

Air Quality Assessment
For The
LATITUDE 2 CONDOMINIUMS
CITY OF ESCONDIDO

Prepared For:

NCA Developments
14 Corporate Plaza, Suite 1000
Newport Beach, CA 92660

Prepared By:

Mestre Greve Associates
Division of Landrum & Brown
Fred Greve P.E.
19700 Fairchild Road, Suite 230
Irvine, CA 92612
949•349•0671

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Table of Contents

List of Tables	ii
List of Exhibits	ii
1.0 Existing Air Quality	1
1.1 Project Description.....	1
1.2 Local, State, and Federal Air Quality Agencies.....	1
1.3 Criteria Pollutants, Health Effects, and Standards.....	4
1.3.1 Ozone (O ₃).....	4
1.3.2 Particulate Matter (PM ₁₀ & PM _{2.5}).....	6
1.3.3 Carbon Monoxide (CO).....	6
1.3.4 Nitrogen Dioxide (NO ₂).....	6
1.3.5 Sulfur Dioxide (SO ₂).....	7
1.3.6 Lead (Pb).....	7
1.4 Attainment Designations.....	7
1.5 Regional Air Quality Strategy (RAQS).....	7
1.6 Climate.....	8
1.7 Monitored Air Quality.....	8
2.0 Potential Air Quality Impacts	10
2.1 Thresholds of Significance.....	10
2.2 Short-Term Impacts.....	10
2.2.1 Construction Emission Calculation Methodology.....	10
2.2.2 Construction Activities.....	10
2.2.3 Construction Emissions.....	11
2.2.4 Diesel Particulate Matter Emissions During Construction.....	11
2.3 Long-Term Impacts.....	12
2.3.1 Air Quality Impacts Near Intersections Affected by Traffic.....	12
2.3.2 Project Operational Emissions.....	12
3.0 Mitigation Measures	13
3.1 Short-Term Impacts.....	13
3.2 Long-Term Impacts.....	13
4.0 Unavoidable Significant Impacts	13
4.1 Short-Term Impacts.....	13
4.2 Long-Term Impacts.....	13
Appendix	14

List of Tables

Table 1	Ambient Air Quality Standards	Error! Bookmark not defined.
Table 2	Air Quality Levels Measured at the Escondido Station	Error! Bookmark not defined.
Table 3	Escondido Pollutant Emission Thresholds of Significance	Error! Bookmark not defined.
Table 4	Peak Construction Emissions.....	Error! Bookmark not defined.
Table 5	Project Emissions (pounds per day).....	Error! Bookmark not defined.

List of Exhibits

Exhibit 1	Vicinity Map.....	2
Exhibit 2	Project Site Plan.....	3

1.0 Existing Air Quality

1.1 Project Description

The project is located within the City of Escondido in the County of San Diego. The project will consist of 112 condominiums and associated amenities on approximately 3.45 acres. The project vicinity is presented in Exhibit 1, and the site plan is illustrated in Exhibit 2.

This report analyzes the potential air quality impacts associated with this project. Air quality impacts from construction and operation of the proposed project are analyzed and the City of Escondido significance thresholds are used to determine impacts.

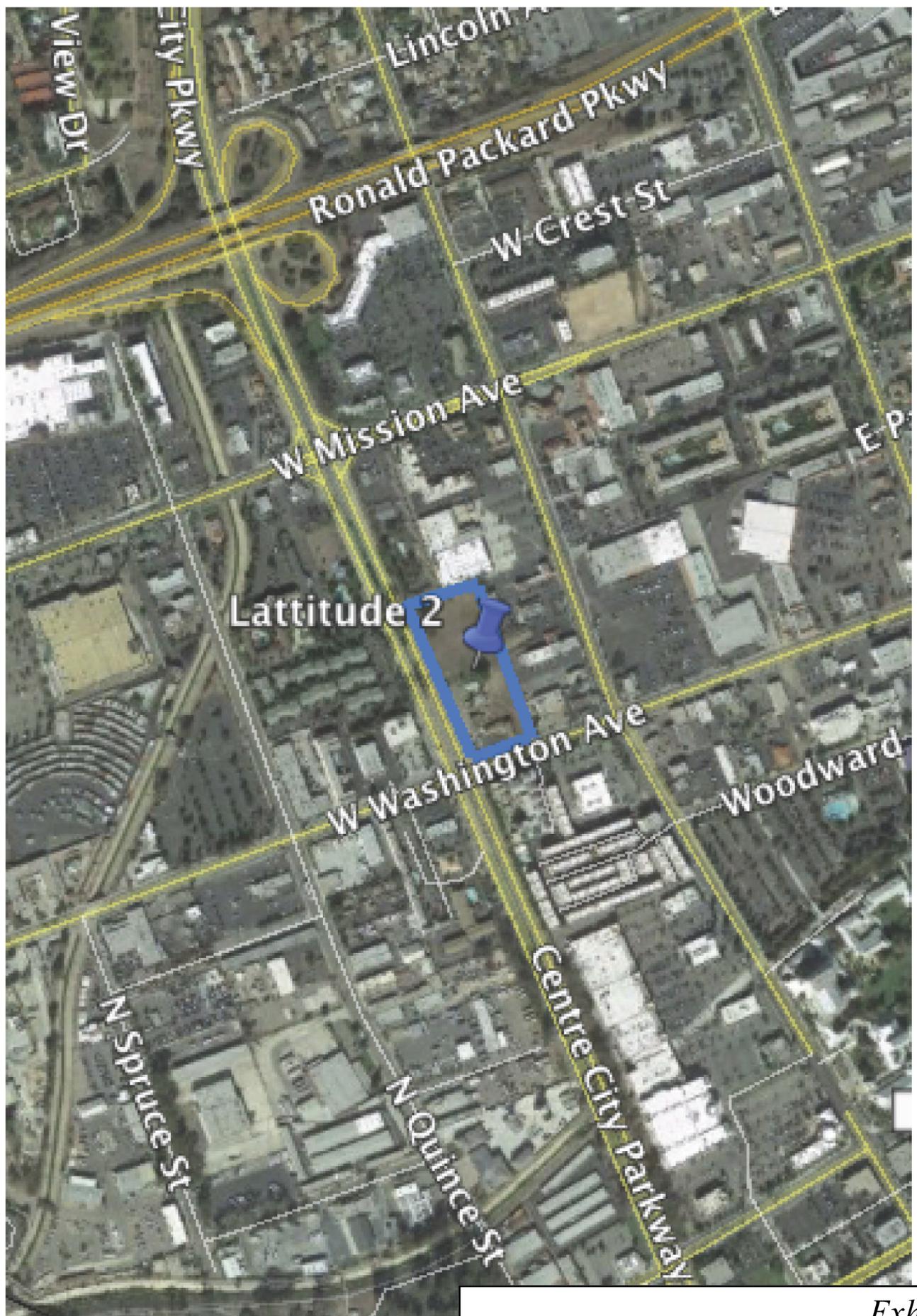
1.2 Local, State, and Federal Air Quality Agencies

The proposed project is located in the San Diego Air Basin (SDAB). The SDAB encompasses all of San Diego County. The primary agencies responsible for regulations to improve air quality in the SDAB are the San Diego Air Pollution Control District (APCD) and the California Air Resources Board (CARB). The APCD sets and enforces regulations for non-vehicular sources of air pollution in the basin.

The U.S. Environmental Protection Agency (U.S. EPA) is the primary federal agency for regulating air quality. The EPA implements the provisions of the Federal Clean Air Act (FCAA). This Act establishes national ambient air quality standards (NAAQS) that are applicable nationwide. The EPA designates areas with pollutant concentrations that do not meet the NAAQS as non-attainment areas for each criteria pollutant. States are required by the FCAA to prepare State Implementation Plans (SIP) for designated non-attainment areas. The SIP is required to demonstrate how the areas will attain the NAAQS by the prescribed deadlines and what measures will be required to attain the standards. The EPA also oversees implementation of the prescribed measures.

The California Clean Air Act (CCAA) requires all air pollution control districts in the state to prepare plans to reduce pollutant concentrations exceeding the CAAQS and ultimately achieve the CAAQS. The districts are required to review and revise these plans every three years.

In San Diego, the APCD is responsible for enforcing the rules and regulations protecting air quality. As part of this responsibility, the APCD has created a strategy that lays out a program for attaining the standards for ozone (O₃). The strategy, called the San Diego County RAQS, outlines APCD's plans and control measures designed to attain the CAAQS for O₃. In addition, the APCD's Federally enforceable control measures for ozone-precursors are included in the SIP, which is adopted by the ARB to ensure attainment of the O₃ NAAQS. These plans accommodate emissions from all sources, including natural sources. Through the implementation of control measures on stationary sources, as well as through the control measures applied to mobile sources by ARB and EPA, these plans focus on attaining the standards for the San Diego Air Basin.



1.3 Criteria Pollutants, Health Effects, and Standards

Under the Federal Clean Air Act (FCAA), the U.S. EPA has established National Ambient Air Quality Standards (NAAQS) for six major pollutants; ozone (O₃), respirable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead. These six air pollutants are often referred to as the criteria pollutants. The NAAQS are two tiered: primary, to protect public health, and secondary, to prevent degradation to the environment (i.e., impairment of visibility, damage to vegetation and property).

Under the California Clean Air Act (CCAA), the California Air Resources Board has established California Ambient Air Quality Standards (CAAQS) to protect the health and welfare of Californians. State standards have been established for the six criteria pollutants as well as four additional pollutants; visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

Table 1 presents the state and national ambient air quality standards. A brief explanation of each pollutant and their health effects is presented.

1.3.1 Ozone (O₃)

Ozone is a secondary pollutant; it is not directly emitted. Ozone is the result of chemical reactions between volatile organic compounds (VOC) (also referred to as reactive organic gasses (ROG)) and nitrogen oxides (NO_x), which occur only in the presence of bright sunlight. Sunlight and hot weather cause ground-level ozone to form in the air. As a result, it is known as a summertime air pollutant. Ground-level ozone is the primary constituent of smog. Because ozone is formed in the atmosphere, high concentrations can occur in areas well away from sources of its constituent pollutants.

People with lung disease, children, older adults, and people who are active can be affected when ozone levels are unhealthy. Numerous scientific studies have linked ground-level ozone exposure to a variety of problems, including:

- lung irritation that can cause inflammation much like a sunburn;
- wheezing, coughing, pain when taking a deep breath, and breathing difficulties during exercise or outdoor activities;
- permanent lung damage to those with repeated exposure to ozone pollution; and
- aggravated asthma, reduced lung capacity, and increased susceptibility to respiratory illnesses like pneumonia and bronchitis.

Table 1 Ambient Air Quality Standards

Pollutant	Averaging Time	State Standards ^{1,3}	Federal Standards ²	
			Primary ^{3,5}	Secondary ^{3,6}
Ozone (O ₃) ⁹	1 Hour	0.09 ppm (180 μg/m ³)	--	--
	8 Hour	0.070 ppm (137 μg/m ³)	0.075 ppm (147 μg/m ³)	Same as Primary
Respirable Particulate Matter (PM ₁₀) ⁸	24 Hour	50 μg/m ³	150 μg/m ³	Same as Primary
	AAM ⁶	20 μg/m ³	--	Same as Primary
Fine Particulate Matter (PM _{2.5}) ⁸	24 Hour	--	35 μg/m ³	Same as Primary
	AAM ⁶	12 μg/m ³	12.0 μg/m ³	Same as Primary
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	None
	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	None
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	--	--
Nitrogen Dioxide (NO ₂)	AAM ⁶	0.030 ppm (57 μg/m ³)	0.053 ppm (100 μg/m ³)	Same as Primary
	1 Hour	0.18 ppm (339 μg/m ³)	100 ppb (188 μg/m ³)	--
Sulfur Dioxide (SO ₂)	AAM ⁶	--	0.030 ppm	--
	24 Hour	0.04 ppm (105 μg/m ³)	0.14 ppm	--
	3 Hour	--	--	0.5 ppm (1,300 μg/m ³)
	1 Hour	0.25 ppm (655 μg/m ³)	75 ppb (196 μg/m ³)	--
Lead ⁷	30 day Avg.	1.5 μg/m ³	--	--
	Calendar Quarter	--	1.5 μg/m ³	Same as Primary
	Rolling 3-month Avg.	--	0.15 μg/m ³	Same as Primary
Visibility Reducing Particles	8 hour	Extinction coefficient of 0.23 per km -- visibility ≥ 10 miles (0.07 per km -- ≥30 miles for Lake Tahoe)	No Federal Standards	
Sulfates	24 Hour	25 μg/m ³		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m ³)		
Vinyl Chloride ⁷	24 Hour	0.01 ppm (26 μg/m ³)		

- California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, PM₁₀, PM_{2.5}, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equalled or exceeded.
 - National standards (other than ozone, PM₁₀, PM_{2.5}, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m³ is equal to or less than one. For PM_{2.5}, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
 - Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25° C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25° C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
 - National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
 - National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
 - Annual Arithmetic Mean
 - The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
 - On September 21, 2006 EPA revoked the annual 50 μg/m³ PM₁₀ standard and lowered the 24-hour PM_{2.5} standard from 65 μg/m³. Attainment designations are to be issued by November, 2009 with attainment plans due April, 2013.
 - On March 12, 2008 EPA lowered the 8-hour Ozone standard to 0.075 ppm from 0.08 ppm. Attainment designations are to be issued by March 2010 with attainment plans due by March, 2013
- No Standard

1.3.2 Particulate Matter (PM_{10} & $PM_{2.5}$)

Particulate matter includes both aerosols and solid particles of a wide range of size and composition. Of particular concern are those particles smaller than 10 microns in size (PM_{10}) and smaller than or equal to 2.5 microns ($PM_{2.5}$). The size of the particulate matter is referenced to the aerodynamic diameter of the particulate. Smaller particulates are of greater concern because they can penetrate deeper into the lungs than large particles.

The principal health effect of airborne particulate matter is on the respiratory system. Short-term exposures to high $PM_{2.5}$ levels are associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposures to high $PM_{2.5}$ levels are associated with premature mortality and development of chronic respiratory disease. Short-term exposures to high PM_{10} levels are associated with hospital admissions for cardiopulmonary diseases, increased respiratory symptoms and possible premature mortality. The EPA has concluded that available evidence does not suggest an association between long-term exposure to PM_{10} at current ambient levels and health effects.

$PM_{2.5}$ is directly emitted in combustion exhaust and formed from atmospheric reactions between of various gaseous pollutants including nitrogen oxides (NO_x) sulfur oxides (SO_x) and volatile organic compounds (VOC). PM_{10} is generally emitted directly as a result of mechanical processes that crush or grind larger particles or the re suspension of dusts most typically through construction activities and vehicular travels. $PM_{2.5}$ can remain suspended in the atmosphere for days and weeks and can be transported long distances. PM_{10} generally settles out of the atmosphere rapidly and are not readily transported over large distances.

1.3.3 Carbon Monoxide (CO)

Carbon monoxide is a colorless and odorless gas, which in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. Carbon monoxide combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High carbon monoxide concentrations can lead to headaches, aggravation of cardiovascular disease, and impairment of central nervous system functions. Carbon monoxide concentrations can vary greatly over comparatively short distances. Relatively high concentrations are typically found near crowded intersections, along heavily used roadways carrying slow-moving traffic, and at or near ground level. Even under the most severe meteorological and traffic conditions, high concentrations of carbon monoxide are limited to locations within a relatively short distance (i.e., up to 600 feet or 185 meters) of heavily traveled roadways. Overall carbon monoxide emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973.

1.3.4 Nitrogen Dioxide (NO_2)

Nitrogen gas, normally relatively inert (unreactive), comprises about 80% of the air. At high temperatures (i.e., in the combustion process) and under certain other conditions it can combine with oxygen, forming several different gaseous compounds collectively called nitrogen oxides (NO_x). Nitric oxide (NO) and nitrogen dioxide (NO_2) are the two most important compounds. Nitric oxide is converted to nitrogen dioxide in the atmosphere. Nitrogen dioxide (NO_2) is a red-brown pungent gas. Motor vehicle emissions are the main source of NO_x in urban areas.

Nitrogen dioxide is toxic to various animals as well as to humans. Its toxicity relates to its ability to form nitric acid with water in the eye, lung, mucus membrane and skin. In animals, long-term exposure to nitrogen oxides increases susceptibility to respiratory infections lowering their resistance to such diseases as pneumonia and influenza. Laboratory studies show susceptible humans, such as asthmatics, exposed to high concentrations of NO_2 can suffer lung irritation and potentially, lung damage. Epidemiological studies have also shown associations between NO_2 concentrations and daily mortality from respiratory and cardiovascular causes and with hospital admissions for respiratory conditions.

1.3.5 Sulfur Dioxide (SO_2)

Sulfur oxides (SO_x) constitute a class of compounds of which sulfur dioxide (SO_2) and sulfur trioxide (SO_3) are of greatest importance. Combustion of fossil fuels for generation of electric power is the primary contributor of SO_x emissions.

SO_2 combines easily with water vapor, forming aerosols of sulfurous acid (H_2SO_3), a colorless, mildly corrosive liquid. This liquid may then combine with oxygen in the air, forming the even more irritating and corrosive sulfuric acid (H_2SO_4). Peak levels of SO_2 in the air can cause temporary breathing difficulty for people with asthma who are active outdoors. Longer-term exposures to high levels of SO_2 gas and particles cause respiratory illness and aggravate existing heart disease.

1.3.6 Lead (Pb)

Lead is a stable compound, which persists and accumulates both in the environment and in animals. In humans, it affects the blood-forming or hematopoietic, the nervous, and the renal systems. In addition, lead has been shown to affect the normal functions of the reproductive, endocrine, hepatic, cardiovascular, immunological, and gastrointestinal systems, although there is significant individual variability in response to lead exposure. Since 1975, lead emissions have been in decline due in part to the introduction of catalyst-equipped vehicles, and decline in production of leaded gasoline. In general, an analysis of lead is limited to projects that emit significant quantities of the pollutant (i.e. lead smelters) and are not applied to transportation projects. South Coast Air Basin Air Quality Attainment Designations

1.4 Attainment Designations

San Diego County is presently designated a basic non-attainment area for the NAAQS for O_3 . The county is also a non-attainment area for the CAAQS for ozone and PM_{10} . As such the highest concern involving criteria pollutants is whether a project would result in a considerable net increase of PM_{10} , $\text{PM}_{2.5}$, or exceed screening level criteria thresholds for O_3 precursors (i.e., oxides of nitrogen (NO_x) and volatile organic compounds (VOCs)).

1.5 Regional Air Quality Strategy (RAQS)

The RAQS relies on mobile source (vehicular) information from the San Diego Association of Governments (SANDAG), as well as information regarding projected growth in the County, to determine what strategies are necessary for the reduction of stationary source emissions through regulatory controls. Since the APCD only regulates non-mobile (stationary) sources, only the stationary source control measures identified in the RAQS and SIP have been developed by the APCD into regulations. The rules are developed to set limits on the amount of emissions from

various types of sources and/or require specific emission control technologies. Following rule adoption, a permit system is used to require air pollution controls on new and modified stationary sources and to ensure compliance with regulations by prescribing specific operating conditions, monitoring, record keeping, reporting, emissions testing, etc. Stationary sources are inspected by APCD on a regular basis to ensure compliance with all emissions, maintenance and operating requirements.

1.6 Climate

The boundaries of the San Diego Air Basin are contiguous with the political boundaries of San Diego County. The County of San Diego encompasses approximately 4,260 square miles and is bounded on the north by Orange and Riverside Counties, on the east by Imperial County, on the west by the Pacific Ocean, and on the south by the Mexican State of Baja California. The County is divided by the Laguna Mountain Range which runs approximately parallel to the coast about 45 miles inland and separates the coastal area from the desert portion of the County. The coastal region is made up of coastal terraces that rise from the ocean into wide mesas which then, moving farther east, transition into the Laguna Foothills. Farther east, the topography gradually rises to the rugged mountains. On the east side, the mountains drop off rapidly to the Anza-Borrego Desert, which is characterized by several broken mountain ranges with desert valleys in between.

The climate of the San Diego Air Basin, as with all of Southern California, is largely dominated by the strength and position of the semi-permanent high-pressure system over the Pacific Ocean, known as the Pacific High. This high-pressure ridge over the West Coast often creates a pattern of late-night and early-morning low clouds, hazy afternoon sunshine, daytime onshore breezes, and little temperature variation year round. The climatic classification for San Diego is a Mediterranean climate, with warm, dry summers and mild, wet winters. Average annual precipitation ranges from approximately 10 inches on the coast to over 30 inches in the mountains to the east. The desert regions of San Diego County generally receive between 4 and 6 inches per year.

1.7 Monitored Air Quality

Air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin.

The San Diego APCD operates and maintains ten monitoring stations located throughout the region. The purpose of these stations is to measure concentrations of the criteria pollutants and determine whether the ambient air quality meets the NAAQS and the CAAQS. The nearest station to the project is located in Escondido. The data collected at this station is considered representative of the air quality experienced in the vicinity of the project. The air pollutants measured at the Escondido station include ozone, nitrogen dioxide (NO₂), particulates, and carbon monoxide (CO).

The air quality data monitored from 2011 to 2013 (data for 2014 has not been released) are presented in Table 3. The air quality data monitored were obtained from the CARB air quality data website (www.arb.ca.gov/adam/).

Table 2 Air Quality Levels Measured at the Escondido Station

Pollutant	California Standard	National Standard	Year	Max. Level	Days State Standard Exceeded	Days National Standard Exceeded
Ozone 1 Hour Average	0.09 ppm	None	2013	0.084	0	0
			2012	0.084	0	0
			2011	0.098	1	0
Ozone 8 Hour Average	0.070 ppm	0.075 ppm	2013	0.074	4	0
			2012	0.073	2	0
			2011	0.089	2	2
CO 8 Hour Average	9.0 ppm	9 ppm	2013	n/a	0	0
			2012	3.61	0	0
			2011	2.2	0	0
NO₂ 1 Hour Average	0.25 ppm	None	2013	0.061	0	0
			2012	0.062	0	0
			2011	0.062	0	0
Fine Particulates PM_{2.5} (24 Hour)	None	65 µg/m ³	2013	56.3	n/a	1.1
			2012	70.7	n/a	3.1
			2011	27.4	n/a	0
Fine Particulates PM_{2.5} (Annual)	12 µg/m ³	15 µg/m ³	2013	11.0	Under	Under
			2012	10.5	Under	Under
			2011	10.4	Under	Under

¹ – no applicable standard

Source: CARB Air Quality Data Statistics web site www.arb.ca.gov/adam/ accessed 5/20/14

The Escondido monitoring data presented in Table 2 show that ozone is the air pollutant of primary concern in the project area. The national 8-hour ozone standard was exceeded between 0 and 2 days per year for the period between 2011 and 2013. The ozone concentration levels have improved over the last 3 years of monitoring.

2.0 Potential Air Quality Impacts

Air quality impacts are usually divided into short term and long term. Short-term impacts are usually the result of construction or grading operations. Long-term impacts are associated with the built out condition of the proposed project.

2.1 Thresholds of Significance

The City of Escondido has established significance thresholds to assess the impact of project related air pollutant emissions. The significance thresholds for air quality are stated in Chapter 33 Zoning, Article 47 Environmental Quality, Division 1 Regulations, Section 33-924(a)(6) of the Municipal Code. Table 3 presents these significance thresholds. There are separate thresholds for short-term construction and long-term operational emissions. A project with daily emission rates below these thresholds are considered to have a less than significant effect on air quality.

Table 3 Escondido Pollutant Emission Thresholds of Significance

	Pollutant Emissions (lbs./day)					
	CO	ROG	NOx	PM10	PM2.5	SOx
<i>Construction</i>	550	75	250	100	55	250
<i>Operation</i>	550	55	250	100	55	250

2.2 Short-Term Impacts

Temporary impacts can result from project construction activities. Air pollutants are emitted by construction equipment and fugitive dust is generated during grading and construction.

2.2.1 Construction Emission Calculation Methodology

Emissions during the phases of construction were calculated using the California Emissions Estimator Model (CalEEMod). CalEEMod is a computer program developed by the South Coast Air Quality Management District (SCAQMD) in conjunction with the California Air Resources Board (CARB). The model calculates emissions for construction and operation of various projects. For on-road vehicular emissions, the CalEEMod model utilizes the EMFAC emission rates that have also been developed by CARB.

2.2.2 Construction Activities

CalEEMod considers the following phases in its calculation of construction emissions; demolition, site preparation, grading, building construction, paving, and painting. The appropriate number of acres, duration of each construction phase, and other key elements of the project were input into the CalEEMod to generate the estimate of emissions. It was also assumed that the overlap between construction phases would be minimal. CalEEMod default assumptions were used for all calculations except for the VOC content of the architectural coatings for the project. . The Project Applicant has committed to using paints with a VOC

content of 75 grams per liter or less to minimize emissions of this ozone precursor. - CalEEMod printouts are included in the Appendix.

2.2.3 Construction Emissions

Table 4 presents the results of the total emissions calculations for the construction activities discussed above. The highest construction emissions are presented below and represent a worst-case scenario. No mitigation is included in the emissions presented below. The projected emissions are compared to the Significance Thresholds described in Section 2.1. The CalEEMod printouts are included in the Appendix.

Table 4 Peak Construction Emissions

Activity	ROG	Pollutant Emissions (Pounds Per Day)				
		NOx	CO	SOx	PM10	PM2.5
Demolition	4.6	48.4	36.8	0.04	2.6	2.3
Site Preparation	5.3	57.0	43.5	0.04	21.3	12.8
Grading	3.9	40.5	27.4	0.03	9.0	5.5
Building Const.	4.4	33.4	27.6	0.05	3.3	2.3
Paving	2.1	18.4	13.5	0.02	1.3	1.1
Architectural Coating	59.8	2.5	2.9	0.01	0.4	0.2
<i>Escondido Thresholds</i>	<i>75</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>55</i>
<i>Exceed Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

The projected construction emissions are all below the significance thresholds established by the City of Escondido except for painting emissions. The painting emissions are about 2.5 times the City significance threshold. A mitigation measure is proposed in Section 3.1.

2.2.4 Diesel Particulate Matter Emissions During Construction

In 1998, the California Air Resources Board (ARB) identified particulate matter from diesel-fueled engines (Diesel Particulate Matter or DPM) as a Toxic Air Contaminant (TAC). It is assumed that the majority of the heavy construction equipment utilized during construction would be diesel fueled and emit DPM.

Impacts from toxic substances are related to cumulative exposure and are assessed over a 70-year period. Cancer risk is expressed as the maximum number of new cases of cancer projected to occur in a population of one million people due to exposure to the cancer-causing substance over a 70-year lifetime (California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Guide to Health Risk Assessment.) Grading for the project, when the peak diesel exhaust emissions would occur, is expected to take less than 1 month with all construction expected to be completed over a 13 to 15 month period. Because of the relatively short duration of construction compared to a 70-year lifespan, diesel emissions resulting from the construction of the project, including truck traffic associated with the project, are not expected to result in a significant impact.

2.3 Long-Term Impacts

2.3.1 Air Quality Impacts Near Intersections Affected by Traffic

The area is in attainment of the CO state and national standards. CO was the pollutant of primary concern near intersections, and exceedances of the standards would result in a significant local air quality impact. Since the air basin has reached attainment of the CO air quality standards, CO analysis is no longer required by the City of Escondido. No air quality impacts are anticipated near intersections or along roadways serving the project.

2.3.2 Project Operational Emissions

Air pollutant emissions due to the project were calculated using the CalEEMod program. The program was set to calculate emissions for the proposed project. Primary sources of emissions generated by the proposed project will be from the motor vehicles. Natural gas combustion and re-current painting of the facilities will also contribute to the emissions. The traffic data indicates that there will be 1,390 trips in and out of the facility per day.

CalEEMod calculates maximum daily emissions for the summertime and wintertime periods. The results presented below are from the summer or winter emissions, whichever are the higher emissions. Output files from the CalEEMod program are presented in the appendix.

Table 5 presents the results of the CalEEMod model showing the maximum daily air pollutant emissions projected for buildout year. The specific data utilized in calculating the emissions are provided in the appendix.

Table 5 Project Emissions (pounds per day)

	ROG	NOx	CO	SOx	PM10	PM2.5
Total Project Emissions	8.4	7.0	39.4	0.1	5.0	1.5
<i>Escondido Thresholds</i>	<i>55</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>55</i>
<i>Exceed Thresholds</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Table 5 shows that the total project emissions are below the Escondido thresholds for all criterion pollutants. Therefore, the project will not result in a significant air impact and mitigation is not necessary to reduce operational emissions.

3.0 Mitigation Measures

3.1 Short-Term Impacts

No short-term impacts are projected and therefore, mitigation are not necessary for construction emissions. Note that the calculations include the Applicants commitment to use architectural coatings with a VOC content of 75 grams per liter or less (as defined by CARB). Compliance with this project design feature is required for construction emissions to result in a less than significant impact.

3.2 Long-Term Impacts

No long-term impacts are projected and therefore, mitigation measures are not necessary for operational emissions.

4.0 Unavoidable Significant Impacts

4.1 Short-Term Impacts

The analysis demonstrates that the project will not result in a significant air quality impact.

4.2 Long-Term Impacts

The analysis demonstrates that the project will not result in a significant air quality impact.

Appendix

Latitude 2
San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	209.00	Space	1.88	83,600.00	0
Condo/Townhouse High Rise	112.00	Dwelling Unit	1.75	112,000.00	320

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2017
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

Project Characteristics -

Land Use -

Construction Phase - Default schedule consistent with developers estimate of 13 to 15 months for construction.

Architectural Coating - Volatility rate reduced for mitigation.

Woodstoves - No fireplaces in project

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	75.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	75.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	75.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	75.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	61.60	0.00
tblFireplaces	NumberNoFireplace	11.20	112.00
tblFireplaces	NumberWood	39.20	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblWoodstoves	NumberCatalytic	5.60	0.00
tblWoodstoves	NumberNoncatalytic	5.60	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	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	lb/day										lb/day					
Area	5.4545	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508	0.0000	16.6836	16.6836	0.0168	0.0000	17.0370
Energy	0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857
Mobile	3.0428	6.8817	31.2702	0.0683	4.8449	0.0875	4.9324	1.2934	0.0805	1.3739		5,769.4583	5,769.4583	0.2425		5,774.5515
Total	8.5429	7.3807	40.7911	0.0713	4.8449	0.1698	5.0147	1.2934	0.1628	1.4562	0.0000	6,283.9977	6,283.9977	0.2689	9.1300e-003	6,292.4741

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.4545	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508	0.0000	16.6836	16.6836	0.0168	0.0000	17.0370
Energy	0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857
Mobile	3.0428	6.8817	31.2702	0.0683	4.8449	0.0875	4.9324	1.2934	0.0805	1.3739		5,769.4583	5,769.4583	0.2425		5,774.5515
Total	8.5429	7.3807	40.7911	0.0713	4.8449	0.1698	5.0147	1.2934	0.1628	1.4562	0.0000	6,283.9977	6,283.9977	0.2689	9.1300e-003	6,292.4741

	ROG	NOx	CO	SO2	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	Demolition	Demolition	9/1/2015	9/28/2015	5	20	
2	Site Preparation	Site Preparation	9/29/2015	10/5/2015	5	5	
3	Grading	Grading	10/6/2015	10/15/2015	5	8	
4	Building Construction	Building Construction	10/16/2015	9/1/2016	5	230	
5	Paving	Paving	9/2/2016	9/27/2016	5	18	
6	Architectural Coating	Architectural Coating	9/28/2016	10/21/2016	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 226,800; Residential Outdoor: 75,600; Non-Residential Indoor: 3,762; Non-Residential Outdoor: 1,254 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	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	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	116.00	26.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886

3.2 Demolition - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0611	0.0761	0.7235	1.4700e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		126.7906	126.7906	7.0800e-003			126.9392
Total	0.0611	0.0761	0.7235	1.4700e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		126.7906	126.7906	7.0800e-003			126.9392

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886

3.2 Demolition - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0611	0.0761	0.7235	1.4700e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		126.7906	126.7906	7.0800e-003		126.9392
Total	0.0611	0.0761	0.7235	1.4700e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		126.7906	126.7906	7.0800e-003		126.9392

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.744 4	4,111.744 4	1.2275		4,137.522 5
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719		4,111.744 4	4,111.744 4	1.2275		4,137.522 5

3.3 Site Preparation - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0734	0.0913	0.8682	1.7600e-003	0.1479	1.1600e-003	0.1490	0.0392	1.0600e-003	0.0403		152.1487	152.1487	8.4900e-003		152.3270
Total	0.0734	0.0913	0.8682	1.7600e-003	0.1479	1.1600e-003	0.1490	0.0392	1.0600e-003	0.0403		152.1487	152.1487	8.4900e-003		152.3270

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.744 4	4,111.744 4	1.2275		4,137.522 4
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719	0.0000	4,111.744 4	4,111.744 4	1.2275		4,137.522 4

3.3 Site Preparation - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0734	0.0913	0.8682	1.7600e-003	0.1479	1.1600e-003	0.1490	0.0392	1.0600e-003	0.0403		152.1487	152.1487	8.4900e-003		152.3270
Total	0.0734	0.0913	0.8682	1.7600e-003	0.1479	1.1600e-003	0.1490	0.0392	1.0600e-003	0.0403		152.1487	152.1487	8.4900e-003		152.3270

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
Total	3.8327	40.4161	26.6731	0.0298	6.5523	2.3284	8.8807	3.3675	2.1421	5.5096		3,129.0158	3,129.0158	0.9341		3,148.6328

3.4 Grading - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0611	0.0761	0.7235	1.4700e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		126.7906	126.7906	7.0800e-003			126.9392
Total	0.0611	0.0761	0.7235	1.4700e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		126.7906	126.7906	7.0800e-003			126.9392

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000	
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341			3,148.6328
Total	3.8327	40.4161	26.6731	0.0298	6.5523	2.3284	8.8807	3.3675	2.1421	5.5096	0.0000	3,129.0158	3,129.0158	0.9341			3,148.6328

3.4 Grading - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0611	0.0761	0.7235	1.4700e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		126.7906	126.7906	7.0800e-003		126.9392
Total	0.0611	0.0761	0.7235	1.4700e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		126.7906	126.7906	7.0800e-003		126.9392

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483

3.5 Building Construction - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.3556	2.9063	4.1906	6.1700e-003	0.1726	0.0470	0.2196	0.0492	0.0432	0.0925		622.9297	622.9297	5.5600e-003			623.0465
Worker	0.4728	0.5885	5.5952	0.0113	0.9529	7.4800e-003	0.9604	0.2528	6.8500e-003	0.2596		980.5136	980.5136	0.0547			981.6627
Total	0.8283	3.4948	9.7858	0.0175	1.1255	0.0545	1.1800	0.3020	0.0501	0.3521		1,603.4433	1,603.4433	0.0603			1,604.7092

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748			2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748			2,703.7483

3.5 Building Construction - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.3556	2.9063	4.1906	6.1700e-003	0.1726	0.0470	0.2196	0.0492	0.0432	0.0925		622.9297	622.9297	5.5600e-003			623.0465
Worker	0.4728	0.5885	5.5952	0.0113	0.9529	7.4800e-003	0.9604	0.2528	6.8500e-003	0.2596		980.5136	980.5136	0.0547			981.6627
Total	0.8283	3.4948	9.7858	0.0175	1.1255	0.0545	1.1800	0.3020	0.0501	0.3521		1,603.4433	1,603.4433	0.0603			1,604.7092

3.5 Building Construction - 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	lb/day										lb/day						
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620			2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620			2,683.1890

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.3138	2.5238	3.8925	6.1600e-003	0.1726	0.0377	0.2102	0.0492	0.0346	0.0839		615.5740	615.5740	4.9100e-003			615.6772
Worker	0.4298	0.5339	5.0416	0.0113	0.9529	7.1500e-003	0.9601	0.2528	6.5700e-003	0.2593		946.1788	946.1788	0.0505			947.2389
Total	0.7436	3.0577	8.9341	0.0175	1.1255	0.0448	1.1703	0.3020	0.0412	0.3432		1,561.7528	1,561.7528	0.0554			1,562.9161

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620			2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620			2,683.1890

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.3138	2.5238	3.8925	6.1600e-003	0.1726	0.0377	0.2102	0.0492	0.0346	0.0839		615.5740	615.5740	4.9100e-003			615.6772
Worker	0.4298	0.5339	5.0416	0.0113	0.9529	7.1500e-003	0.9601	0.2528	6.5700e-003	0.2593		946.1788	946.1788	0.0505			947.2389
Total	0.7436	3.0577	8.9341	0.0175	1.1255	0.0448	1.1703	0.3020	0.0412	0.3432		1,561.7528	1,561.7528	0.0554			1,562.9161

3.6 Paving - 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	lb/day										lb/day						
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588			1,913.9557
Paving	0.2736					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.0692	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588			1,913.9557

3.6 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0741	0.0921	0.8693	1.9500e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		163.1343	163.1343	8.7000e-003			163.3171
Total	0.0741	0.0921	0.8693	1.9500e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		163.1343	163.1343	8.7000e-003			163.3171

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.221 2	1,902.221 2	0.5588			1,913.955 7
Paving	0.2736					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.0692	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.221 2	1,902.221 2	0.5588			1,913.955 7

3.6 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0741	0.0921	0.8693	1.9500e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		163.1343	163.1343	8.7000e-003			163.3171
Total	0.0741	0.0921	0.8693	1.9500e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		163.1343	163.1343	8.7000e-003			163.3171

3.7 Architectural Coating - 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	lb/day										lb/day						
Archit. Coating	59.3697					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449
Total	59.7382	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0852	0.1059	0.9996	2.2500e-003	0.1889	1.4200e-003	0.1904	0.0501	1.3000e-003	0.0514		187.6044	187.6044	0.0100			187.8146
Total	0.0852	0.1059	0.9996	2.2500e-003	0.1889	1.4200e-003	0.1904	0.0501	1.3000e-003	0.0514		187.6044	187.6044	0.0100			187.8146

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	59.3697					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332			282.1449
Total	59.7382	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0852	0.1059	0.9996	2.2500e-003	0.1889	1.4200e-003	0.1904	0.0501	1.3000e-003	0.0514		187.6044	187.6044	0.0100			187.8146
Total	0.0852	0.1059	0.9996	2.2500e-003	0.1889	1.4200e-003	0.1904	0.0501	1.3000e-003	0.0514		187.6044	187.6044	0.0100			187.8146

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Mitigated	3.0428	6.8817	31.2702	0.0683	4.8449	0.0875	4.9324	1.2934	0.0805	1.3739		5,769.4583	5,769.4583	0.2425			5,774.5515
Unmitigated	3.0428	6.8817	31.2702	0.0683	4.8449	0.0875	4.9324	1.2934	0.0805	1.3739		5,769.4583	5,769.4583	0.2425			5,774.5515

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse High Rise	738.08	801.92	679.84	2,109,727	2,109,727
Parking Lot	0.00	0.00	0.00		
Total	738.08	801.92	679.84	2,109,727	2,109,727

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 High Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.510423	0.073380	0.192408	0.132453	0.036550	0.005219	0.012745	0.022253	0.001862	0.002079	0.006550	0.000609	0.003468

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857
NaturalGas Unmitigated	0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	4231.77	0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	4.23177	0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857
Total		0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4545	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508	0.0000	16.6836	16.6836	0.0168	0.0000	17.0370
Unmitigated	5.4545	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508	0.0000	16.6836	16.6836	0.0168	0.0000	17.0370

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	lb/day										lb/day					
Architectural Coating	0.9759					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.1858					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2927	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508		16.6836	16.6836	0.0168		17.0370
Total	5.4545	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508	0.0000	16.6836	16.6836	0.0168	0.0000	17.0370

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9759					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.1858					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2927	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508		16.6836	16.6836	0.0168		17.0370
Total	5.4545	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508	0.0000	16.6836	16.6836	0.0168	0.0000	17.0370

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Latitude 2
San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	209.00	Space	1.88	83,600.00	0
Condo/Townhouse High Rise	112.00	Dwelling Unit	1.75	112,000.00	320

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2017
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

Project Characteristics -

Land Use -

Construction Phase - Default schedule consistent with developers estimate of 13 to 15 months for construction.

Architectural Coating - Volatility rate reduced for mitigation.

Woodstoves - No fireplaces in project

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	75.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	75.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	75.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	75.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	61.60	0.00
tblFireplaces	NumberNoFireplace	11.20	112.00
tblFireplaces	NumberWood	39.20	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblWoodstoves	NumberCatalytic	5.60	0.00
tblWoodstoves	NumberNoncatalytic	5.60	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	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	lb/day										lb/day					
Area	5.4545	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508	0.0000	16.6836	16.6836	0.0168	0.0000	17.0370
Energy	0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857
Mobile	2.8588	6.4769	29.8775	0.0719	4.8449	0.0872	4.9321	1.2934	0.0802	1.3736		6,061.9198	6,061.9198	0.2424		6,067.0097
Total	8.3589	6.9759	39.3984	0.0748	4.8449	0.1695	5.0144	1.2934	0.1625	1.4559	0.0000	6,576.4592	6,576.4592	0.2688	9.1300e-003	6,584.9323

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.4545	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508	0.0000	16.6836	16.6836	0.0168	0.0000	17.0370
Energy	0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857
Mobile	2.8588	6.4769	29.8775	0.0719	4.8449	0.0872	4.9321	1.2934	0.0802	1.3736		6,061.9198	6,061.9198	0.2424		6,067.0097
Total	8.3589	6.9759	39.3984	0.0748	4.8449	0.1695	5.0144	1.2934	0.1625	1.4559	0.0000	6,576.4592	6,576.4592	0.2688	9.1300e-003	6,584.9323

	ROG	NOx	CO	SO2	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	Demolition	Demolition	9/1/2015	9/28/2015	5	20	
2	Site Preparation	Site Preparation	9/29/2015	10/5/2015	5	5	
3	Grading	Grading	10/6/2015	10/15/2015	5	8	
4	Building Construction	Building Construction	10/16/2015	9/1/2016	5	230	
5	Paving	Paving	9/2/2016	9/27/2016	5	18	
6	Architectural Coating	Architectural Coating	9/28/2016	10/21/2016	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 226,800; Residential Outdoor: 75,600; Non-Residential Indoor: 3,762; Non-Residential Outdoor: 1,254 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	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	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	116.00	26.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886

3.2 Demolition - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0575	0.0678	0.7416	1.5600e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		135.0013	135.0013	7.0800e-003			135.1499
Total	0.0575	0.0678	0.7416	1.5600e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		135.0013	135.0013	7.0800e-003			135.1499

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886

3.2 Demolition - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0575	0.0678	0.7416	1.5600e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		135.0013	135.0013	7.0800e-003			135.1499
Total	0.0575	0.0678	0.7416	1.5600e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		135.0013	135.0013	7.0800e-003			135.1499

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000				0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275			4,137.5225
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719		4,111.7444	4,111.7444	1.2275			4,137.5225

3.3 Site Preparation - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0814	0.8900	1.8700e-003	0.1479	1.1600e-003	0.1490	0.0392	1.0600e-003	0.0403		162.0015	162.0015	8.4900e-003		162.1798
Total	0.0690	0.0814	0.8900	1.8700e-003	0.1479	1.1600e-003	0.1490	0.0392	1.0600e-003	0.0403		162.0015	162.0015	8.4900e-003		162.1798

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.7444	4,111.7444	1.2275		4,137.5224
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719	0.0000	4,111.7444	4,111.7444	1.2275		4,137.5224

3.3 Site Preparation - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0814	0.8900	1.8700e-003	0.1479	1.1600e-003	0.1490	0.0392	1.0600e-003	0.0403		162.0015	162.0015	8.4900e-003		162.1798
Total	0.0690	0.0814	0.8900	1.8700e-003	0.1479	1.1600e-003	0.1490	0.0392	1.0600e-003	0.0403		162.0015	162.0015	8.4900e-003		162.1798

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
Total	3.8327	40.4161	26.6731	0.0298	6.5523	2.3284	8.8807	3.3675	2.1421	5.5096		3,129.0158	3,129.0158	0.9341		3,148.6328

3.4 Grading - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0575	0.0678	0.7416	1.5600e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		135.0013	135.0013	7.0800e-003		135.1499
Total	0.0575	0.0678	0.7416	1.5600e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		135.0013	135.0013	7.0800e-003		135.1499

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328
Total	3.8327	40.4161	26.6731	0.0298	6.5523	2.3284	8.8807	3.3675	2.1421	5.5096	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328

3.4 Grading - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0575	0.0678	0.7416	1.5600e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		135.0013	135.0013	7.0800e-003			135.1499
Total	0.0575	0.0678	0.7416	1.5600e-003	0.1232	9.7000e-004	0.1242	0.0327	8.9000e-004	0.0336		135.0013	135.0013	7.0800e-003			135.1499

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748			2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748			2,703.7483

3.5 Building Construction - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.3069	2.8359	3.1587	6.2000e-003	0.1726	0.0465	0.2190	0.0492	0.0427	0.0920		627.7168	627.7168	5.4300e-003			627.8309
Worker	0.4447	0.5244	5.7353	0.0121	0.9529	7.4800e-003	0.9604	0.2528	6.8500e-003	0.2596		1,044.0098	1,044.0098	0.0547			1,045.1589
Total	0.7516	3.3604	8.8940	0.0183	1.1255	0.0540	1.1794	0.3020	0.0496	0.3516		1,671.7265	1,671.7265	0.0602			1,672.9898

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748			2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748			2,703.7483

3.5 Building Construction - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.3069	2.8359	3.1587	6.2000e-003	0.1726	0.0465	0.2190	0.0492	0.0427	0.0920		627.7168	627.7168	5.4300e-003			627.8309
Worker	0.4447	0.5244	5.7353	0.0121	0.9529	7.4800e-003	0.9604	0.2528	6.8500e-003	0.2596		1,044.0098	1,044.0098	0.0547			1,045.1589
Total	0.7516	3.3604	8.8940	0.0183	1.1255	0.0540	1.1794	0.3020	0.0496	0.3516		1,671.7265	1,671.7265	0.0602			1,672.9898

3.5 Building Construction - 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	lb/day										lb/day						
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620			2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620			2,683.1890

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2712	2.4641	2.8923	6.1900e-003	0.1726	0.0373	0.2098	0.0492	0.0343	0.0835		620.3300	620.3300	4.7900e-003			620.4306
Worker	0.4055	0.4759	5.1896	0.0121	0.9529	7.1500e-003	0.9601	0.2528	6.5700e-003	0.2593		1,007.4971	1,007.4971	0.0505			1,008.5571
Total	0.6767	2.9399	8.0819	0.0183	1.1255	0.0444	1.1699	0.3020	0.0408	0.3428		1,627.8270	1,627.8270	0.0553			1,628.9878

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620			2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620			2,683.1890

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2712	2.4641	2.8923	6.1900e-003	0.1726	0.0373	0.2098	0.0492	0.0343	0.0835		620.3300	620.3300	4.7900e-003			620.4306
Worker	0.4055	0.4759	5.1896	0.0121	0.9529	7.1500e-003	0.9601	0.2528	6.5700e-003	0.2593		1,007.4971	1,007.4971	0.0505			1,008.5571
Total	0.6767	2.9399	8.0819	0.0183	1.1255	0.0444	1.1699	0.3020	0.0408	0.3428		1,627.8270	1,627.8270	0.0553			1,628.9878

3.6 Paving - 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	lb/day										lb/day						
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588			1,913.9557
Paving	0.2736					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.0692	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588			1,913.9557

3.6 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0699	0.0820	0.8948	2.0800e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		173.7064	173.7064	8.7000e-003			173.8892
Total	0.0699	0.0820	0.8948	2.0800e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		173.7064	173.7064	8.7000e-003			173.8892

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.221 2	1,902.221 2	0.5588			1,913.955 7
Paving	0.2736					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.0692	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.221 2	1,902.221 2	0.5588			1,913.955 7

3.6 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0699	0.0820	0.8948	2.0800e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		173.7064	173.7064	8.7000e-003			173.8892
Total	0.0699	0.0820	0.8948	2.0800e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		173.7064	173.7064	8.7000e-003			173.8892

3.7 Architectural Coating - 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	lb/day										lb/day						
Archit. Coating	59.3697					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449
Total	59.7382	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0804	0.0944	1.0290	2.3900e-003	0.1889	1.4200e-003	0.1904	0.0501	1.3000e-003	0.0514		199.7624	199.7624	0.0100			199.9725
Total	0.0804	0.0944	1.0290	2.3900e-003	0.1889	1.4200e-003	0.1904	0.0501	1.3000e-003	0.0514		199.7624	199.7624	0.0100			199.9725

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	59.3697					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332			282.1449
Total	59.7382	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0804	0.0944	1.0290	2.3900e-003	0.1889	1.4200e-003	0.1904	0.0501	1.3000e-003	0.0514		199.7624	199.7624	0.0100			199.9725
Total	0.0804	0.0944	1.0290	2.3900e-003	0.1889	1.4200e-003	0.1904	0.0501	1.3000e-003	0.0514		199.7624	199.7624	0.0100			199.9725

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Mitigated	2.8588	6.4769	29.8775	0.0719	4.8449	0.0872	4.9321	1.2934	0.0802	1.3736		6,061.9198	6,061.9198	0.2424			6,067.0097
Unmitigated	2.8588	6.4769	29.8775	0.0719	4.8449	0.0872	4.9321	1.2934	0.0802	1.3736		6,061.9198	6,061.9198	0.2424			6,067.0097

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse High Rise	738.08	801.92	679.84	2,109,727	2,109,727
Parking Lot	0.00	0.00	0.00		
Total	738.08	801.92	679.84	2,109,727	2,109,727

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 High Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.510423	0.073380	0.192408	0.132453	0.036550	0.005219	0.012745	0.022253	0.001862	0.002079	0.006550	0.000609	0.003468

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857
NaturalGas Unmitigated	0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	4231.77	0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse High Rise	4.23177	0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857
Total		0.0456	0.3900	0.1660	2.4900e-003		0.0315	0.0315		0.0315	0.0315		497.8558	497.8558	9.5400e-003	9.1300e-003	500.8857

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4545	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508	0.0000	16.6836	16.6836	0.0168	0.0000	17.0370
Unmitigated	5.4545	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508	0.0000	16.6836	16.6836	0.0168	0.0000	17.0370

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	lb/day										lb/day					
Architectural Coating	0.9759					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.1858					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2927	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508		16.6836	16.6836	0.0168		17.0370
Total	5.4545	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508	0.0000	16.6836	16.6836	0.0168	0.0000	17.0370

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9759					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.1858					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2927	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508		16.6836	16.6836	0.0168		17.0370
Total	5.4545	0.1090	9.3550	4.9000e-004		0.0508	0.0508		0.0508	0.0508	0.0000	16.6836	16.6836	0.0168	0.0000	17.0370

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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