0.0000	599.9892	599.9892	0.1435	0.0000	603.5775
Total	0.4418	4.0395	4.2452	6.9700e-003		0.2095	0.2095		0.1971	0.1971	0.0000	599.9892	599.9892	0.1435	0.0000	603.5775

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	0.0183	0.6182	0.1653	1.6900e-003	0.0423	1.1900e-003	0.0435	0.0122	1.1400e-003	0.0134	0.0000	164.9602	164.9602	0.0120	0.0000	165.2595
Worker	0.1133	0.0779	0.7990	2.5700e-003	0.2763	1.9100e-003	0.2782	0.0734	1.7600e-003	0.0752	0.0000	232.4834	232.4834	6.3400e-003	0.0000	232.6418
Total	0.1316	0.6961	0.9643	4.2600e-003	0.3185	3.1000e-003	0.3216	0.0856	2.9000e-003	0.0885	0.0000	397.4436	397.4436	0.0183	0.0000	397.9013

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	0.1824	3.6801	4.6228	6.9700e-003		0.2316	0.2316		0.2310	0.2310	0.0000	599.9885	599.9885	0.1435	0.0000	603.5768
Total	0.1824	3.6801	4.6228	6.9700e-003		0.2316	0.2316		0.2310	0.2310	0.0000	599.9885	599.9885	0.1435	0.0000	603.5768

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	0.0183	0.6182	0.1653	1.6900e-003	0.0423	1.1900e-003	0.0435	0.0122	1.1400e-003	0.0134	0.0000	164.9602	164.9602	0.0120	0.0000	165.2595
Worker	0.1133	0.0779	0.7990	2.5700e-003	0.2763	1.9100e-003	0.2782	0.0734	1.7600e-003	0.0752	0.0000	232.4834	232.4834	6.3400e-003	0.0000	232.6418
Total	0.1316	0.6961	0.9643	4.2600e-003	0.3185	3.1000e-003	0.3216	0.0856	2.9000e-003	0.0885	0.0000	397.4436	397.4436	0.0183	0.0000	397.9013

3.3 Paving - 2022

Unmitigated Construction On-Site

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

Off-Road	0.1987	1.9498	2.5187	3.9000e-003		0.0997	0.0997		0.0920	0.0920	0.0000	337.7863	337.7863	0.1066	0.0000	340.4521
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1987	1.9498	2.5187	3.9000e-003		0.0997	0.0997		0.0920	0.0920	0.0000	337.7863	337.7863	0.1066	0.0000	340.4521

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	0.0107	7.3500e-003	0.0754	2.4000e-004	0.0261	1.8000e-004	0.0262	6.9300e-003	1.7000e-004	7.0900e-003	0.0000	21.9324	21.9324	6.0000e-004	0.0000	21.9473
Total	0.0107	7.3500e-003	0.0754	2.4000e-004	0.0261	1.8000e-004	0.0262	6.9300e-003	1.7000e-004	7.0900e-003	0.0000	21.9324	21.9324	6.0000e-004	0.0000	21.9473

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	0.0941	1.8873	2.8060	3.9000e-003		0.1083	0.1083		0.1081	0.1081	0.0000	337.7859	337.7859	0.1066	0.0000	340.4517
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0941	1.8873	2.8060	3.9000e-003		0.1083	0.1083		0.1081	0.1081	0.0000	337.7859	337.7859	0.1066	0.0000	340.4517

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	0.0107	7.3500e-003	0.0754	2.4000e-004	0.0261	1.8000e-004	0.0262	6.9300e-003	1.7000e-004	7.0900e-003	0.0000	21.9324	21.9324	6.0000e-004	0.0000	21.9473
Total	0.0107	7.3500e-003	0.0754	2.4000e-004	0.0261	1.8000e-004	0.0262	6.9300e-003	1.7000e-004	7.0900e-003	0.0000	21.9324	21.9324	6.0000e-004	0.0000	21.9473

3.4 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.9715					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0532	0.3662	0.4715	7.7000e-004		0.0213	0.0213		0.0213	0.0213	0.0000	66.3846	66.3846	4.3200e-003	0.0000	66.4927
Total	3.0247	0.3662	0.4715	7.7000e-004		0.0213	0.0213		0.0213	0.0213	0.0000	66.3846	66.3846	4.3200e-003	0.0000	66.4927

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
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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	0.0227	0.0156	0.1598	5.1000e-004	0.0553	3.8000e-004	0.0556	0.0147	3.5000e-004	0.0150	0.0000	46.4967	46.4967	1.2700e-003	0.0000	46.5284
Total	0.0227	0.0156	0.1598	5.1000e-004	0.0553	3.8000e-004	0.0556	0.0147	3.5000e-004	0.0150	0.0000	46.4967	46.4967	1.2700e-003	0.0000	46.5284

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	2.9715					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.3528	0.4764	7.7000e-004		0.0247	0.0247		0.0247	0.0247	0.0000	66.3845	66.3845	4.3200e-003	0.0000	66.4926
Total	2.9870	0.3528	0.4764	7.7000e-004		0.0247	0.0247		0.0247	0.0247	0.0000	66.3845	66.3845	4.3200e-003	0.0000	66.4926

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	0.0227	0.0156	0.1598	5.1000e-004	0.0553	3.8000e-004	0.0556	0.0147	3.5000e-004	0.0150	0.0000	46.4967	46.4967	1.2700e-003	0.0000	46.5284

Total	0.0227	0.0156	0.1598	5.1000e-004	0.0553	3.8000e-004	0.0556	0.0147	3.5000e-004	0.0150	0.0000	46.4967	46.4967	1.2700e-003	0.0000	46.5284
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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	0.6432	2.8699	7.7214	0.0271	2.4017	0.0227	2.4244	0.6431	0.0212	0.6643	0.0000	2,503.7588	2,503.7588	0.1303	0.0000	2,507.0158
Unmitigated	0.6432	2.8699	7.7214	0.0271	2.4017	0.0227	2.4244	0.6431	0.0212	0.6643	0.0000	2,503.7588	2,503.7588	0.1303	0.0000	2,507.0158

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	1,812.72	1,769.04	1510.08	5,034,601	5,034,601
Industrial Park	653.15	238.12	69.81	1,338,516	1,338,516
Total	2,465.87	2,007.16	1,579.89	6,373,117	6,373,117

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122
Condo/Townhouse	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	977.3616	977.3616	0.0393	8.1400e-003	980.7705
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	977.3616	977.3616	0.0393	8.1400e-003	980.7705
NaturalGas Mitigated	0.0392	0.3408	0.1844	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	388.0596	388.0596	7.4400e-003	7.1100e-003	390.3656
NaturalGas Unmitigated	0.0392	0.3408	0.1844	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	388.0596	388.0596	7.4400e-003	7.1100e-003	390.3656

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	5.33364e+006	0.0288	0.2458	0.1046	1.5700e-003		0.0199	0.0199		0.0199	0.0199	0.0000	284.6235	284.6235	5.4600e-003	5.2200e-003	286.3149

Industrial Park	1.93832e+006	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
Total		0.0392	0.3408	0.1844	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	388.0596	388.0596	7.4400e-003	7.1200e-003	390.3656

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	5.33364e+006	0.0288	0.2458	0.1046	1.5700e-003		0.0199	0.0199		0.0199	0.0199	0.0000	284.6235	284.6235	5.4600e-003	5.2200e-003	286.3149
Industrial Park	1.93832e+006	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
Total		0.0392	0.3408	0.1844	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	388.0596	388.0596	7.4400e-003	7.1200e-003	390.3656

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	1.67482e+006	547.3466	0.0220	4.5600e-003	549.2557
Industrial Park	1.3158e+006	430.0150	0.0173	3.5800e-003	431.5148
Total		977.3616	0.0393	8.1400e-003	980.7705

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	1.67482e+006	547.3466	0.0220	4.5600e-003	549.2557
Industrial Park	1.3158e+006	430.0150	0.0173	3.5800e-003	431.5148
Total		977.3616	0.0393	8.1400e-003	980.7705

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	21.2389	0.4091	26.4855	0.0439		3.4010	3.4010		3.4010	3.4010	322.2828	138.9466	461.2294	0.3011	0.0254	476.3104
Unmitigated	21.2389	0.4091	26.4855	0.0439		3.4010	3.4010		3.4010	3.4010	322.2828	138.9466	461.2294	0.3011	0.0254	476.3104

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
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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	1.5920					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	19.5768	0.3823	24.1655	0.0438		3.3882	3.3882		3.3882	3.3882	322.2828	135.1607	457.4435	0.2974	0.0254	472.4331
Landscaping	0.0701	0.0268	2.3200	1.2000e-004		0.0128	0.0128		0.0128	0.0128	0.0000	3.7859	3.7859	3.6600e-003	0.0000	3.8773
Total	21.2389	0.4091	26.4855	0.0439		3.4011	3.4011		3.4011	3.4011	322.2828	138.9466	461.2294	0.3011	0.0254	476.3104

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	1.5920					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	19.5768	0.3823	24.1655	0.0438		3.3882	3.3882		3.3882	3.3882	322.2828	135.1607	457.4435	0.2974	0.0254	472.4331
Landscaping	0.0701	0.0268	2.3200	1.2000e-004		0.0128	0.0128		0.0128	0.0128	0.0000	3.7859	3.7859	3.6600e-003	0.0000	3.8773
Total	21.2389	0.4091	26.4855	0.0439		3.4011	3.4011		3.4011	3.4011	322.2828	138.9466	461.2294	0.3011	0.0254	476.3104

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	240.6050	1.3921	0.0346	285.7033
Unmitigated	240.6050	1.3921	0.0346	285.7033

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	20.3281 / 12.8155	139.4838	0.6677	0.0168	161.1685
Industrial Park	22.1144 / 0	101.1212	0.7244	0.0178	124.5348
Total		240.6050	1.3921	0.0346	285.7033

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	20.3281 / 12.8155	139.4838	0.6677	0.0168	161.1685
Industrial Park	22.1144 / 0	101.1212	0.7244	0.0178	124.5348

Total		240.6050	1.3921	0.0346	285.7033
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8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	53.2039	3.1443	0.0000	131.8105
Unmitigated	53.2039	3.1443	0.0000	131.8105

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	143.52	29.1333	1.7217	0.0000	72.1764
Industrial Park	118.58	24.0707	1.4225	0.0000	59.6341
Total		53.2039	3.1443	0.0000	131.8105

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	143.52	29.1333	1.7217	0.0000	72.1764
Industrial Park	118.58	24.0707	1.4225	0.0000	59.6341
Total		53.2039	3.1443	0.0000	131.8105

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

East Otay Mesa Specific Plan Amendment Phase 6 Construction - San Diego Air Basin, Annual

East Otay Mesa Specific Plan Amendment Phase 6 Construction

San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	95.63	1000sqft	2.20	95,625.00	0
Condo/Townhouse	100.00	Dwelling Unit	6.25	100,000.00	286
Strip Mall	78.00	1000sqft	1.79	78,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Architectural Coating - Rule 67.0.1 coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_ Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_ Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_ Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_ Interior	250.00	50.00
tblAreaCoating	Area_EF_Parking	250	0

tblAreaCoating	Area_Nonresidential_Exterior	86813	0
tblAreaCoating	Area_Nonresidential_Interior	260438	0
tblAreaCoating	Area_Residential_Exterior	67500	0
tblAreaCoating	Area_Residential_Interior	202500	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeedUP	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	130.00

tblConstructionPhase	NumDays	300.00	260.00
tblConstructionPhase	NumDays	20.00	260.00
tblLandUse	BuildingSpaceSquareFeet	95,630.00	95,625.00
tblLandUse	LandUseSquareFeet	95,630.00	95,625.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	132.00	130.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	OperationalYear	2018	2023

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					
2023	2.5193	6.2921	7.8510	0.0147	0.2307	0.2899	0.5206	0.0621	0.2723	0.3344	0.0000	1,291.9029	1,291.9029	0.2660	0.0000	1,298.5535
Maximum	2.5193	6.2921	7.8510	0.0147	0.2307	0.2899	0.5206	0.0621	0.2723	0.3344	0.0000	1,291.9029	1,291.9029	0.2660	0.0000	1,298.5535

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					
2023	2.1571	6.3647	8.5663	0.0147	0.2307	0.3703	0.6010	0.0621	0.3702	0.4322	0.0000	1,291.9017	1,291.9017	0.2660	0.0000	1,298.5523
Maximum	2.1571	6.3647	8.5663	0.0147	0.2307	0.3703	0.6010	0.0621	0.3702	0.4322	0.0000	1,291.9017	1,291.9017	0.2660	0.0000	1,298.5523

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	14.38	-1.15	-9.11	0.00	0.00	-27.72	-15.44	0.00	-35.93	-29.25	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
25	10-24-2022	1-23-2023	0.5572	0.5389
26	1-24-2023	4-23-2023	2.1552	2.0844
27	4-24-2023	7-23-2023	2.2008	2.1284
28	7-24-2023	9-30-2023	1.6446	1.5905
		Highest	2.2008	2.1284

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	7.3658	0.1311	8.4896	0.0141		1.0901	1.0901		1.0901	1.0901	103.2958	44.5367	147.8325	0.0965	8.1200e-003	152.6662
Energy	0.0206	0.1824	0.1205	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	1,138.0119	1,138.0119	0.0415	0.0115	1,142.4819
Mobile	0.9486	3.6172	9.9001	0.0331	2.9494	0.0263	2.9757	0.7898	0.0245	0.8143	0.0000	3,059.2280	3,059.2280	0.1633	0.0000	3,063.3107

Waste						0.0000	0.0000		0.0000	0.0000	50.0332	0.0000	50.0332	2.9569	0.0000	123.9552
Water						0.0000	0.0000		0.0000	0.0000	10.9159	174.1881	185.1040	1.1282	0.0279	221.6298
Total	8.3349	3.9306	18.5102	0.0483	2.9494	1.1307	4.0801	0.7898	1.1288	1.9186	164.2449	4,415.9647	4,580.2096	4.3864	0.0476	4,704.0437

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	7.3658	0.1311	8.4896	0.0141		1.0901	1.0901		1.0901	1.0901	103.2958	44.5367	147.8325	0.0965	8.1200e-003	152.6662
Energy	0.0206	0.1824	0.1205	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	1,138.0119	1,138.0119	0.0415	0.0115	1,142.4819
Mobile	0.9486	3.6172	9.9001	0.0331	2.9494	0.0263	2.9757	0.7898	0.0245	0.8143	0.0000	3,059.2280	3,059.2280	0.1633	0.0000	3,063.3107
Waste						0.0000	0.0000		0.0000	0.0000	50.0332	0.0000	50.0332	2.9569	0.0000	123.9552
Water						0.0000	0.0000		0.0000	0.0000	10.9159	174.1881	185.1040	1.1282	0.0279	221.6298
Total	8.3349	3.9306	18.5102	0.0483	2.9494	1.1307	4.0801	0.7898	1.1288	1.9186	164.2449	4,415.9647	4,580.2096	4.3864	0.0476	4,704.0437

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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	Building Construction	Building Construction	1/1/2023	12/31/2023	5	260	
2	Paving	Paving	1/1/2023	12/31/2023	5	260	

3	Architectural Coating	Architectural Coating	1/1/2023	12/31/2023	5	130
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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 202,500; Residential Outdoor: 67,500; Non-Residential Indoor: 260,438; Non-Residential Outdoor: 86,813; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	2	7.00	226	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	18	137.00	39.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	27.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2023

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	0.4072	3.7213	4.2144	6.9800e-003		0.1812	0.1812		0.1705	0.1705	0.0000	600.1960	600.1960	0.1426	0.0000	603.7601
Total	0.4072	3.7213	4.2144	6.9800e-003		0.1812	0.1812		0.1705	0.1705	0.0000	600.1960	600.1960	0.1426	0.0000	603.7601

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	0.0113	0.3865	0.1198	1.3100e-003	0.0337	4.6000e-004	0.0341	9.7200e-003	4.4000e-004	0.0102	0.0000	127.9897	127.9897	8.7000e-003	0.0000	128.2072
Worker	0.0555	0.0368	0.3831	1.2800e-003	0.1428	9.7000e-004	0.1438	0.0380	8.9000e-004	0.0388	0.0000	115.5986	115.5986	3.0000e-003	0.0000	115.6734
Total	0.0668	0.4233	0.5029	2.5900e-003	0.1765	1.4300e-003	0.1779	0.0477	1.3300e-003	0.0490	0.0000	243.5882	243.5882	0.0117	0.0000	243.8807

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	0.1745	3.6853	4.6321	6.9800e-003		0.2344	0.2344		0.2344	0.2344	0.0000	600.1953	600.1953	0.1426	0.0000	603.7594
Total	0.1745	3.6853	4.6321	6.9800e-003		0.2344	0.2344		0.2344	0.2344	0.0000	600.1953	600.1953	0.1426	0.0000	603.7594

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	0.0113	0.3865	0.1198	1.3100e-003	0.0337	4.6000e-004	0.0341	9.7200e-003	4.4000e-004	0.0102	0.0000	127.9897	127.9897	8.7000e-003	0.0000	128.2072
Worker	0.0555	0.0368	0.3831	1.2800e-003	0.1428	9.7000e-004	0.1438	0.0380	8.9000e-004	0.0388	0.0000	115.5986	115.5986	3.0000e-003	0.0000	115.6734
Total	0.0668	0.4233	0.5029	2.5900e-003	0.1765	1.4300e-003	0.1779	0.0477	1.3300e-003	0.0490	0.0000	243.5882	243.5882	0.0117	0.0000	243.8807

3.3 Paving - 2023

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	0.1863	1.7948	2.5174	3.9000e-003		0.0886	0.0886		0.0818	0.0818	0.0000	337.8573	337.8573	0.1067	0.0000	340.5236
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1863	1.7948	2.5174	3.9000e-003		0.0886	0.0886		0.0818	0.0818	0.0000	337.8573	337.8573	0.1067	0.0000	340.5236

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	0.0101	6.7100e-003	0.0699	2.3000e-004	0.0261	1.8000e-004	0.0262	6.9300e-003	1.6000e-004	7.0900e-003	0.0000	21.0946	21.0946	5.5000e-004	0.0000	21.1083
Total	0.0101	6.7100e-003	0.0699	2.3000e-004	0.0261	1.8000e-004	0.0262	6.9300e-003	1.6000e-004	7.0900e-003	0.0000	21.0946	21.0946	5.5000e-004	0.0000	21.1083

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	0.0911	1.8893	2.8095	3.9000e-003		0.1094	0.1094		0.1094	0.1094	0.0000	337.8569	337.8569	0.1067	0.0000	340.5232
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0911	1.8893	2.8095	3.9000e-003		0.1094	0.1094		0.1094	0.1094	0.0000	337.8569	337.8569	0.1067	0.0000	340.5232

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	0.0101	6.7100e-003	0.0699	2.3000e-004	0.0261	1.8000e-004	0.0262	6.9300e-003	1.6000e-004	7.0900e-003	0.0000	21.0946	21.0946	5.5000e-004	0.0000	21.1083
Total	0.0101	6.7100e-003	0.0699	2.3000e-004	0.0261	1.8000e-004	0.0262	6.9300e-003	1.6000e-004	7.0900e-003	0.0000	21.0946	21.0946	5.5000e-004	0.0000	21.1083

3.4 Architectural Coating - 2023

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	1.7881					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.3388	0.4709	7.7000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	66.3846	66.3846	3.9700e-003	0.0000	66.4839
Total	1.8379	0.3388	0.4709	7.7000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	66.3846	66.3846	3.9700e-003	0.0000	66.4839

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
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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	0.0109	7.2500e-003	0.0755	2.5000e-004	0.0282	1.9000e-004	0.0283	7.4800e-003	1.8000e-004	7.6600e-003	0.0000	22.7822	22.7822	5.9000e-004	0.0000	22.7970
Total	0.0109	7.2500e-003	0.0755	2.5000e-004	0.0282	1.9000e-004	0.0283	7.4800e-003	1.8000e-004	7.6600e-003	0.0000	22.7822	22.7822	5.9000e-004	0.0000	22.7970

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	1.7881					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.3528	0.4764	7.7000e-004		0.0247	0.0247		0.0247	0.0247	0.0000	66.3845	66.3845	3.9700e-003	0.0000	66.4838
Total	1.8036	0.3528	0.4764	7.7000e-004		0.0247	0.0247		0.0247	0.0247	0.0000	66.3845	66.3845	3.9700e-003	0.0000	66.4838

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	0.0109	7.2500e-003	0.0755	2.5000e-004	0.0282	1.9000e-004	0.0283	7.4800e-003	1.8000e-004	7.6600e-003	0.0000	22.7822	22.7822	5.9000e-004	0.0000	22.7970

Total	0.0109	7.2500e-003	0.0755	2.5000e-004	0.0282	1.9000e-004	0.0283	7.4800e-003	1.8000e-004	7.6600e-003	0.0000	22.7822	22.7822	5.9000e-004	0.0000	22.7970
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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	0.9486	3.6172	9.9001	0.0331	2.9494	0.0263	2.9757	0.7898	0.0245	0.8143	0.0000	3,059.2280	3,059.2280	0.1633	0.0000	3,063.3107
Unmitigated	0.9486	3.6172	9.9001	0.0331	2.9494	0.0263	2.9757	0.7898	0.0245	0.8143	0.0000	3,059.2280	3,059.2280	0.1633	0.0000	3,063.3107

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	581.00	567.00	484.00	1,613,654	1,613,654
Industrial Park	653.15	238.12	69.81	1,338,516	1,338,516
Strip Mall	3,456.96	3,279.12	1593.54	4,874,746	4,874,746
Total	4,691.11	4,084.24	2,147.35	7,826,916	7,826,916

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

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

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	934.0266	934.0266	0.0376	7.7800e-003	937.2844
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	934.0266	934.0266	0.0376	7.7800e-003	937.2844
NaturalGas Mitigated	0.0206	0.1824	0.1205	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	203.9853	203.9853	3.9100e-003	3.7400e-003	205.1975
NaturalGas Unmitigated	0.0206	0.1824	0.1205	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	203.9853	203.9853	3.9100e-003	3.7400e-003	205.1975

5.2 Energy by Land Use - NaturalGas
Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					

Condo/Townhouse	1.7095e+006	9.2200e-003	0.0788	0.0335	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	91.2255	91.2255	1.7500e-003	1.6700e-003	91.7676
Industrial Park	1.93832e+006	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
Strip Mall	174720	9.4000e-004	8.5600e-003	7.1900e-003	5.0000e-005		6.5000e-004	6.5000e-004		6.5000e-004	6.5000e-004	0.0000	9.3237	9.3237	1.8000e-004	1.7000e-004	9.3791
Total		0.0206	0.1824	0.1205	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	203.9853	203.9853	3.9100e-003	3.7400e-003	205.1975

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	1.7095e+006	9.2200e-003	0.0788	0.0335	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	91.2255	91.2255	1.7500e-003	1.6700e-003	91.7676
Industrial Park	1.93832e+006	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
Strip Mall	174720	9.4000e-004	8.5600e-003	7.1900e-003	5.0000e-005		6.5000e-004	6.5000e-004		6.5000e-004	6.5000e-004	0.0000	9.3237	9.3237	1.8000e-004	1.7000e-004	9.3791
Total		0.0206	0.1824	0.1205	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	203.9853	203.9853	3.9100e-003	3.7400e-003	205.1975

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	536802	175.4316	7.0600e-003	1.4600e-003	176.0435
Industrial Park	1.3158e+006	430.0150	0.0173	3.5800e-003	431.5148
Strip Mall	1.00542e+006	328.5801	0.0132	2.7400e-003	329.7261

Total		934.0267	0.0376	7.7800e-003	937.2845
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Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	536802	175.4316	7.0600e-003	1.4600e-003	176.0435
Industrial Park	1.3158e+006	430.0150	0.0173	3.5800e-003	431.5148
Strip Mall	1.00542e+006	328.5801	0.0132	2.7400e-003	329.7261
Total		934.0267	0.0376	7.7800e-003	937.2845

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	7.3658	0.1311	8.4896	0.0141		1.0901	1.0901		1.0901	1.0901	103.2958	44.5367	147.8325	0.0965	8.1200e-003	152.6662
Unmitigated	7.3658	0.1311	8.4896	0.0141		1.0901	1.0901		1.0901	1.0901	103.2958	44.5367	147.8325	0.0965	8.1200e-003	152.6662

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	1.0686					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.2746	0.1225	7.7453	0.0140		1.0860	1.0860		1.0860	1.0860	103.2958	43.3207	146.6165	0.0953	8.1200e-003	151.4209
Landscaping	0.0225	8.5800e-003	0.7443	4.0000e-005		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003	0.0000	1.2160	1.2160	1.1700e-003	0.0000	1.2453
Total	7.3658	0.1311	8.4896	0.0141		1.0901	1.0901		1.0901	1.0901	103.2958	44.5367	147.8325	0.0965	8.1200e-003	152.6662

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	1.0686					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.2746	0.1225	7.7453	0.0140		1.0860	1.0860		1.0860	1.0860	103.2958	43.3207	146.6165	0.0953	8.1200e-003	151.4209
Landscaping	0.0225	8.5800e-003	0.7443	4.0000e-005		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003	0.0000	1.2160	1.2160	1.1700e-003	0.0000	1.2453
Total	7.3658	0.1311	8.4896	0.0141		1.0901	1.0901		1.0901	1.0901	103.2958	44.5367	147.8325	0.0965	8.1200e-003	152.6662

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	185.1040	1.1282	0.0279	221.6298
Unmitigated	185.1040	1.1282	0.0279	221.6298

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	6.5154 / 4.10754	44.7064	0.2140	5.3700e-003	51.6566
Industrial Park	22.1144 / 0	101.1212	0.7244	0.0178	124.5348
Strip Mall	5.77766 / 3.54114	39.2764	0.1898	4.7600e-003	45.4384
Total		185.1040	1.1282	0.0279	221.6298

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	6.5154 / 4.10754	44.7064	0.2140	5.3700e-003	51.6566
Industrial Park	22.1144 / 0	101.1212	0.7244	0.0178	124.5348
Strip Mall	5.77766 / 3.54114	39.2764	0.1898	4.7600e-003	45.4384
Total		185.1040	1.1282	0.0279	221.6298

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	50.0332	2.9569	0.0000	123.9552
Unmitigated	50.0332	2.9569	0.0000	123.9552

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
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Land Use	tons	MT/yr			
Condo/Townhouse	46	9.3376	0.5518	0.0000	23.1335
Industrial Park	118.58	24.0707	1.4225	0.0000	59.6341
Strip Mall	81.9	16.6250	0.9825	0.0000	41.1876
Total		50.0332	2.9569	0.0000	123.9552

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	46	9.3376	0.5518	0.0000	23.1335
Industrial Park	118.58	24.0707	1.4225	0.0000	59.6341
Strip Mall	81.9	16.6250	0.9825	0.0000	41.1876
Total		50.0332	2.9569	0.0000	123.9552

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

East Otay Mesa Specific Plan Amendment Construction Phase 7 - San Diego Air Basin, Annual

East Otay Mesa Specific Plan Amendment Construction Phase 7 San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	95.63	1000sqft	4.00	95,625.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Architectural Coating - Rule 67.0.1 coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Parking	250	0
tblAreaCoating	Area_Nonresidential_Exterior	47813	0
tblAreaCoating	Area_Nonresidential_Interior	143438	0

tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	18.00	132.00
tblConstructionPhase	NumDays	230.00	262.00
tblConstructionPhase	NumDays	18.00	262.00
tblLandUse	BuildingSpaceSquareFeet	95,630.00	95,625.00
tblLandUse	LandUseSquareFeet	95,630.00	95,625.00

tblLandUse	LotAcreage	2.20	4.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	132.00	130.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	OperationalYear	2018	2024

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					
2024	1.1700	5.4795	7.1772	0.0125	0.0906	0.2472	0.3378	0.0244	0.2322	0.2566	0.0000	1,083.3372	1,083.3372	0.2465	0.0000	1,089.4985
Maximum	1.1700	5.4795	7.1772	0.0125	0.0906	0.2472	0.3378	0.0244	0.2322	0.2566	0.0000	1,083.3372	1,083.3372	0.2465	0.0000	1,089.4985

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					
2024	0.8552	5.9270	7.8890	0.0125	0.0906	0.3592	0.4498	0.0244	0.3592	0.3836	0.0000	1,083.3360	1,083.3360	0.2465	0.0000	1,089.4974
Maximum	0.8552	5.9270	7.8890	0.0125	0.0906	0.3592	0.4498	0.0244	0.3592	0.3836	0.0000	1,083.3360	1,083.3360	0.2465	0.0000	1,089.4974

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	26.90	-8.17	-9.92	0.00	0.00	-45.34	-33.18	0.00	-54.67	-49.47	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
29	10-24-2023	1-23-2024	0.4171	0.4254
30	1-24-2024	4-23-2024	1.6318	1.6644
31	4-24-2024	7-23-2024	1.6489	1.6819
32	7-24-2024	9-30-2024	1.2322	1.2568
		Highest	1.6489	1.6819

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3735	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7100e-003	1.7100e-003	0.0000	0.0000	1.8200e-003
Energy	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	533.4511	533.4511	0.0193	5.4800e-003	535.5656
Mobile	0.1227	0.4958	1.4505	5.3300e-003	0.5043	4.1600e-003	0.5085	0.1350	3.8700e-003	0.1389	0.0000	492.6979	492.6979	0.0246	0.0000	493.3137

Waste						0.0000	0.0000		0.0000	0.0000	24.0707	0.0000	24.0707	1.4225	0.0000	59.6341
Water						0.0000	0.0000		0.0000	0.0000	7.0159	94.1053	101.1212	0.7244	0.0178	124.5348
Total	0.5067	0.5908	1.5312	5.9000e-003	0.5043	0.0114	0.5157	0.1350	0.0111	0.1461	31.0866	1,120.2559	1,151.3425	2.1909	0.0233	1,213.0499

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3735	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7100e-003	1.7100e-003	0.0000	0.0000	1.8200e-003
Energy	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	533.4511	533.4511	0.0193	5.4800e-003	535.5656
Mobile	0.1227	0.4958	1.4505	5.3300e-003	0.5043	4.1600e-003	0.5085	0.1350	3.8700e-003	0.1389	0.0000	492.6979	492.6979	0.0246	0.0000	493.3137
Waste						0.0000	0.0000		0.0000	0.0000	24.0707	0.0000	24.0707	1.4225	0.0000	59.6341
Water						0.0000	0.0000		0.0000	0.0000	7.0159	94.1053	101.1212	0.7244	0.0178	124.5348
Total	0.5067	0.5908	1.5312	5.9000e-003	0.5043	0.0114	0.5157	0.1350	0.0111	0.1461	31.0866	1,120.2559	1,151.3425	2.1909	0.0233	1,213.0499

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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	Building Construction	Building Construction	1/1/2024	12/31/2024	5	262	
2	Paving	Paving	1/1/2024	12/31/2024	5	262	

3	Architectural Coating	Architectural Coating	1/1/2024	12/31/2024	5	132
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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: 143,438; Non-Residential Outdoor: 47,813; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	2	7.00	226	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	18	40.00	16.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2024

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	0.3839	3.5049	4.2269	7.0300e-003		0.1600	0.1600		0.1505	0.1505	0.0000	604.9292	604.9292	0.1428	0.0000	608.4999
Total	0.3839	3.5049	4.2269	7.0300e-003		0.1600	0.1600		0.1505	0.1505	0.0000	604.9292	604.9292	0.1428	0.0000	608.4999

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4900e-003	0.1576	0.0480	5.4000e-004	0.0139	1.9000e-004	0.0141	4.0200e-003	1.8000e-004	4.1900e-003	0.0000	52.5762	52.5762	3.5500e-003	0.0000	52.6650
Worker	0.0155	9.9200e-003	0.1053	3.6000e-004	0.0420	2.8000e-004	0.0423	0.0112	2.6000e-004	0.0114	0.0000	32.6721	32.6721	8.1000e-004	0.0000	32.6923
Total	0.0200	0.1675	0.1532	9.0000e-004	0.0559	4.7000e-004	0.0564	0.0152	4.4000e-004	0.0156	0.0000	85.2482	85.2482	4.3600e-003	0.0000	85.3573

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	0.1759	3.7136	4.6677	7.0300e-003		0.2362	0.2362		0.2362	0.2362	0.0000	604.9284	604.9284	0.1428	0.0000	608.4992
Total	0.1759	3.7136	4.6677	7.0300e-003		0.2362	0.2362		0.2362	0.2362	0.0000	604.9284	604.9284	0.1428	0.0000	608.4992

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4900e-003	0.1576	0.0480	5.4000e-004	0.0139	1.9000e-004	0.0141	4.0200e-003	1.8000e-004	4.1900e-003	0.0000	52.5762	52.5762	3.5500e-003	0.0000	52.6650
Worker	0.0155	9.9200e-003	0.1053	3.6000e-004	0.0420	2.8000e-004	0.0423	0.0112	2.6000e-004	0.0114	0.0000	32.6721	32.6721	8.1000e-004	0.0000	32.6923
Total	0.0200	0.1675	0.1532	9.0000e-004	0.0559	4.7000e-004	0.0564	0.0152	4.4000e-004	0.0156	0.0000	85.2482	85.2482	4.3600e-003	0.0000	85.3573

3.3 Paving - 2024

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	0.1560	1.4797	2.2360	3.4500e-003		0.0706	0.0706		0.0651	0.0651	0.0000	299.3101	299.3101	0.0948	0.0000	301.6807
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1560	1.4797	2.2360	3.4500e-003		0.0706	0.0706		0.0651	0.0651	0.0000	299.3101	299.3101	0.0948	0.0000	301.6807

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	9.7100e-003	6.2000e-003	0.0658	2.3000e-004	0.0263	1.7000e-004	0.0264	6.9800e-003	1.6000e-004	7.1400e-003	0.0000	20.4200	20.4200	5.1000e-004	0.0000	20.4327
Total	9.7100e-003	6.2000e-003	0.0658	2.3000e-004	0.0263	1.7000e-004	0.0264	6.9800e-003	1.6000e-004	7.1400e-003	0.0000	20.4200	20.4200	5.1000e-004	0.0000	20.4327

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	0.0811	1.6822	2.5012	3.4500e-003		0.0974	0.0974		0.0974	0.0974	0.0000	299.3098	299.3098	0.0948	0.0000	301.6804
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0811	1.6822	2.5012	3.4500e-003		0.0974	0.0974		0.0974	0.0974	0.0000	299.3098	299.3098	0.0948	0.0000	301.6804

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	9.7100e-003	6.2000e-003	0.0658	2.3000e-004	0.0263	1.7000e-004	0.0264	6.9800e-003	1.6000e-004	7.1400e-003	0.0000	20.4200	20.4200	5.1000e-004	0.0000	20.4327
Total	9.7100e-003	6.2000e-003	0.0658	2.3000e-004	0.0263	1.7000e-004	0.0264	6.9800e-003	1.6000e-004	7.1400e-003	0.0000	20.4200	20.4200	5.1000e-004	0.0000	20.4327

3.4 Architectural Coating - 2024

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	0.5498					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0474	0.3193	0.4743	7.8000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	66.8953	66.8953	3.7700e-003	0.0000	66.9894
Total	0.5972	0.3193	0.4743	7.8000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	66.8953	66.8953	3.7700e-003	0.0000	66.9894

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
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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	3.1100e-003	1.9800e-003	0.0211	7.0000e-005	8.4000e-003	6.0000e-005	8.4600e-003	2.2300e-003	5.0000e-005	2.2800e-003	0.0000	6.5344	6.5344	1.6000e-004	0.0000	6.5385
Total	3.1100e-003	1.9800e-003	0.0211	7.0000e-005	8.4000e-003	6.0000e-005	8.4600e-003	2.2300e-003	5.0000e-005	2.2800e-003	0.0000	6.5344	6.5344	1.6000e-004	0.0000	6.5385

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	0.5498					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0156	0.3555	0.4801	7.8000e-004		0.0249	0.0249		0.0249	0.0249	0.0000	66.8952	66.8952	3.7700e-003	0.0000	66.9893
Total	0.5654	0.3555	0.4801	7.8000e-004		0.0249	0.0249		0.0249	0.0249	0.0000	66.8952	66.8952	3.7700e-003	0.0000	66.9893

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	3.1100e-003	1.9800e-003	0.0211	7.0000e-005	8.4000e-003	6.0000e-005	8.4600e-003	2.2300e-003	5.0000e-005	2.2800e-003	0.0000	6.5344	6.5344	1.6000e-004	0.0000	6.5385

Total	3.1100e-003	1.9800e-003	0.0211	7.0000e-005	8.4000e-003	6.0000e-005	8.4600e-003	2.2300e-003	5.0000e-005	2.2800e-003	0.0000	6.5344	6.5344	1.6000e-004	0.0000	6.5385
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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	0.1227	0.4958	1.4505	5.3300e-003	0.5043	4.1600e-003	0.5085	0.1350	3.8700e-003	0.1389	0.0000	492.6979	492.6979	0.0246	0.0000	493.3137
Unmitigated	0.1227	0.4958	1.4505	5.3300e-003	0.5043	4.1600e-003	0.5085	0.1350	3.8700e-003	0.1389	0.0000	492.6979	492.6979	0.0246	0.0000	493.3137

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	653.15	238.12	69.81	1,338,516	1,338,516
Total	653.15	238.12	69.81	1,338,516	1,338,516

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
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	430.0150	430.0150	0.0173	3.5800e-003	431.5148
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	430.0150	430.0150	0.0173	3.5800e-003	431.5148
NaturalGas Mitigated	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
NaturalGas Unmitigated	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507

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					
Industrial Park	1.93832e+006	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
Total		0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507

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					
Industrial Park	1.93832e+006	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
Total		0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	1.3158e+006	430.0150	0.0173	3.5800e-003	431.5148
Total		430.0150	0.0173	3.5800e-003	431.5148

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
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Consumer Products	0.3735					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7100e-003	1.7100e-003	0.0000	0.0000	1.8200e-003
Total	0.3735	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7100e-003	1.7100e-003	0.0000	0.0000	1.8200e-003

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	0.3735					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7100e-003	1.7100e-003	0.0000	0.0000	1.8200e-003
Total	0.3735	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7100e-003	1.7100e-003	0.0000	0.0000	1.8200e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	101.1212	0.7244	0.0178	124.5348
Unmitigated	101.1212	0.7244	0.0178	124.5348

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	22.1144 / 0	101.1212	0.7244	0.0178	124.5348
Total		101.1212	0.7244	0.0178	124.5348

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	22.1144 / 0	101.1212	0.7244	0.0178	124.5348
Total		101.1212	0.7244	0.0178	124.5348

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	24.0707	1.4225	0.0000	59.6341
Unmitigated	24.0707	1.4225	0.0000	59.6341

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	118.58	24.0707	1.4225	0.0000	59.6341
Total		24.0707	1.4225	0.0000	59.6341

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Industrial Park	118.58	24.0707	1.4225	0.0000	59.6341
Total		24.0707	1.4225	0.0000	59.6341

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

East Otay Mesa Specific Plan Amendment Construction Phase 8 - San Diego Air Basin, Annual

East Otay Mesa Specific Plan Amendment Construction Phase 8 San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	95.63	1000sqft	4.00	95,625.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2025
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Architectural Coating - Rule 67.0.1 coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Parking	250	0
tblAreaCoating	Area_Nonresidential_Exterior	47813	0
tblAreaCoating	Area_Nonresidential_Interior	143438	0

tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	18.00	132.00
tblConstructionPhase	NumDays	230.00	262.00
tblConstructionPhase	NumDays	18.00	262.00
tblLandUse	BuildingSpaceSquareFeet	95,630.00	95,625.00
tblLandUse	LandUseSquareFeet	95,630.00	95,625.00

tblLandUse	LotAcreage	2.20	4.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	132.00	130.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	OperationalYear	2018	2025

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					
2025	1.1237	5.0533	7.1086	0.0124	0.0903	0.2129	0.3032	0.0243	0.2001	0.2244	0.0000	1,076.6551	1,076.6551	0.2444	0.0000	1,082.7660
Maximum	1.1237	5.0533	7.1086	0.0124	0.0903	0.2129	0.3032	0.0243	0.2001	0.2244	0.0000	1,076.6551	1,076.6551	0.2444	0.0000	1,082.7660

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					
2025	0.8506	5.9007	7.8452	0.0124	0.0903	0.3579	0.4481	0.0243	0.3578	0.3821	0.0000	1,076.6540	1,076.6540	0.2444	0.0000	1,082.7648
Maximum	0.8506	5.9007	7.8452	0.0124	0.0903	0.3579	0.4481	0.0243	0.3578	0.3821	0.0000	1,076.6540	1,076.6540	0.2444	0.0000	1,082.7648

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	24.31	-16.77	-10.36	0.00	0.00	-68.05	-47.79	0.00	-78.85	-70.31	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
33	10-24-2024	1-23-2025	0.3890	0.4251
34	1-24-2025	4-23-2025	1.5048	1.6447
35	4-24-2025	7-23-2025	1.5376	1.6806
36	7-24-2025	9-30-2025	1.1490	1.2559
		Highest	1.5376	1.6806

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3735	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7100e-003	1.7100e-003	0.0000	0.0000	1.8200e-003
Energy	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	533.4511	533.4511	0.0193	5.4800e-003	535.5656
Mobile	0.1167	0.4771	1.3710	5.1400e-003	0.5043	4.0500e-003	0.5083	0.1350	3.7700e-003	0.1388	0.0000	476.2813	476.2813	0.0236	0.0000	476.8718

Waste						0.0000	0.0000		0.0000	0.0000	24.0707	0.0000	24.0707	1.4225	0.0000	59.6341
Water						0.0000	0.0000		0.0000	0.0000	7.0159	94.1053	101.1212	0.7244	0.0178	124.5348
Total	0.5007	0.5722	1.4517	5.7100e-003	0.5043	0.0113	0.5156	0.1350	0.0110	0.1460	31.0866	1,103.8393	1,134.9258	2.1898	0.0233	1,196.6080

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3735	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7100e-003	1.7100e-003	0.0000	0.0000	1.8200e-003
Energy	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	533.4511	533.4511	0.0193	5.4800e-003	535.5656
Mobile	0.1167	0.4771	1.3710	5.1400e-003	0.5043	4.0500e-003	0.5083	0.1350	3.7700e-003	0.1388	0.0000	476.2813	476.2813	0.0236	0.0000	476.8718
Waste						0.0000	0.0000		0.0000	0.0000	24.0707	0.0000	24.0707	1.4225	0.0000	59.6341
Water						0.0000	0.0000		0.0000	0.0000	7.0159	94.1053	101.1212	0.7244	0.0178	124.5348
Total	0.5007	0.5722	1.4517	5.7100e-003	0.5043	0.0113	0.5156	0.1350	0.0110	0.1460	31.0866	1,103.8393	1,134.9258	2.1898	0.0233	1,196.6080

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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	Building Construction	Building Construction	1/1/2025	12/31/2025	5	262	
2	Paving	Paving	1/1/2025	12/31/2025	5	262	

3	Architectural Coating	Architectural Coating	1/1/2025	12/31/2025	5	132	
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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: 143,438; Non-Residential Outdoor: 47,813; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	2	7.00	226	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	18	40.00	16.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2025

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	0.3553	3.2389	4.1895	7.0100e-003		0.1370	0.1370		0.1289	0.1289	0.0000	602.8038	602.8038	0.1415	0.0000	606.3408
Total	0.3553	3.2389	4.1895	7.0100e-003		0.1370	0.1370		0.1289	0.1289	0.0000	602.8038	602.8038	0.1415	0.0000	606.3408

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3400e-003	0.1547	0.0468	5.3000e-004	0.0139	1.8000e-004	0.0140	4.0000e-003	1.7000e-004	4.1700e-003	0.0000	52.0569	52.0569	3.5000e-003	0.0000	52.1444
Worker	0.0148	9.1100e-003	0.0979	3.5000e-004	0.0419	2.7000e-004	0.0421	0.0111	2.5000e-004	0.0114	0.0000	31.2316	31.2316	7.4000e-004	0.0000	31.2502
Total	0.0191	0.1638	0.1447	8.8000e-004	0.0557	4.5000e-004	0.0562	0.0151	4.2000e-004	0.0156	0.0000	83.2885	83.2885	4.2400e-003	0.0000	83.3946

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	0.1752	3.6995	4.6499	7.0100e-003		0.2353	0.2353		0.2353	0.2353	0.0000	602.8031	602.8031	0.1415	0.0000	606.3400
Total	0.1752	3.6995	4.6499	7.0100e-003		0.2353	0.2353		0.2353	0.2353	0.0000	602.8031	602.8031	0.1415	0.0000	606.3400

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3400e-003	0.1547	0.0468	5.3000e-004	0.0139	1.8000e-004	0.0140	4.0000e-003	1.7000e-004	4.1700e-003	0.0000	52.0569	52.0569	3.5000e-003	0.0000	52.1444
Worker	0.0148	9.1100e-003	0.0979	3.5000e-004	0.0419	2.7000e-004	0.0421	0.0111	2.5000e-004	0.0114	0.0000	31.2316	31.2316	7.4000e-004	0.0000	31.2502
Total	0.0191	0.1638	0.1447	8.8000e-004	0.0557	4.5000e-004	0.0562	0.0151	4.2000e-004	0.0156	0.0000	83.2885	83.2885	4.2400e-003	0.0000	83.3946

3.3 Paving - 2025

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	0.1447	1.3441	2.2215	3.4300e-003		0.0618	0.0618		0.0571	0.0571	0.0000	298.1569	298.1569	0.0945	0.0000	300.5184
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1447	1.3441	2.2215	3.4300e-003		0.0618	0.0618		0.0571	0.0571	0.0000	298.1569	298.1569	0.0945	0.0000	300.5184

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	9.2400e-003	5.7000e-003	0.0612	2.2000e-004	0.0262	1.7000e-004	0.0263	6.9500e-003	1.6000e-004	7.1100e-003	0.0000	19.5197	19.5197	4.7000e-004	0.0000	19.5314
Total	9.2400e-003	5.7000e-003	0.0612	2.2000e-004	0.0262	1.7000e-004	0.0263	6.9500e-003	1.6000e-004	7.1100e-003	0.0000	19.5197	19.5197	4.7000e-004	0.0000	19.5314

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	0.0808	1.6758	2.4916	3.4300e-003		0.0970	0.0970		0.0970	0.0970	0.0000	298.1565	298.1565	0.0945	0.0000	300.5180
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0808	1.6758	2.4916	3.4300e-003		0.0970	0.0970		0.0970	0.0970	0.0000	298.1565	298.1565	0.0945	0.0000	300.5180

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	9.2400e-003	5.7000e-003	0.0612	2.2000e-004	0.0262	1.7000e-004	0.0263	6.9500e-003	1.6000e-004	7.1100e-003	0.0000	19.5197	19.5197	4.7000e-004	0.0000	19.5314
Total	9.2400e-003	5.7000e-003	0.0612	2.2000e-004	0.0262	1.7000e-004	0.0263	6.9500e-003	1.6000e-004	7.1100e-003	0.0000	19.5197	19.5197	4.7000e-004	0.0000	19.5314

3.4 Architectural Coating - 2025

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	0.5477					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0446	0.2990	0.4722	7.8000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	66.6399	66.6399	3.6400e-003	0.0000	66.7308
Total	0.5923	0.2990	0.4722	7.8000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	66.6399	66.6399	3.6400e-003	0.0000	66.7308

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
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Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9600e-003	1.8200e-003	0.0196	7.0000e-005	8.3700e-003	5.0000e-005	8.4300e-003	2.2200e-003	5.0000e-005	2.2800e-003	0.0000	6.2463	6.2463	1.5000e-004	0.0000	6.2500
Total	2.9600e-003	1.8200e-003	0.0196	7.0000e-005	8.3700e-003	5.0000e-005	8.4300e-003	2.2200e-003	5.0000e-005	2.2800e-003	0.0000	6.2463	6.2463	1.5000e-004	0.0000	6.2500

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	0.5477					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	3.6400e-003	0.0000	66.7307
Total	0.5633	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	3.6400e-003	0.0000	66.7307

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9600e-003	1.8200e-003	0.0196	7.0000e-005	8.3700e-003	5.0000e-005	8.4300e-003	2.2200e-003	5.0000e-005	2.2800e-003	0.0000	6.2463	6.2463	1.5000e-004	0.0000	6.2500

Total	2.9600e-003	1.8200e-003	0.0196	7.0000e-005	8.3700e-003	5.0000e-005	8.4300e-003	2.2200e-003	5.0000e-005	2.2800e-003	0.0000	6.2463	6.2463	1.5000e-004	0.0000	6.2500
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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	0.1167	0.4771	1.3710	5.1400e-003	0.5043	4.0500e-003	0.5083	0.1350	3.7700e-003	0.1388	0.0000	476.2813	476.2813	0.0236	0.0000	476.8718
Unmitigated	0.1167	0.4771	1.3710	5.1400e-003	0.5043	4.0500e-003	0.5083	0.1350	3.7700e-003	0.1388	0.0000	476.2813	476.2813	0.0236	0.0000	476.8718

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	653.15	238.12	69.81	1,338,516	1,338,516
Total	653.15	238.12	69.81	1,338,516	1,338,516

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
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.609162	0.038894	0.178600	0.101308	0.013823	0.005356	0.016956	0.024628	0.001928	0.001823	0.005807	0.000764	0.000950

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	430.0150	430.0150	0.0173	3.5800e-003	431.5148
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	430.0150	430.0150	0.0173	3.5800e-003	431.5148
NaturalGas Mitigated	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
NaturalGas Unmitigated	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507

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					
Industrial Park	1.93832e+006	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
Total		0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507

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					
Industrial Park	1.93832e+006	0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507
Total		0.0105	0.0950	0.0798	5.7000e-004		7.2200e-003	7.2200e-003		7.2200e-003	7.2200e-003	0.0000	103.4361	103.4361	1.9800e-003	1.9000e-003	104.0507

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	1.3158e+006	430.0150	0.0173	3.5800e-003	431.5148
Total		430.0150	0.0173	3.5800e-003	431.5148

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
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Consumer Products	0.3735					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7100e-003	1.7100e-003	0.0000	0.0000	1.8200e-003
Total	0.3735	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7100e-003	1.7100e-003	0.0000	0.0000	1.8200e-003

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	0.3735					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7100e-003	1.7100e-003	0.0000	0.0000	1.8200e-003
Total	0.3735	1.0000e-005	8.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7100e-003	1.7100e-003	0.0000	0.0000	1.8200e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	101.1212	0.7244	0.0178	124.5348
Unmitigated	101.1212	0.7244	0.0178	124.5348

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	22.1144 / 0	101.1212	0.7244	0.0178	124.5348
Total		101.1212	0.7244	0.0178	124.5348

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	22.1144 / 0	101.1212	0.7244	0.0178	124.5348
Total		101.1212	0.7244	0.0178	124.5348

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	24.0707	1.4225	0.0000	59.6341
Unmitigated	24.0707	1.4225	0.0000	59.6341

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	118.58	24.0707	1.4225	0.0000	59.6341
Total		24.0707	1.4225	0.0000	59.6341

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Industrial Park	118.58	24.0707	1.4225	0.0000	59.6341
Total		24.0707	1.4225	0.0000	59.6341

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

East Otay Mesa Specific Plan Amendment Construction Phase 9 - San Diego Air Basin, Annual

East Otay Mesa Specific Plan Amendment Construction Phase 9 San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	47.81	1000sqft	4.00	47,813.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2026
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Architectural Coating - Rule 67.0.1 coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Parking	250	0
tblAreaCoating	Area_Nonresidential_Exterior	23907	0
tblAreaCoating	Area_Nonresidential_Interior	71720	0

tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	18.00	132.00
tblConstructionPhase	NumDays	230.00	262.00
tblConstructionPhase	NumDays	18.00	262.00
tblLandUse	BuildingSpaceSquareFeet	47,810.00	47,813.00
tblLandUse	LandUseSquareFeet	47,810.00	47,813.00

tblLandUse	LotAcreage	1.10	4.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	132.00	130.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	OperationalYear	2018	2026

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					
2026	0.8380	4.9686	7.0189	0.0119	0.0582	0.2127	0.2709	0.0156	0.1998	0.2154	0.0000	1,030.3376	1,030.3376	0.2422	0.0000	1,036.3915
Maximum	0.8380	4.9686	7.0189	0.0119	0.0582	0.2127	0.2709	0.0156	0.1998	0.2154	0.0000	1,030.3376	1,030.3376	0.2422	0.0000	1,036.3915

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					
2026	0.5649	5.8160	7.7555	0.0119	0.0582	0.3576	0.4158	0.0156	0.3576	0.3732	0.0000	1,030.3364	1,030.3364	0.2422	0.0000	1,036.3904
Maximum	0.5649	5.8160	7.7555	0.0119	0.0582	0.3576	0.4158	0.0156	0.3576	0.3732	0.0000	1,030.3364	1,030.3364	0.2422	0.0000	1,036.3904

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	32.60	-17.05	-10.49	0.00	0.00	-68.14	-53.50	0.00	-78.94	-73.21	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
37	10-24-2025	1-23-2026	0.3656	0.4018
38	1-24-2026	4-23-2026	1.4145	1.5544
39	4-24-2026	7-23-2026	1.4457	1.5887
40	7-24-2026	9-30-2026	1.0803	1.1872
		Highest	1.4457	1.5887

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1868	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-004
Energy	5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	266.7283	266.7283	9.6500e-003	2.7400e-003	267.7856
Mobile	0.0558	0.2307	0.6534	2.4900e-003	0.2521	1.9400e-003	0.2540	0.0675	1.8100e-003	0.0693	0.0000	231.1635	231.1635	0.0114	0.0000	231.4486

Waste						0.0000	0.0000		0.0000	0.0000	12.0333	0.0000	12.0333	0.7112	0.0000	29.8120
Water						0.0000	0.0000		0.0000	0.0000	3.5076	47.0477	50.5553	0.3622	8.9000e-003	62.2609
Total	0.2478	0.2782	0.6938	2.7800e-003	0.2521	5.5500e-003	0.2577	0.0675	5.4200e-003	0.0729	15.5409	544.9404	560.4813	1.0944	0.0116	591.3080

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1868	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-004
Energy	5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	266.7283	266.7283	9.6500e-003	2.7400e-003	267.7856
Mobile	0.0558	0.2307	0.6534	2.4900e-003	0.2521	1.9400e-003	0.2540	0.0675	1.8100e-003	0.0693	0.0000	231.1635	231.1635	0.0114	0.0000	231.4486
Waste						0.0000	0.0000		0.0000	0.0000	12.0333	0.0000	12.0333	0.7112	0.0000	29.8120
Water						0.0000	0.0000		0.0000	0.0000	3.5076	47.0477	50.5553	0.3622	8.9000e-003	62.2609
Total	0.2478	0.2782	0.6938	2.7800e-003	0.2521	5.5500e-003	0.2577	0.0675	5.4200e-003	0.0729	15.5409	544.9404	560.4813	1.0944	0.0116	591.3080

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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	Building Construction	Building Construction	1/1/2026	12/31/2026	5	262	
2	Paving	Paving	1/1/2026	12/31/2026	5	262	

3	Architectural Coating	Architectural Coating	1/1/2026	12/31/2026	5	132	
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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: 71,720; Non-Residential Outdoor: 23,907; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	2	7.00	226	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	18	20.00	8.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2026

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	0.3553	3.2389	4.1895	7.0100e-003		0.1370	0.1370		0.1289	0.1289	0.0000	602.8038	602.8038	0.1415	0.0000	606.3408
Total	0.3553	3.2389	4.1895	7.0100e-003		0.1370	0.1370		0.1289	0.1289	0.0000	602.8038	602.8038	0.1415	0.0000	606.3408

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	2.1100e-003	0.0762	0.0231	2.6000e-004	6.9300e-003	9.0000e-005	7.0200e-003	2.0000e-003	8.0000e-005	2.0800e-003	0.0000	25.8795	25.8795	1.7300e-003	0.0000	25.9228
Worker	7.0900e-003	4.2400e-003	0.0460	1.7000e-004	0.0209	1.3000e-004	0.0211	5.5600e-003	1.2000e-004	5.6800e-003	0.0000	15.0439	15.0439	3.5000e-004	0.0000	15.0526
Total	9.2000e-003	0.0805	0.0691	4.3000e-004	0.0279	2.2000e-004	0.0281	7.5600e-003	2.0000e-004	7.7600e-003	0.0000	40.9234	40.9234	2.0800e-003	0.0000	40.9753

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	0.1752	3.6995	4.6499	7.0100e-003		0.2353	0.2353		0.2353	0.2353	0.0000	602.8031	602.8031	0.1415	0.0000	606.3400
Total	0.1752	3.6995	4.6499	7.0100e-003		0.2353	0.2353		0.2353	0.2353	0.0000	602.8031	602.8031	0.1415	0.0000	606.3400

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	2.1100e-003	0.0762	0.0231	2.6000e-004	6.9300e-003	9.0000e-005	7.0200e-003	2.0000e-003	8.0000e-005	2.0800e-003	0.0000	25.8795	25.8795	1.7300e-003	0.0000	25.9228
Worker	7.0900e-003	4.2400e-003	0.0460	1.7000e-004	0.0209	1.3000e-004	0.0211	5.5600e-003	1.2000e-004	5.6800e-003	0.0000	15.0439	15.0439	3.5000e-004	0.0000	15.0526
Total	9.2000e-003	0.0805	0.0691	4.3000e-004	0.0279	2.2000e-004	0.0281	7.5600e-003	2.0000e-004	7.7600e-003	0.0000	40.9234	40.9234	2.0800e-003	0.0000	40.9753

3.3 Paving - 2026

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	0.1447	1.3441	2.2215	3.4300e-003		0.0618	0.0618		0.0571	0.0571	0.0000	298.1569	298.1569	0.0945	0.0000	300.5184
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1447	1.3441	2.2215	3.4300e-003		0.0618	0.0618		0.0571	0.0571	0.0000	298.1569	298.1569	0.0945	0.0000	300.5184

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.8600e-003	5.3000e-003	0.0575	2.1000e-004	0.0262	1.7000e-004	0.0263	6.9500e-003	1.5000e-004	7.1100e-003	0.0000	18.8049	18.8049	4.3000e-004	0.0000	18.8157
Total	8.8600e-003	5.3000e-003	0.0575	2.1000e-004	0.0262	1.7000e-004	0.0263	6.9500e-003	1.5000e-004	7.1100e-003	0.0000	18.8049	18.8049	4.3000e-004	0.0000	18.8157

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	0.0808	1.6758	2.4916	3.4300e-003		0.0970	0.0970		0.0970	0.0970	0.0000	298.1565	298.1565	0.0945	0.0000	300.5180
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0808	1.6758	2.4916	3.4300e-003		0.0970	0.0970		0.0970	0.0970	0.0000	298.1565	298.1565	0.0945	0.0000	300.5180

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.8600e-003	5.3000e-003	0.0575	2.1000e-004	0.0262	1.7000e-004	0.0263	6.9500e-003	1.5000e-004	7.1100e-003	0.0000	18.8049	18.8049	4.3000e-004	0.0000	18.8157
Total	8.8600e-003	5.3000e-003	0.0575	2.1000e-004	0.0262	1.7000e-004	0.0263	6.9500e-003	1.5000e-004	7.1100e-003	0.0000	18.8049	18.8049	4.3000e-004	0.0000	18.8157

3.4 Architectural Coating - 2026

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	0.2739					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0446	0.2990	0.4722	7.8000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	66.6399	66.6399	3.6400e-003	0.0000	66.7308
Total	0.3185	0.2990	0.4722	7.8000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	66.6399	66.6399	3.6400e-003	0.0000	66.7308

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
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Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	8.5000e-004	9.2000e-003	3.0000e-005	4.1900e-003	3.0000e-005	4.2100e-003	1.1100e-003	2.0000e-005	1.1400e-003	0.0000	3.0088	3.0088	7.0000e-005	0.0000	3.0105
Total	1.4200e-003	8.5000e-004	9.2000e-003	3.0000e-005	4.1900e-003	3.0000e-005	4.2100e-003	1.1100e-003	2.0000e-005	1.1400e-003	0.0000	3.0088	3.0088	7.0000e-005	0.0000	3.0105

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	0.2739					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	3.6400e-003	0.0000	66.7307
Total	0.2894	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	3.6400e-003	0.0000	66.7307

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	8.5000e-004	9.2000e-003	3.0000e-005	4.1900e-003	3.0000e-005	4.2100e-003	1.1100e-003	2.0000e-005	1.1400e-003	0.0000	3.0088	3.0088	7.0000e-005	0.0000	3.0105

Total	1.4200e-003	8.5000e-004	9.2000e-003	3.0000e-005	4.1900e-003	3.0000e-005	4.2100e-003	1.1100e-003	2.0000e-005	1.1400e-003	0.0000	3.0088	3.0088	7.0000e-005	0.0000	3.0105
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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	0.0558	0.2307	0.6534	2.4900e-003	0.2521	1.9400e-003	0.2540	0.0675	1.8100e-003	0.0693	0.0000	231.1635	231.1635	0.0114	0.0000	231.4486
Unmitigated	0.0558	0.2307	0.6534	2.4900e-003	0.2521	1.9400e-003	0.2540	0.0675	1.8100e-003	0.0693	0.0000	231.1635	231.1635	0.0114	0.0000	231.4486

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	326.54	119.05	34.90	669,188	669,188
Total	326.54	119.05	34.90	669,188	669,188

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
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.611343	0.038414	0.178161	0.100214	0.013382	0.005338	0.017151	0.024839	0.001931	0.001783	0.005765	0.000770	0.000908

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	215.0097	215.0097	8.6500e-003	1.7900e-003	215.7597
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	215.0097	215.0097	8.6500e-003	1.7900e-003	215.7597
NaturalGas Mitigated	5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	51.7186	51.7186	9.9000e-004	9.5000e-004	52.0259
NaturalGas Unmitigated	5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	51.7186	51.7186	9.9000e-004	9.5000e-004	52.0259

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					
Industrial Park	969170	5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	51.7186	51.7186	9.9000e-004	9.5000e-004	52.0259
Total		5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	51.7186	51.7186	9.9000e-004	9.5000e-004	52.0259

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					
Industrial Park	969170	5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	51.7186	51.7186	9.9000e-004	9.5000e-004	52.0259
Total		5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	51.7186	51.7186	9.9000e-004	9.5000e-004	52.0259

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	657907	215.0097	8.6500e-003	1.7900e-003	215.7597
Total		215.0097	8.6500e-003	1.7900e-003	215.7597

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
--	-----------------	-----------	-----	-----	------

Land Use	kWh/yr	MT/yr			
Industrial Park	657907	215.0097	8.6500e-003	1.7900e-003	215.7597
Total		215.0097	8.6500e-003	1.7900e-003	215.7597

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1868	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-004
Unmitigated	0.1868	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-004

6.2 Area by SubCategory

Unmitigated

[illegible]

Consumer Products	0.1867					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-004
Total	0.1868	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-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	0.1867					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-004
Total	0.1868	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	50.5553	0.3622	8.9000e-003	62.2609
Unmitigated	50.5553	0.3622	8.9000e-003	62.2609

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	11.0561 / 0	50.5553	0.3622	8.9000e-003	62.2609
Total		50.5553	0.3622	8.9000e-003	62.2609

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	11.0561 / 0	50.5553	0.3622	8.9000e-003	62.2609
Total		50.5553	0.3622	8.9000e-003	62.2609

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	12.0333	0.7112	0.0000	29.8120
Unmitigated	12.0333	0.7112	0.0000	29.8120

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	59.28	12.0333	0.7112	0.0000	29.8120
Total		12.0333	0.7112	0.0000	29.8120

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Industrial Park	59.28	12.0333	0.7112	0.0000	29.8120
Total		12.0333	0.7112	0.0000	29.8120

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

East Otay Mesa Specific Plan Amendment Construction Phase 10 - San Diego Air Basin, Annual

East Otay Mesa Specific Plan Amendment Construction Phase 10

San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	47.81	1000sqft	4.00	47,813.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13	Operational Year	2027		
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Architectural Coating - Rule 67.0.1 coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Parking	250	0
tblAreaCoating	Area_Nonresidential_Exterior	23907	0
tblAreaCoating	Area_Nonresidential_Interior	71720	0

tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	18.00	132.00
tblConstructionPhase	NumDays	230.00	262.00
tblConstructionPhase	NumDays	18.00	262.00
tblLandUse	BuildingSpaceSquareFeet	47,810.00	47,813.00
tblLandUse	LandUseSquareFeet	47,810.00	47,813.00

tblLandUse	LotAcreage	1.10	4.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	132.00	130.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	OperationalYear	2018	2027

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					
2027	0.8372	4.9669	7.0122	0.0119	0.0582	0.2127	0.2709	0.0156	0.1998	0.2154	0.0000	1,028.9663	1,028.9663	0.2421	0.0000	1,035.0185
Maximum	0.8372	4.9669	7.0122	0.0119	0.0582	0.2127	0.2709	0.0156	0.1998	0.2154	0.0000	1,028.9663	1,028.9663	0.2421	0.0000	1,035.0185

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					
2027	0.5641	5.8143	7.7488	0.0119	0.0582	0.3576	0.4158	0.0156	0.3575	0.3732	0.0000	1,028.9652	1,028.9652	0.2421	0.0000	1,035.0173
Maximum	0.5641	5.8143	7.7488	0.0119	0.0582	0.3576	0.4158	0.0156	0.3575	0.3732	0.0000	1,028.9652	1,028.9652	0.2421	0.0000	1,035.0173

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	32.63	-17.06	-10.50	0.00	0.00	-68.14	-53.50	0.00	-78.95	-73.22	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
41	10-24-2026	1-23-2027	0.3654	0.4016
42	1-24-2027	4-23-2027	1.4139	1.5538
43	4-24-2027	7-23-2027	1.4451	1.5881
44	7-24-2027	9-30-2027	1.0798	1.1867
		Highest	1.4451	1.5881

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1868	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-004
Energy	5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	266.7283	266.7283	9.6500e-003	2.7400e-003	267.7856
Mobile	0.0535	0.2237	0.6257	2.4300e-003	0.2521	1.8400e-003	0.2539	0.0675	1.7100e-003	0.0692	0.0000	225.0127	225.0127	0.0111	0.0000	225.2889

Waste						0.0000	0.0000		0.0000	0.0000	12.0333	0.0000	12.0333	0.7112	0.0000	29.8120
Water						0.0000	0.0000		0.0000	0.0000	3.5076	47.0477	50.5553	0.3622	8.9000e-003	62.2609
Total	0.2455	0.2712	0.6660	2.7200e-003	0.2521	5.4500e-003	0.2575	0.0675	5.3200e-003	0.0728	15.5409	538.7896	554.3305	1.0940	0.0116	585.1483

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1868	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-004
Energy	5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	266.7283	266.7283	9.6500e-003	2.7400e-003	267.7856
Mobile	0.0535	0.2237	0.6257	2.4300e-003	0.2521	1.8400e-003	0.2539	0.0675	1.7100e-003	0.0692	0.0000	225.0127	225.0127	0.0111	0.0000	225.2889
Waste						0.0000	0.0000		0.0000	0.0000	12.0333	0.0000	12.0333	0.7112	0.0000	29.8120
Water						0.0000	0.0000		0.0000	0.0000	3.5076	47.0477	50.5553	0.3622	8.9000e-003	62.2609
Total	0.2455	0.2712	0.6660	2.7200e-003	0.2521	5.4500e-003	0.2575	0.0675	5.3200e-003	0.0728	15.5409	538.7896	554.3305	1.0940	0.0116	585.1483

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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	Building Construction	Building Construction	1/1/2027	12/31/2027	5	262	
2	Paving	Paving	1/1/2027	12/31/2027	5	262	

3	Architectural Coating	Architectural Coating	1/1/2027	12/31/2027	5	132	
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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: 71,720; Non-Residential Outdoor: 23,907; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	2	7.00	226	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	18	20.00	8.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2027

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	0.3553	3.2389	4.1895	7.0100e-003		0.1370	0.1370		0.1289	0.1289	0.0000	602.8038	602.8038	0.1415	0.0000	606.3408
Total	0.3553	3.2389	4.1895	7.0100e-003		0.1370	0.1370		0.1289	0.1289	0.0000	602.8038	602.8038	0.1415	0.0000	606.3408

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	2.0700e-003	0.0752	0.0228	2.6000e-004	6.9300e-003	9.0000e-005	7.0100e-003	2.0000e-003	8.0000e-005	2.0800e-003	0.0000	25.7429	25.7429	1.7200e-003	0.0000	25.7858
Worker	6.7800e-003	3.9600e-003	0.0434	1.6000e-004	0.0209	1.3000e-004	0.0211	5.5600e-003	1.2000e-004	5.6800e-003	0.0000	14.5399	14.5399	3.2000e-004	0.0000	14.5481
Total	8.8500e-003	0.0791	0.0662	4.2000e-004	0.0279	2.2000e-004	0.0281	7.5600e-003	2.0000e-004	7.7600e-003	0.0000	40.2828	40.2828	2.0400e-003	0.0000	40.3339

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	0.1752	3.6995	4.6499	7.0100e-003		0.2353	0.2353		0.2353	0.2353	0.0000	602.8031	602.8031	0.1415	0.0000	606.3400
Total	0.1752	3.6995	4.6499	7.0100e-003		0.2353	0.2353		0.2353	0.2353	0.0000	602.8031	602.8031	0.1415	0.0000	606.3400

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	2.0700e-003	0.0752	0.0228	2.6000e-004	6.9300e-003	9.0000e-005	7.0100e-003	2.0000e-003	8.0000e-005	2.0800e-003	0.0000	25.7429	25.7429	1.7200e-003	0.0000	25.7858
Worker	6.7800e-003	3.9600e-003	0.0434	1.6000e-004	0.0209	1.3000e-004	0.0211	5.5600e-003	1.2000e-004	5.6800e-003	0.0000	14.5399	14.5399	3.2000e-004	0.0000	14.5481
Total	8.8500e-003	0.0791	0.0662	4.2000e-004	0.0279	2.2000e-004	0.0281	7.5600e-003	2.0000e-004	7.7600e-003	0.0000	40.2828	40.2828	2.0400e-003	0.0000	40.3339

3.3 Paving - 2027

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	0.1447	1.3441	2.2215	3.4300e-003		0.0618	0.0618		0.0571	0.0571	0.0000	298.1569	298.1569	0.0945	0.0000	300.5184
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1447	1.3441	2.2215	3.4300e-003		0.0618	0.0618		0.0571	0.0571	0.0000	298.1569	298.1569	0.0945	0.0000	300.5184

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.4800e-003	4.9400e-003	0.0542	2.0000e-004	0.0262	1.6000e-004	0.0263	6.9500e-003	1.4000e-004	7.1000e-003	0.0000	18.1749	18.1749	4.1000e-004	0.0000	18.1851
Total	8.4800e-003	4.9400e-003	0.0542	2.0000e-004	0.0262	1.6000e-004	0.0263	6.9500e-003	1.4000e-004	7.1000e-003	0.0000	18.1749	18.1749	4.1000e-004	0.0000	18.1851

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	0.0808	1.6758	2.4916	3.4300e-003		0.0970	0.0970		0.0970	0.0970	0.0000	298.1565	298.1565	0.0945	0.0000	300.5180
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0808	1.6758	2.4916	3.4300e-003		0.0970	0.0970		0.0970	0.0970	0.0000	298.1565	298.1565	0.0945	0.0000	300.5180

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.4800e-003	4.9400e-003	0.0542	2.0000e-004	0.0262	1.6000e-004	0.0263	6.9500e-003	1.4000e-004	7.1000e-003	0.0000	18.1749	18.1749	4.1000e-004	0.0000	18.1851
Total	8.4800e-003	4.9400e-003	0.0542	2.0000e-004	0.0262	1.6000e-004	0.0263	6.9500e-003	1.4000e-004	7.1000e-003	0.0000	18.1749	18.1749	4.1000e-004	0.0000	18.1851

3.4 Architectural Coating - 2027

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	0.2739					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0446	0.2990	0.4722	7.8000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	66.6399	66.6399	3.6400e-003	0.0000	66.7308
Total	0.3185	0.2990	0.4722	7.8000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	66.6399	66.6399	3.6400e-003	0.0000	66.7308

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
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Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3600e-003	7.9000e-004	8.6700e-003	3.0000e-005	4.1900e-003	3.0000e-005	4.2100e-003	1.1100e-003	2.0000e-005	1.1400e-003	0.0000	2.9080	2.9080	6.0000e-005	0.0000	2.9096
Total	1.3600e-003	7.9000e-004	8.6700e-003	3.0000e-005	4.1900e-003	3.0000e-005	4.2100e-003	1.1100e-003	2.0000e-005	1.1400e-003	0.0000	2.9080	2.9080	6.0000e-005	0.0000	2.9096

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	0.2739					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	3.6400e-003	0.0000	66.7307
Total	0.2894	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	3.6400e-003	0.0000	66.7307

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3600e-003	7.9000e-004	8.6700e-003	3.0000e-005	4.1900e-003	3.0000e-005	4.2100e-003	1.1100e-003	2.0000e-005	1.1400e-003	0.0000	2.9080	2.9080	6.0000e-005	0.0000	2.9096

Total	1.3600e-003	7.9000e-004	8.6700e-003	3.0000e-005	4.1900e-003	3.0000e-005	4.2100e-003	1.1100e-003	2.0000e-005	1.1400e-003	0.0000	2.9080	2.9080	6.0000e-005	0.0000	2.9096
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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	0.0535	0.2237	0.6257	2.4300e-003	0.2521	1.8400e-003	0.2539	0.0675	1.7100e-003	0.0692	0.0000	225.0127	225.0127	0.0111	0.0000	225.2889
Unmitigated	0.0535	0.2237	0.6257	2.4300e-003	0.2521	1.8400e-003	0.2539	0.0675	1.7100e-003	0.0692	0.0000	225.0127	225.0127	0.0111	0.0000	225.2889

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	326.54	119.05	34.90	669,188	669,188
Total	326.54	119.05	34.90	669,188	669,188

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
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.613162	0.038013	0.177872	0.099323	0.012979	0.005313	0.017297	0.024998	0.001928	0.001754	0.005717	0.000774	0.000870

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	215.0097	215.0097	8.6500e-003	1.7900e-003	215.7597
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	215.0097	215.0097	8.6500e-003	1.7900e-003	215.7597
NaturalGas Mitigated	5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	51.7186	51.7186	9.9000e-004	9.5000e-004	52.0259
NaturalGas Unmitigated	5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	51.7186	51.7186	9.9000e-004	9.5000e-004	52.0259

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					
Industrial Park	969170	5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	51.7186	51.7186	9.9000e-004	9.5000e-004	52.0259
Total		5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	51.7186	51.7186	9.9000e-004	9.5000e-004	52.0259

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					
Industrial Park	969170	5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	51.7186	51.7186	9.9000e-004	9.5000e-004	52.0259
Total		5.2300e-003	0.0475	0.0399	2.9000e-004		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	51.7186	51.7186	9.9000e-004	9.5000e-004	52.0259

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	657907	215.0097	8.6500e-003	1.7900e-003	215.7597
Total		215.0097	8.6500e-003	1.7900e-003	215.7597

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
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Land Use	kWh/yr	MT/yr			
Industrial Park	657907	215.0097	8.6500e-003	1.7900e-003	215.7597
Total		215.0097	8.6500e-003	1.7900e-003	215.7597

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1868	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-004
Unmitigated	0.1868	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-004

6.2 Area by SubCategory

Unmitigated

[illegible]

Consumer Products	0.1867					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-004
Total	0.1868	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-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	0.1867					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-004
Total	0.1868	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.5000e-004	8.5000e-004	0.0000	0.0000	9.1000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	50.5553	0.3622	8.9000e-003	62.2609
Unmitigated	50.5553	0.3622	8.9000e-003	62.2609

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	11.0561 / 0	50.5553	0.3622	8.9000e-003	62.2609
Total		50.5553	0.3622	8.9000e-003	62.2609

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	11.0561 / 0	50.5553	0.3622	8.9000e-003	62.2609
Total		50.5553	0.3622	8.9000e-003	62.2609

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	12.0333	0.7112	0.0000	29.8120
Unmitigated	12.0333	0.7112	0.0000	29.8120

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	59.28	12.0333	0.7112	0.0000	29.8120
Total		12.0333	0.7112	0.0000	29.8120

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Industrial Park	59.28	12.0333	0.7112	0.0000	29.8120
Total		12.0333	0.7112	0.0000	29.8120

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

East Otay Mesa Specific Plan Amendment - San Diego Air Basin, Annual

East Otay Mesa Specific Plan Amendment - Operation with PDFs

San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	765.00	1000sqft	47.72	765,000.00	0
Condo/Townhouse	3,158.00	Dwelling Unit	124.40	3,158,000.00	9032
Regional Shopping Center	68.00	1000sqft	6.80	68,000.00	0
Strip Mall	10.00	1000sqft	1.00	10,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2028
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	360.25	CH4 Intensity (lb/MW hr)	0.015	N2O Intensity (lb/MW hr)	0.003

1.3 User Entered Comments & Non-Default Data

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100

tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	50	0
tblAreaMitigation	UseLowVOCPaintParkingValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	50	0
tblConstructionPhase	NumDays	220.00	0.00
tblConstructionPhase	NumDays	3,100.00	0.00
tblConstructionPhase	NumDays	200.00	0.00
tblConstructionPhase	NumDays	310.00	0.00
tblConstructionPhase	NumDays	220.00	0.00
tblConstructionPhase	NumDays	120.00	0.00
tblEnergyUse	T24E	257.33	185.28
tblEnergyUse	T24E	4.88	4.64
tblEnergyUse	T24E	3.34	3.17
tblEnergyUse	T24E	3.34	3.17
tblEnergyUse	T24NG	12,915.01	9,298.81
tblEnergyUse	T24NG	16.07	15.27
tblEnergyUse	T24NG	1.15	1.09
tblEnergyUse	T24NG	1.15	1.09
tblFireplaces	FireplaceDayYear	82.00	30.00
tblFireplaces	NumberGas	1,736.90	1,000.00
tblFireplaces	NumberNoFireplace	315.80	2,158.00
tblFireplaces	NumberWood	1,105.30	0.00
tblLandUse	LotAcreage	17.56	47.72
tblLandUse	LotAcreage	197.38	124.40
tblLandUse	LotAcreage	1.56	6.80
tblLandUse	LotAcreage	0.23	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.015
tblProjectCharacteristics	CO2IntensityFactor	720.49	360.25
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblProjectCharacteristics	OperationalYear	2018	2028
tblTripsAndVMT	WorkerTripNumber	524.00	0.00
tblTripsAndVMT	WorkerTripNumber	2,620.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	23.00	10.00
tblTripsAndVMT	WorkerTripNumber	23.00	18.00
tblTripsAndVMT	WorkerTripNumber	13.00	5.00
tblVehicleTrips	ST_TR	5.67	8.00
tblVehicleTrips	ST_TR	49.97	96.00
tblVehicleTrips	ST_TR	42.04	40.00
tblVehicleTrips	SU_TR	4.84	8.00
tblVehicleTrips	SU_TR	25.24	96.00
tblVehicleTrips	SU_TR	20.43	40.00

tblVehicleTrips	WD_TR	5.81	8.00
tblVehicleTrips	WD_TR	6.83	7.48
tblVehicleTrips	WD_TR	42.70	96.00
tblVehicleTrips	WD_TR	44.32	40.00
tblWoodstoves	NumberCatalytic	157.90	0.00
tblWoodstoves	NumberNoncatalytic	157.90	0.00

2.0 Emissions Summary

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	17.8383	0.5187	23.5399	2.8300e-003		0.1501	0.1501		0.1501	0.1501	0.0000	326.4824	326.4824	0.0422	5.2800e-003	329.1127
Energy	0.3108	2.6998	1.4549	0.0170		0.2147	0.2147		0.2147	0.2147	0.0000	7,660.5228	7,660.5228	0.2499	0.0946	7,694.9497
Mobile	7.3796	31.1249	86.1891	0.3389	36.0986	0.2436	36.3421	9.6632	0.2263	9.8895	0.0000	31,461.6606	31,461.6606	1.5400	0.0000	31,500.1594
Waste						0.0000	0.0000		0.0000	0.0000	504.0631	0.0000	504.0631	29.7893	0.0000	1,248.7950
Water						0.0000	0.0000		0.0000	0.0000	123.2342	1,068.4129	1,191.6471	12.7018	0.3078	1,600.9063
Total	25.5287	34.3435	111.1839	0.3587	36.0986	0.6084	36.7070	9.6632	0.5911	10.2543	627.2973	40,517.0786	41,144.3759	44.3232	0.4076	42,373.9232

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	17.8284	0.5171	23.3711	2.8100e-003		0.1491	0.1491		0.1491	0.1491	0.0000	326.1371	326.1371	0.0417	5.2800e-003	328.7544
Energy	0.3108	2.6998	1.4549	0.0170		0.2147	0.2147		0.2147	0.2147	0.0000	7,538.2627	7,538.2627	0.2448	0.0936	7,572.2589
Mobile	7.1348	29.9916	80.9837	0.3141	33.2688	0.2270	33.4958	8.9057	0.2109	9.1166	0.0000	29,164.8643	29,164.8643	1.4415	0.0000	29,200.9030
Waste						0.0000	0.0000		0.0000	0.0000	504.0631	0.0000	504.0631	29.7893	0.0000	1,248.7950
Water						0.0000	0.0000		0.0000	0.0000	98.5874	888.3574	986.9447	10.1629	0.2465	1,314.4706
Total	25.2740	33.2085	105.8098	0.3339	33.2688	0.5908	33.8596	8.9057	0.5747	9.4804	602.6505	37,917.6216	38,520.2720	41.6802	0.3453	39,665.1819

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	1.00	3.30	4.83	6.92	7.84	2.89	7.76	7.84	2.77	7.55	3.93	6.42	6.38	5.96	15.28	6.39

2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	-827.1843
Total	-827.1843

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	7.1348	29.9916	80.9837	0.3141	33.2688	0.2270	33.4958	8.9057	0.2109	9.1166	0.0000	29,164.8643	29,164.8643	1.4415	0.0000	29,200.9030
Unmitigated	7.3796	31.1249	86.1891	0.3389	36.0986	0.2436	36.3421	9.6632	0.2263	9.8895	0.0000	31,461.6606	31,461.6606	1.5400	0.0000	31,500.1594

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	25,264.00	25,264.00	25264.00	72,136,384	66,481,613
Industrial Park	5,722.20	1,904.85	558.45	11,638,783	10,726,419
Regional Shopping Center	6,528.00	6,528.00	6528.00	11,445,574	10,548,355
Strip Mall	400.00	400.00	400.00	616,013	567,724
Total	37,914.20	34,096.85	32,750.45	95,836,754	88,324,111

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.614571	0.037691	0.177673	0.098627	0.012633	0.005296	0.017422	0.025155	0.001929	0.001711	0.005676	0.000778	0.000837
Condo/Townhouse	0.614571	0.037691	0.177673	0.098627	0.012633	0.005296	0.017422	0.025155	0.001929	0.001711	0.005676	0.000778	0.000837
Regional Shopping Center	0.614571	0.037691	0.177673	0.098627	0.012633	0.005296	0.017422	0.025155	0.001929	0.001711	0.005676	0.000778	0.000837
Strip Mall	0.614571	0.037691	0.177673	0.098627	0.012633	0.005296	0.017422	0.025155	0.001929	0.001711	0.005676	0.000778	0.000837

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

- Install High Efficiency Lighting
- Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,462.8706	4,462.8706	0.1858	0.0372	4,478.5913
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,585.1307	4,585.1307	0.1909	0.0382	4,601.2821
NaturalGas Mitigated	0.3108	2.6998	1.4549	0.0170		0.2147	0.2147		0.2147	0.2147	0.0000	3,075.3921	3,075.3921	0.0590	0.0564	3,093.6677
NaturalGas Unmitigated	0.3108	2.6998	1.4549	0.0170		0.2147	0.2147		0.2147	0.2147	0.0000	3,075.3921	3,075.3921	0.0590	0.0564	3,093.6677

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
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Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	4.25661e+007	0.2295	1.9614	0.8346	0.0125		0.1586	0.1586		0.1586	0.1586	0.0000	2,271.4882	2,271.4882	0.0435	0.0416	2,284.9866
Industrial Park	1.48946e+007	0.0803	0.7301	0.6133	4.3800e-003		0.0555	0.0555		0.0555	0.0555	0.0000	794.8299	794.8299	0.0152	0.0146	799.5532
Regional Shopping Center	148240	8.0000e-004	7.2700e-003	6.1000e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	7.9107	7.9107	1.5000e-004	1.5000e-004	7.9577
Strip Mall	21800	1.2000e-004	1.0700e-003	9.0000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1633	1.1633	2.0000e-005	2.0000e-005	1.1702
Total		0.3108	2.6998	1.4549	0.0170		0.2147	0.2147		0.2147	0.2147	0.0000	3,075.3921	3,075.3921	0.0589	0.0564	3,093.6676

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	4.25661e+007	0.2295	1.9614	0.8346	0.0125		0.1586	0.1586		0.1586	0.1586	0.0000	2,271.4882	2,271.4882	0.0435	0.0416	2,284.9866
Industrial Park	1.48946e+007	0.0803	0.7301	0.6133	4.3800e-003		0.0555	0.0555		0.0555	0.0555	0.0000	794.8299	794.8299	0.0152	0.0146	799.5532
Regional Shopping Center	148240	8.0000e-004	7.2700e-003	6.1000e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	7.9107	7.9107	1.5000e-004	1.5000e-004	7.9577
Strip Mall	21800	1.2000e-004	1.0700e-003	9.0000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1633	1.1633	2.0000e-005	2.0000e-005	1.1702
Total		0.3108	2.6998	1.4549	0.0170		0.2147	0.2147		0.2147	0.2147	0.0000	3,075.3921	3,075.3921	0.0589	0.0564	3,093.6676

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

Condo/Townhouse	1.67247e+007	2,732.9229	0.1138	0.0228	2,742.5497
Industrial Park	1.03428e+007	1,690.0823	0.0704	0.0141	1,696.0357
Regional Shopping Center	864960	141.3402	5.8900e-003	1.1800e-003	141.8381
Strip Mall	127200	20.7853	8.7000e-004	1.7000e-004	20.8585
Total		4,585.1307	0.1909	0.0382	4,601.2821

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	1.6151e+007	2,639.1737	0.1099	0.0220	2,648.4703
Industrial Park	1.01932e+007	1,665.6436	0.0694	0.0139	1,671.5109
Regional Shopping Center	843234	137.7900	5.7400e-003	1.1500e-003	138.2754
Strip Mall	124005	20.2632	8.4000e-004	1.7000e-004	20.3346
Total		4,462.8706	0.1858	0.0372	4,478.5913

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	17.8284	0.5171	23.3711	2.8100e-003		0.1491	0.1491		0.1491	0.1491	0.0000	326.1371	326.1371	0.0417	5.2800e-003	328.7544
Unmitigated	17.8383	0.5187	23.5399	2.8300e-003		0.1501	0.1501		0.1501	0.1501	0.0000	326.4824	326.4824	0.0422	5.2800e-003	329.1127

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	1.4792					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	15.6259					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0291	0.2488	0.1059	1.5900e-003		0.0201	0.0201		0.0201	0.0201	0.0000	288.1646	288.1646	5.5200e-003	5.2800e-003	289.8770
Landscaping	0.7041	0.2699	23.4340	1.2400e-003		0.1300	0.1300		0.1300	0.1300	0.0000	38.3178	38.3178	0.0367	0.0000	39.2358
Total	17.8383	0.5187	23.5399	2.8300e-003		0.1501	0.1501		0.1501	0.1501	0.0000	326.4824	326.4824	0.0422	5.2800e-003	329.1127

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	1.4792					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	15.6259					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0291	0.2488	0.1059	1.5900e-003		0.0201	0.0201		0.0201	0.0201	0.0000	288.1646	288.1646	5.5200e-003	5.2800e-003	289.8770
Landscaping	0.6942	0.2682	23.2652	1.2300e-003		0.1290	0.1290		0.1290	0.1290	0.0000	37.9726	37.9726	0.0362	0.0000	38.8774
Total	17.8284	0.5171	23.3711	2.8200e-003		0.1491	0.1491		0.1491	0.1491	0.0000	326.1371	326.1371	0.0417	5.2800e-003	328.7544

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			
Mitigated	986.9447	10.1629	0.2465	1,314.4706
Unmitigated	1,191.6471	12.7018	0.3078	1,600.9063

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	205.756 / 129.716	738.5613	6.7326	0.1639	955.7236
Industrial Park	176.906 / 0	432.5308	5.7802	0.1393	618.5305
Regional Shopping Center	5.03693 / 3.08715	17.9197	0.1648	4.0100e-003	23.2353
Strip Mall	0.740725 / 0.453993	2.6353	0.0242	5.9000e-004	3.4170
Total		1,191.6471	12.7018	0.3078	1,600.9063

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	164.605 / 121.803	623.5825	5.3875	0.1314	797.4277
Industrial Park	141.525 / 0	346.0246	4.6241	0.1114	494.8244
Regional Shopping Center	4.02955 / 2.89884	15.1148	0.1319	3.2200e-003	19.3700
Strip Mall	0.59258 / 0.426299	2.2228	0.0194	4.7000e-004	2.8485
Total		986.9447	10.1629	0.2465	1,314.4706

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	504.0631	29.7893	0.0000	1,248.7950
Unmitigated	504.0631	29.7893	0.0000	1,248.7950

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	1452.68	294.8809	17.4270	0.0000	730.5550
Industrial Park	948.6	192.5572	11.3798	0.0000	477.0524
Regional Shopping Center	71.4	14.4936	0.8565	0.0000	35.9072
Strip Mall	10.5	2.1314	0.1260	0.0000	5.2805
Total		504.0631	29.7893	0.0000	1,248.7950

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	1452.68	294.8809	17.4270	0.0000	730.5550
Industrial Park	948.6	192.5572	11.3798	0.0000	477.0524
Regional Shopping Center	71.4	14.4936	0.8565	0.0000	35.9072
Strip Mall	10.5	2.1314	0.1260	0.0000	5.2805
Total		504.0631	29.7893	0.0000	1,248.7950

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-827.1843	0.0000	0.0000	-827.1843

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	239.91 / 51.33	-812.7798	0.0000	0.0000	-812.7798
Grassland	1.65 / 0	-7.1115	0.0000	0.0000	-7.1115
Others	2.97 / 0	0.0000	0.0000	0.0000	0.0000
Others	7.26 / 0	0.0000	0.0000	0.0000	0.0000
Scrub	0.51 / 0	-7.2930	0.0000	0.0000	-7.2930
Wetlands	0.83 / 0.3	0.0000	0.0000	0.0000	0.0000
Total		-827.1843	0.0000	0.0000	-827.1843

East Otay Mesa Specific Plan Amendment - San Diego Air Basin, Annual

East Otay Mesa Specific Plan Amendment - Operations with Mitigation

San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	765.00	1000sqft	47.72	765,000.00	0
Condo/Townhouse	3,158.00	Dwelling Unit	124.40	3,158,000.00	9032
Regional Shopping Center	68.00	1000sqft	6.80	68,000.00	0
Strip Mall	10.00	1000sqft	1.00	10,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2028
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	360.25	CH4 Intensity (lb/MW hr)	0.015	N2O Intensity (lb/MW hr)	0.003

1.3 User Entered Comments & Non-Default Data

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50

tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	50	0
tblAreaMitigation	UseLowVOCPaintParkingValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	50	0
tblConstructionPhase	NumDays	220.00	0.00
tblConstructionPhase	NumDays	3,100.00	0.00
tblConstructionPhase	NumDays	200.00	0.00
tblConstructionPhase	NumDays	310.00	0.00
tblConstructionPhase	NumDays	220.00	0.00
tblConstructionPhase	NumDays	120.00	0.00
tblEnergyUse	T24E	257.33	185.28
tblEnergyUse	T24E	4.88	4.64
tblEnergyUse	T24E	3.34	3.17
tblEnergyUse	T24E	3.34	3.17
tblEnergyUse	T24NG	12,915.01	9,298.81
tblEnergyUse	T24NG	16.07	15.27
tblEnergyUse	T24NG	1.15	1.09
tblEnergyUse	T24NG	1.15	1.09
tblFireplaces	FireplaceDayYear	82.00	30.00
tblFireplaces	NumberGas	1,736.90	1,000.00
tblFireplaces	NumberNoFireplace	315.80	2,158.00
tblFireplaces	NumberWood	1,105.30	0.00
tblLandUse	LotAcreage	17.56	47.72
tblLandUse	LotAcreage	197.38	124.40
tblLandUse	LotAcreage	1.56	6.80
tblLandUse	LotAcreage	0.23	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.015
tblProjectCharacteristics	CO2IntensityFactor	720.49	360.25
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblProjectCharacteristics	OperationalYear	2018	2028
tblTripsAndVMT	WorkerTripNumber	524.00	0.00
tblTripsAndVMT	WorkerTripNumber	2,620.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	23.00	10.00
tblTripsAndVMT	WorkerTripNumber	23.00	18.00
tblTripsAndVMT	WorkerTripNumber	13.00	5.00
tblVehicleTrips	ST_TR	5.67	8.00
tblVehicleTrips	ST_TR	49.97	96.00
tblVehicleTrips	ST_TR	42.04	40.00
tblVehicleTrips	SU_TR	4.84	8.00
tblVehicleTrips	SU_TR	25.24	96.00
tblVehicleTrips	SU_TR	20.43	40.00
tblVehicleTrips	WD_TR	5.81	8.00

tblVehicleTrips	WD_TR	6.83	7.48
tblVehicleTrips	WD_TR	42.70	96.00
tblVehicleTrips	WD_TR	44.32	40.00
tblWoodstoves	NumberCatalytic	157.90	0.00
tblWoodstoves	NumberNoncatalytic	157.90	0.00

2.0 Emissions Summary

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	17.8383	0.5187	23.5399	2.8300e-003		0.1501	0.1501		0.1501	0.1501	0.0000	326.4824	326.4824	0.0422	5.2800e-003	329.1127
Energy	0.3108	2.6998	1.4549	0.0170		0.2147	0.2147		0.2147	0.2147	0.0000	7,660.5228	7,660.5228	0.2499	0.0946	7,694.9497
Mobile	7.3796	31.1249	86.1891	0.3389	36.0986	0.2436	36.3421	9.6632	0.2263	9.8895	0.0000	31,461.6606	31,461.6606	1.5400	0.0000	31,500.1594
Waste						0.0000	0.0000		0.0000	0.0000	504.0631	0.0000	504.0631	29.7893	0.0000	1,248.7950
Water						0.0000	0.0000		0.0000	0.0000	123.2342	1,068.4129	1,191.6471	12.7018	0.3078	1,600.9063
Total	25.5287	34.3435	111.1839	0.3587	36.0986	0.6084	36.7070	9.6632	0.5911	10.2543	627.2973	40,517.0786	41,144.3759	44.3232	0.4076	42,373.9232

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
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Category	tons/yr										MT/yr					
Area	17.8284	0.5171	23.3711	2.8100e-003		0.1491	0.1491		0.1491	0.1491	0.0000	326.1371	326.1371	0.0417	5.2800e-003	328.7544
Energy	0.2664	2.3139	1.2429	0.0145		0.1841	0.1841		0.1841	0.1841	0.0000	4,796.2288	4,796.2288	0.1405	0.0663	4,819.5037
Mobile	7.1348	29.9916	80.9837	0.3141	33.2688	0.2270	33.4958	8.9057	0.2109	9.1166	0.0000	29,164.8643	29,164.8643	1.4415	0.0000	29,200.9030
Waste						0.0000	0.0000		0.0000	0.0000	504.0631	0.0000	504.0631	29.7893	0.0000	1,248.7950
Water						0.0000	0.0000		0.0000	0.0000	98.5874	888.3574	986.9447	10.1629	0.2465	1,314.4706
Total	25.2296	32.8225	105.5977	0.3315	33.2688	0.5602	33.8290	8.9057	0.5441	9.4498	602.6505	35,175.5876	35,778.2380	41.5759	0.3181	36,912.4266

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	1.17	4.43	5.02	7.59	7.84	7.92	7.84	7.84	7.96	7.85	3.93	13.18	13.04	6.20	21.96	12.89

2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	-827.1843
Total	-827.1843

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	7.1348	29.9916	80.9837	0.3141	33.2688	0.2270	33.4958	8.9057	0.2109	9.1166	0.0000	29,164.8643	29,164.8643	1.4415	0.0000	29,200.9030
Unmitigated	7.3796	31.1249	86.1891	0.3389	36.0986	0.2436	36.3421	9.6632	0.2263	9.8895	0.0000	31,461.6606	31,461.6606	1.5400	0.0000	31,500.1594

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	25,264.00	25,264.00	25,264.00	72,136,384	66,481,613
Industrial Park	5,722.20	1,904.85	558.45	11,638,783	10,726,419
Regional Shopping Center	6,528.00	6,528.00	6,528.00	11,445,574	10,548,355
Strip Mall	400.00	400.00	400.00	616,013	567,724
Total	37,914.20	34,096.85	32,750.45	95,836,754	88,324,111

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.614571	0.037691	0.177673	0.098627	0.012633	0.005296	0.017422	0.025155	0.001929	0.001711	0.005676	0.000778	0.000837
Condo/Townhouse	0.614571	0.037691	0.177673	0.098627	0.012633	0.005296	0.017422	0.025155	0.001929	0.001711	0.005676	0.000778	0.000837

Regional Shopping Center	0.614571	0.037691	0.177673	0.098627	0.012633	0.005296	0.017422	0.025155	0.001929	0.001711	0.005676	0.000778	0.000837
Strip Mall	0.614571	0.037691	0.177673	0.098627	0.012633	0.005296	0.017422	0.025155	0.001929	0.001711	0.005676	0.000778	0.000837

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

- Exceed Title 24
- Install High Efficiency Lighting
- Percent of Electricity Use Generated with Renewable Energy
- Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,159.8309	2,159.8309	0.0899	0.0180	2,167.4390
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,585.1307	4,585.1307	0.1909	0.0382	4,601.2821
NaturalGas Mitigated	0.2664	2.3139	1.2429	0.0145		0.1841	0.1841		0.1841	0.1841	0.0000	2,636.3978	2,636.3978	0.0505	0.0483	2,652.0646
NaturalGas Unmitigated	0.3108	2.6998	1.4549	0.0170		0.2147	0.2147		0.2147	0.2147	0.0000	3,075.3921	3,075.3921	0.0590	0.0564	3,093.6677

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
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Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	4.25661e+007	0.2295	1.9614	0.8346	0.0125		0.1586	0.1586		0.1586	0.1586	0.0000	2,271.4882	2,271.4882	0.0435	0.0416	2,284.9866
Industrial Park	1.48946e+007	0.0803	0.7301	0.6133	4.3800e-003		0.0555	0.0555		0.0555	0.0555	0.0000	794.8299	794.8299	0.0152	0.0146	799.5532
Regional Shopping Center	148240	8.0000e-004	7.2700e-003	6.1000e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	7.9107	7.9107	1.5000e-004	1.5000e-004	7.9577
Strip Mall	21800	1.2000e-004	1.0700e-003	9.0000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1633	1.1633	2.0000e-005	2.0000e-005	1.1702
Total		0.3108	2.6998	1.4549	0.0170		0.2147	0.2147		0.2147	0.2147	0.0000	3,075.3921	3,075.3921	0.0589	0.0564	3,093.6676

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	3.6693e+007	0.1979	1.6908	0.7195	0.0108		0.1367	0.1367		0.1367	0.1367	0.0000	1,958.0757	1,958.0757	0.0375	0.0359	1,969.7116
Industrial Park	1.25582e+007	0.0677	0.6156	0.5171	3.6900e-003		0.0468	0.0468		0.0468	0.0468	0.0000	670.1555	670.1555	0.0128	0.0123	674.1379
Regional Shopping Center	133416	7.2000e-004	6.5400e-003	5.4900e-003	4.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	7.1196	7.1196	1.4000e-004	1.3000e-004	7.1619
Strip Mall	19620	1.1000e-004	9.6000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0470	1.0470	2.0000e-005	2.0000e-005	1.0532
Total		0.2664	2.3139	1.2429	0.0145		0.1841	0.1841		0.1841	0.1841	0.0000	2,636.3978	2,636.3978	0.0505	0.0483	2,652.0646

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

Condo/Townhouse	1.67247e+007	2,732.9229	0.1138	0.0228	2,742.5497
Industrial Park	1.03428e+007	1,690.0823	0.0704	0.0141	1,696.0357
Regional Shopping Center	864960	141.3402	5.8900e-003	1.1800e-003	141.8381
Strip Mall	127200	20.7853	8.7000e-004	1.7000e-004	20.8585
Total		4,585.1307	0.1909	0.0382	4,601.2821

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	8.01697e+006	1,310.0257	0.0546	0.0109	1,314.6403
Industrial Park	4.74166e+006	774.8190	0.0323	6.4500e-003	777.5483
Regional Shopping Center	400061	65.3726	2.7200e-003	5.4000e-004	65.6029
Strip Mall	58832.5	9.6136	4.0000e-004	8.0000e-005	9.6475
Total		2,159.8309	0.0899	0.0180	2,167.4391

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	17.8284	0.5171	23.3711	2.8100e-003		0.1491	0.1491		0.1491	0.1491	0.0000	326.1371	326.1371	0.0417	5.2800e-003	328.7544
Unmitigated	17.8383	0.5187	23.5399	2.8300e-003		0.1501	0.1501		0.1501	0.1501	0.0000	326.4824	326.4824	0.0422	5.2800e-003	329.1127

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	1.4792					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	15.6259					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0291	0.2488	0.1059	1.5900e-003		0.0201	0.0201		0.0201	0.0201	0.0000	288.1646	288.1646	5.5200e-003	5.2800e-003	289.8770
Landscaping	0.7041	0.2699	23.4340	1.2400e-003		0.1300	0.1300		0.1300	0.1300	0.0000	38.3178	38.3178	0.0367	0.0000	39.2358
Total	17.8383	0.5187	23.5399	2.8300e-003		0.1501	0.1501		0.1501	0.1501	0.0000	326.4824	326.4824	0.0422	5.2800e-003	329.1127

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	1.4792					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	15.6259					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0291	0.2488	0.1059	1.5900e-003		0.0201	0.0201		0.0201	0.0201	0.0000	288.1646	288.1646	5.5200e-003	5.2800e-003	289.8770
Landscaping	0.6942	0.2682	23.2652	1.2300e-003		0.1290	0.1290		0.1290	0.1290	0.0000	37.9726	37.9726	0.0362	0.0000	38.8774
Total	17.8284	0.5171	23.3711	2.8200e-003		0.1491	0.1491		0.1491	0.1491	0.0000	326.1371	326.1371	0.0417	5.2800e-003	328.7544

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			
Mitigated	986.9447	10.1629	0.2465	1,314.4706
Unmitigated	1,191.6471	12.7018	0.3078	1,600.9063

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	205.756 / 129.716	738.5613	6.7326	0.1639	955.7236
Industrial Park	176.906 / 0	432.5308	5.7802	0.1393	618.5305
Regional Shopping Center	5.03693 / 3.08715	17.9197	0.1648	4.0100e-003	23.2353
Strip Mall	0.740725 / 0.453993	2.6353	0.0242	5.9000e-004	3.4170
Total		1,191.6471	12.7018	0.3078	1,600.9063

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	164.605 / 121.803	623.5825	5.3875	0.1314	797.4277
Industrial Park	141.525 / 0	346.0246	4.6241	0.1114	494.8244
Regional Shopping Center	4.02955 / 2.89884	15.1148	0.1319	3.2200e-003	19.3700
Strip Mall	0.59258 / 0.426299	2.2228	0.0194	4.7000e-004	2.8485
Total		986.9447	10.1629	0.2465	1,314.4706

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	504.0631	29.7893	0.0000	1,248.7950
Unmitigated	504.0631	29.7893	0.0000	1,248.7950

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	1452.68	294.8809	17.4270	0.0000	730.5550
Industrial Park	948.6	192.5572	11.3798	0.0000	477.0524
Regional Shopping Center	71.4	14.4936	0.8565	0.0000	35.9072
Strip Mall	10.5	2.1314	0.1260	0.0000	5.2805
Total		504.0631	29.7893	0.0000	1,248.7950

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	1452.68	294.8809	17.4270	0.0000	730.5550
Industrial Park	948.6	192.5572	11.3798	0.0000	477.0524
Regional Shopping Center	71.4	14.4936	0.8565	0.0000	35.9072
Strip Mall	10.5	2.1314	0.1260	0.0000	5.2805
Total		504.0631	29.7893	0.0000	1,248.7950

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-827.1843	0.0000	0.0000	-827.1843

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	239.91 / 51.33	-812.7798	0.0000	0.0000	-812.7798
Grassland	1.65 / 0	-7.1115	0.0000	0.0000	-7.1115
Others	2.97 / 0	0.0000	0.0000	0.0000	0.0000
Others	7.26 / 0	0.0000	0.0000	0.0000	0.0000
Scrub	0.51 / 0	-7.2930	0.0000	0.0000	-7.2930
Wetlands	0.83 / 0.3	0.0000	0.0000	0.0000	0.0000
Total		-827.1843	0.0000	0.0000	-827.1843

East Otay Mesa Existing Entitlement - San Diego Air Basin, Annual

East Otay Mesa Existing Entitlement

San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	1,562.20	1000sqft	35.86	1,562,200.00	0
Regional Shopping Center	383.18	1000sqft	8.80	383,180.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2028
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	360.25	CH4 Intensity (lb/MW hr)	0.015	N2O Intensity (lb/MW hr)	0.003

1.3 User Entered Comments & Non-Default Data

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Rule 67.0.1 coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	0

tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	50	0
tblAreaMitigation	UseLowVOCPaintParkingValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	0
tblConstructionPhase	NumDays	55.00	0.00
tblConstructionPhase	NumDays	740.00	0.00
tblConstructionPhase	NumDays	50.00	0.00
tblConstructionPhase	NumDays	75.00	0.00
tblConstructionPhase	NumDays	55.00	0.00
tblConstructionPhase	NumDays	30.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.015
tblProjectCharacteristics	CO2IntensityFactor	720.49	360.25
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblProjectCharacteristics	OperationalYear	2018	2028
tblTripsAndVMT	WorkerTripNumber	156.00	0.00
tblTripsAndVMT	WorkerTripNumber	779.00	0.00

tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	23.00	10.00
tblTripsAndVMT	WorkerTripNumber	23.00	18.00
tblTripsAndVMT	WorkerTripNumber	13.00	5.00
tblVehicleTrips	ST_TR	2.49	10.00
tblVehicleTrips	ST_TR	49.97	50.00
tblVehicleTrips	SU_TR	0.73	10.00
tblVehicleTrips	SU_TR	25.24	50.00
tblVehicleTrips	WD_TR	6.83	10.00
tblVehicleTrips	WD_TR	42.70	50.00

2.0 Emissions Summary

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	8.1629	1.6000e-004	0.0178	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0348	0.0348	9.0000e-005	0.0000	0.0370
Energy	0.1754	1.5943	1.3392	9.5700e-003		0.1212	0.1212		0.1212	0.1212	0.0000	6,055.2757	6,055.2757	0.2131	0.0678	6,080.8059
Mobile	6.4709	27.0719	70.4403	0.2675	28.0805	0.1950	28.2755	7.5168	0.1811	7.6980	0.0000	24,844.5137	24,844.5137	1.2467	0.0000	24,875.6822
Waste						0.0000	0.0000		0.0000	0.0000	474.8913	0.0000	474.8913	28.0653	0.0000	1,176.5230
Water						0.0000	0.0000		0.0000	0.0000	123.6154	860.6297	984.2451	12.7323	0.3070	1,394.0267
Total	14.8092	28.6663	71.7974	0.2771	28.0805	0.3162	28.3967	7.5168	0.3024	7.8192	598.5067	31,760.4539	32,358.9606	42.2576	0.3748	33,527.0748

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	8.1629	1.6000e-004	0.0176	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0343	0.0343	9.0000e-005	0.0000	0.0365
Energy	0.1754	1.5943	1.3392	9.5700e-003		0.1212	0.1212		0.1212	0.1212	0.0000	6,055.2757	6,055.2757	0.2131	0.0678	6,080.8059
Mobile	6.2805	26.1903	66.3911	0.2482	25.8792	0.1821	26.0613	6.9276	0.1691	7.0967	0.0000	23,057.8753	23,057.8753	1.1702	0.0000	23,087.1300
Waste						0.0000	0.0000		0.0000	0.0000	237.4456	0.0000	237.4456	14.0326	0.0000	588.2615
Water						0.0000	0.0000		0.0000	0.0000	98.8923	692.8936	791.7859	10.1860	0.2456	1,119.6267
Total	14.6187	27.7848	67.7479	0.2578	25.8792	0.3033	26.1826	6.9276	0.2904	7.2180	336.3379	29,806.0789	30,142.4169	25.6021	0.3134	30,875.8606

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	1.29	3.08	5.64	6.96	7.84	4.08	7.80	7.84	3.96	7.69	43.80	6.15	6.85	39.41	16.37	7.91

2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	-827.1843
Total	-827.1843

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	6.2805	26.1903	66.3911	0.2482	25.8792	0.1821	26.0613	6.9276	0.1691	7.0967	0.0000	23,057.8753	23,057.8753	1.1702	0.0000	23,087.1300
Unmitigated	6.4709	27.0719	70.4403	0.2675	28.0805	0.1950	28.2755	7.5168	0.1811	7.6980	0.0000	24,844.5137	24,844.5137	1.2467	0.0000	24,875.6822

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	15,622.00	15,622.00	15622.00	40,958,202	37,747,488
Regional Shopping Center	19,159.00	19,159.00	19159.00	33,591,567	30,958,324
Total	34,781.00	34,781.00	34,781.00	74,549,769	68,705,812

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
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
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Industrial Park	0.614571	0.037691	0.177673	0.098627	0.012633	0.005296	0.017422	0.025155	0.001929	0.001711	0.005676	0.000778	0.000837
Regional Shopping Center	0.614571	0.037691	0.177673	0.098627	0.012633	0.005296	0.017422	0.025155	0.001929	0.001711	0.005676	0.000778	0.000837

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,319.6650	4,319.6650	0.1799	0.0360	4,334.8812
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,319.6650	4,319.6650	0.1799	0.0360	4,334.8812
NaturalGas Mitigated	0.1754	1.5943	1.3392	9.5700e-003		0.1212	0.1212		0.1212	0.1212	0.0000	1,735.6108	1,735.6108	0.0333	0.0318	1,745.9246
NaturalGas Unmitigated	0.1754	1.5943	1.3392	9.5700e-003		0.1212	0.1212		0.1212	0.1212	0.0000	1,735.6108	1,735.6108	0.0333	0.0318	1,745.9246

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					
Industrial Park	3.16658e+007	0.1708	1.5522	1.3039	9.3100e-003		0.1180	0.1180		0.1180	0.1180	0.0000	1,689.8074	1,689.8074	0.0324	0.0310	1,699.8490
Regional Shopping Center	858323	4.6300e-003	0.0421	0.0353	2.5000e-004		3.2000e-003	3.2000e-003		3.2000e-003	3.2000e-003	0.0000	45.8034	45.8034	8.8000e-004	8.4000e-004	46.0756

Total		0.1754	1.5943	1.3392	9.5600e-003		0.1212	0.1212		0.1212	0.1212	0.0000	1,735.6108	1,735.6108	0.0333	0.0318	1,745.9246
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Mitigated

	Natural Gas 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					
Industrial Park	3.16658e+007	0.1708	1.5522	1.3039	9.3100e-003		0.1180	0.1180		0.1180	0.1180	0.0000	1,689.8074	1,689.8074	0.0324	0.0310	1,699.8490
Regional Shopping Center	858323	4.6300e-003	0.0421	0.0353	2.5000e-004		3.2000e-003	3.2000e-003		3.2000e-003	3.2000e-003	0.0000	45.8034	45.8034	8.8000e-004	8.4000e-004	46.0756
Total		0.1754	1.5943	1.3392	9.5600e-003		0.1212	0.1212		0.1212	0.1212	0.0000	1,735.6108	1,735.6108	0.0333	0.0318	1,745.9246

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	2.14959e+007	3,512.5685	0.1463	0.0293	3,524.9417
Regional Shopping Center	4.93919e+006	807.0965	0.0336	6.7200e-003	809.9396
Total		4,319.6650	0.1799	0.0360	4,334.8812

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	2.14959e+007	3,512.5685	0.1463	0.0293	3,524.9417
Regional Shopping Center	4.93919e+006	807.0965	0.0336	6.7200e-003	809.9396
Total		4,319.6650	0.1799	0.0360	4,334.8812

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	8.1629	1.6000e-004	0.0176	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0343	0.0343	9.0000e-005	0.0000	0.0365
Unmitigated	8.1629	1.6000e-004	0.0178	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0348	0.0348	9.0000e-005	0.0000	0.0370

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	0.5636					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.5977					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6400e-003	1.6000e-004	0.0178	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0348	0.0348	9.0000e-005	0.0000	0.0370
Total	8.1629	1.6000e-004	0.0178	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0348	0.0348	9.0000e-005	0.0000	0.0370

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	0.5636					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.5977					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6100e-003	1.6000e-004	0.0176	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0343	0.0343	9.0000e-005	0.0000	0.0365
Total	8.1628	1.6000e-004	0.0176	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0343	0.0343	9.0000e-005	0.0000	0.0365

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			
Mitigated	791.7859	10.1860	0.2456	1,119.6267
Unmitigated	984.2451	12.7323	0.3070	1,394.0267

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	361.259 / 0	883.2675	11.8036	0.2844	1,263.0958
Regional Shopping Center	28.3831 / 17.3961	100.9776	0.9287	0.0226	130.9309
Total		984.2451	12.7323	0.3070	1,394.0267

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			

Industrial Park	289.007 / 0.000	706.6140	9.4429	0.2275	1,010.4766
Regional Shopping Center	22.7065 / 16.3349	85.1720	0.7431	0.0181	109.1501
Total		791.7859	10.1860	0.2456	1,119.6267

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	237.4456	14.0326	0.0000	588.2615
Unmitigated	474.8913	28.0653	0.0000	1,176.5230

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	1937.13	393.2199	23.2386	0.0000	974.1856
Regional Shopping Center	402.34	81.6714	4.8266	0.0000	202.3374

Total		474.8913	28.0653	0.0000	1,176.5230
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Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	968.565	196.6099	11.6193	0.0000	487.0928
Regional Shopping Center	201.17	40.8357	2.4133	0.0000	101.1687
Total		237.4456	14.0326	0.0000	588.2615

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-827.1843	0.0000	0.0000	-827.1843

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	239.91 / 51.33	-812.7798	0.0000	0.0000	-812.7798
Grassland	1.65 / 0	-7.1115	0.0000	0.0000	-7.1115
Others	2.97 / 0	0.0000	0.0000	0.0000	0.0000
Others	7.26 / 0	0.0000	0.0000	0.0000	0.0000
Scrub	0.51 / 0	-7.2930	0.0000	0.0000	-7.2930
Wetlands	0.83 / 0.3	0.0000	0.0000	0.0000	0.0000
Total		-827.1843	0.0000	0.0000	-827.1843