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Air Quality Analysis for the South Dogwood Annexation Project Imperial County, California

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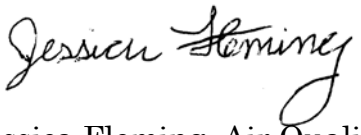

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Acronyms and Abbreviations

AB	Assembly Bill
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CO	carbon monoxide
DPM	diesel-exhaust particulate matter
GPA	General Plan Amendment
ICAPCD	Imperial County Air Pollution Control District
LLG	Linscott, Law & Greenspan, Engineers
LOS	Level of Service
NAAQS	National Ambient Air Quality Standards
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
O&M	operations and maintenance
Pb	lead
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	Particulate matter less than 2.5 microns in diameter
project	South Dogwood Annexation Project
ROG	reactive organic gases
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SIP	State Implementation Plan
SO_2	sulfur dioxide
SSAB	Salton Sea Air Basin
TAC	toxic air contaminant
U.S. EPA	U.S. Environmental Protection Agency
UPRR	Union Pacific Railroad
USC	United States Code

Executive Summary

The South Dogwood Road Annexation Project (project) consists of the annexation of approximately 67.78 gross acres (65.1 net acres after road right of way exclusions) of unincorporated lands to the City of El Centro (City), a General Plan Amendment (GPA) and a Pre-zone. The GPA and Pre-zone would allow for General Commercial development within the northern and central areas and High Medium Density Residential development in the southern four parcels. No specific development is proposed at this time, but future development at the site is anticipated to include infrastructure improvements and design features in order to meet regulatory requirements and provide sufficient infrastructure to serve the future development.

This analysis evaluates the significance of the project in accordance with the California Environmental Quality Act (CEQA) and guidance from the Imperial County Air Pollution Control District (ICAPCD). The project was evaluated to determine if it would (1) conflict with applicable air quality plans, (2) result in cumulative impacts to air quality, (3) impact sensitive receptors, or (4) expose a substantial number of people to objectionable odors. Project emissions were calculated using the California Emissions Estimator Model Version 2016.3.2.

A significant air quality impact would occur if the project conflicted with the ICAPCD's ozone (O_3) and particulate matter air quality plans. The project would include annexation of the project site, removing it from the Imperial County (County) Land Use Plan, and changing the City land use designation to General Commercial and High Medium Density Residential. Thus, the project would be inconsistent with the existing County land use and zoning designation. As compared to the General Industrial and Low Density Residential land use designation, future development of the project site with General Commercial and High Medium Density Residential uses would result in greater trip generation. Thus, without mitigation the project would result in air emissions that were not accounted for in the ICAPCD air quality plans and thus would be inconsistent with ICAPCD air quality plans. Mitigation measures AIR-1 and AIR-2 would require that the City provide the ICAPCD with revised land use plan so that these emissions may be accounted for in the next air quality plan updates and would require that the Project Applicant contribute to the ICAPCD Operational Development Fee Mitigation Program. Payment to the Operational Development Fee Program would fund local emission reduction projects in the County to offset of the increased air emissions associated with the future development of the project site through offsite mitigation. As contribution to the Program the project would offset ozone precursor and particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) emissions, the project would not result in a net increase in criteria pollutant emissions that is not accounted for in the air quality plans. The project would be consistent with applicable air quality plans after the implementation of mitigation measures AIR-1 and AIR-2. Impacts would be reduced to a level that is less than significant.

A significant air quality impact would occur if the project resulted in a cumulatively considerable net increase of any criteria pollutant for which the project region is in

non-attainment. The project site is in a non-attainment area for ozone, particulate matter with PM_{10}, and particulate matter with an aerodynamic diameter of 2.5 microns or less ($PM_{2.5}$) emissions. Construction emissions associated with of future construction of the project site would be less than all applicable ICAPCD significance thresholds. The ICAPCD requires that, regardless of the size of a project, all feasible standard measures for fugitive PM_{10} and construction equipment must be implemented at construction sites. Additionally, all feasible discretionary measures for PM_{10} apply to those construction sites that are 5 acres or more for non-residential developments or 10 acres or more in size for residential developments. With implementation of these standard and measures (AIR-3), project construction would not result in a cumulatively considerable increase in non-attainment pollutants, and impacts would be less than significant.

Air emissions associated with project operation would exceed the applicable ICAPCD significance thresholds for oxides of nitrogen (NO_X), an ozone precursor. Therefore, the project would be required to incorporate mitigation. Mitigation measure AIR-4 would require implementation of ICAPCD recommended standard, discretionary, and enhanced operation mitigation measures and would thereby substantially reduce air emissions associated with operation. Additionally, as required by mitigation measure AIR-2, the project would contribute to the ICAPCD Operational Development Fee Mitigation Program to offset remaining operations emissions. With the implementation of measures to reduce operational emissions and participation in the local air emission offset program, operations would not result in a cumulatively considerable net increase in non-attainment criteria pollutant emissions. Impacts would be reduced to a level that is less than significant.

Future development of the project site may expose sensitive receptors to increased pollutant concentrations including diesel particulate matter (DPM) from construction equipment use and hauling trips and carbon monoxide (CO) hotspots from traffic generated by future development of the project site. However, due to the temporary nature of construction activities, the fact that the duration of construction activities near any specific sensitive receptor would temporary and short-term, as well as ongoing implementation of U.S. Environmental Protection Agency and California Air Resources Board requirements for cleaner construction equipment, impacts associated with temporary DPM emissions would be less than significant. Once operational, all signalized intersections are projected to operate at Level of Service D or better; therefore, it is not anticipated to result in a CO hot spot. Therefore, localized air quality impacts to sensitive receptors would be less than significant.

The project does not include heavy industrial or agricultural uses that are typically associated with odor complaints. During construction, diesel equipment may generate some nuisance odors. Sensitive receptors near the project site include residential uses; however, exposure to odors associated with project construction would be short term and temporary in nature. Additionally, the measures outlined in this analysis would reduce construction exhaust emissions, which would also reduce construction-related odors. Impacts would be less than significant.

1.0 Introduction

1.1 Purpose of the Report

This report evaluates the significance of air quality emissions associated with the South Dogwood Annexation Project (project). This report characterizes existing conditions at the project site and in the region, identifies applicable rules and regulations, and assesses impacts related to air quality associated with construction and operation of the project.

1.2 Project Description

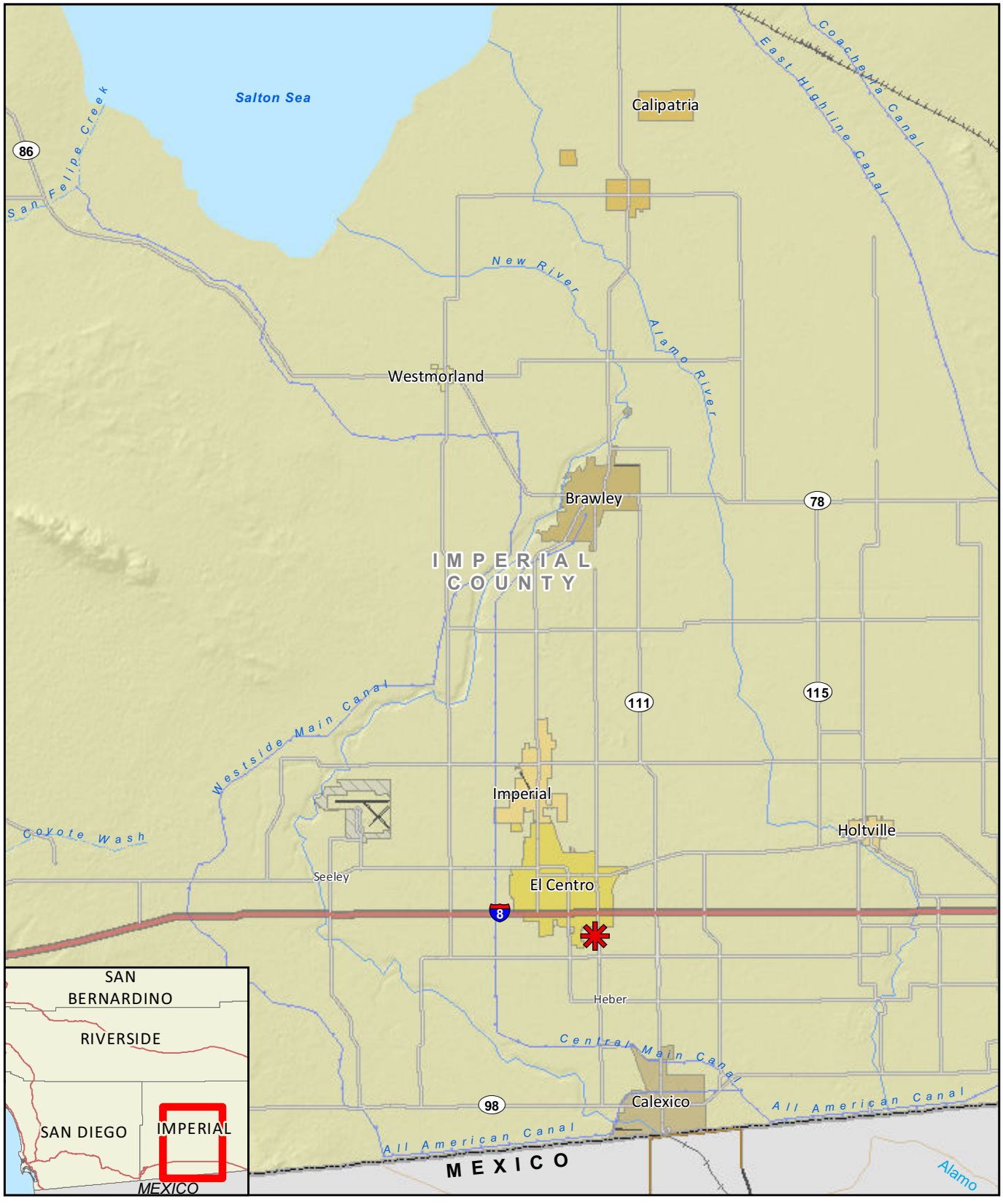
The project consists of the annexation of approximately 67.78 gross acres (65.1 net acres after road right-of-way exclusions) of Imperial County (County) unincorporated lands to the City of El Centro (City), a General Plan Amendment (GPA) and a Pre-zone. The property lies along the west side of Dogwood Avenue, from Danenberg Drive to 660 feet north of McCabe Road. Figure 1 shows the regional location and Figure 2 shows an aerial photograph of the project site and vicinity. No specific development is proposed at this time, but future development at the site is anticipated to include infrastructure improvements and design features in order to meet regulatory requirements and provide sufficient infrastructure to serve the future development.

1.2.1 General Plan Amendment

The County currently designates the site as Urban Area, a designation that is intended to cover areas anticipated to be annexed or incorporated into neighboring cities. The El Centro General Plan designates the site as General Industrial Development (northern portion of site) and Low Density Residential (southern portion of site). Concurrent with the application for annexation, the landowners have applied for a GPA to allow for General Commercial development within the northern and central areas and High Medium Density Residential development in the southern four parcels. Figure 3 shows the proposed land use designations.

1.2.2 Pre-zone

The site is currently zoned Medium Industrial Development by the County. As the site is not currently in the City, there is no existing City zoning for the site. The project area is proposed to be zoned CG (General Commercial), except for the southern 1,528 feet (11.97 acres) which is proposed to be zoned R-3 (High Density Residential).The southern area proposed for R-3 (High Density Residential) consists of assessor parcel numbers 054-390-089, 054-390-050, 054-390-051 and 054-390-052.



Project Location

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FIGURE 1
Regional Location

Image Source: Nearmap (flown September 2019)

Project Boundary

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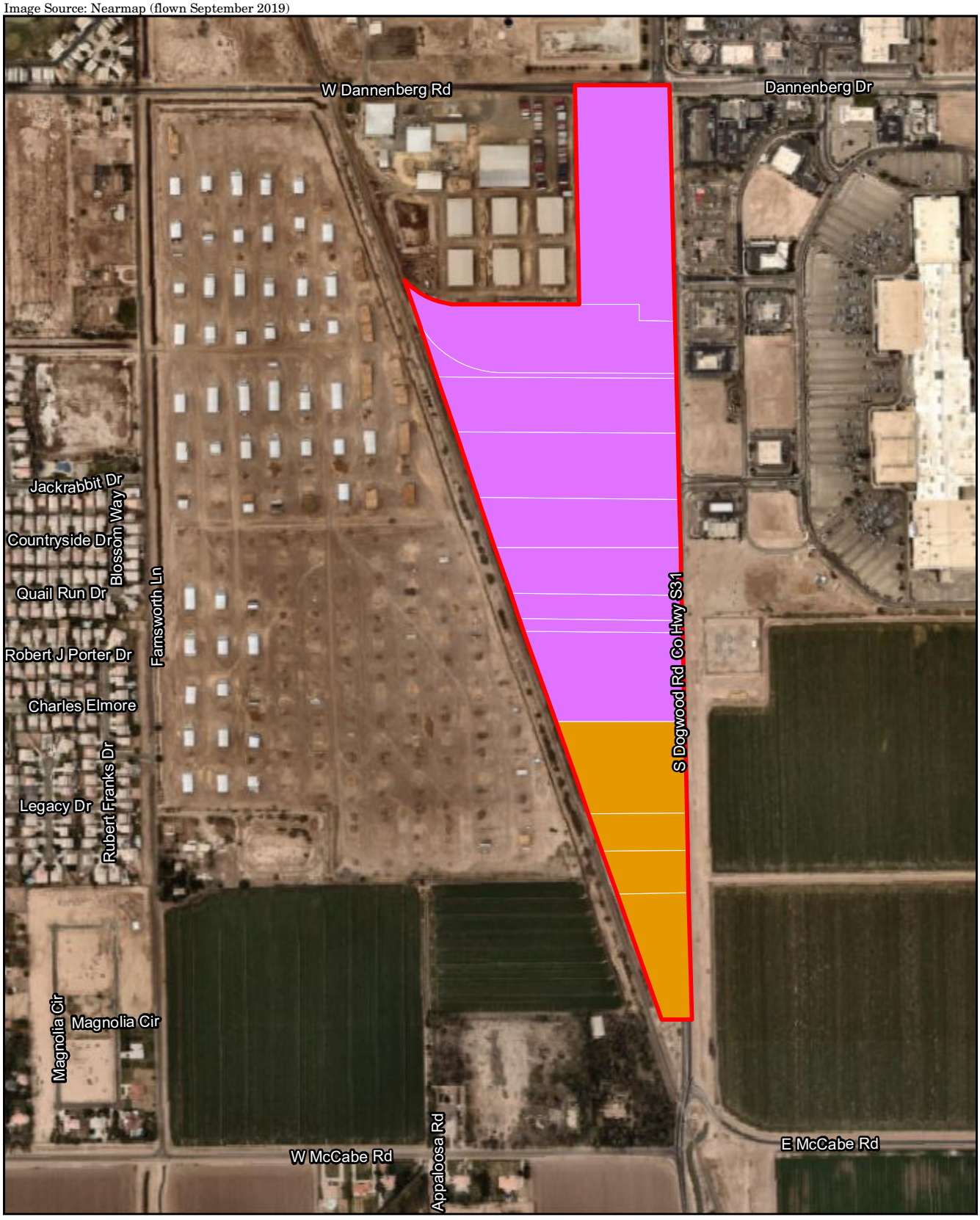
FIGURE 2

Project Location on Aerial Photograph

Image Source: Nearmap (flown September 2019)



Project Boundary

Land Use Designation

High Medium Density Residential

General Commercial

0 Feet 700

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FIGURE 3

Proposed Land Use Designations

At this time, no specific project is proposed. This analysis is based on the assumption of future retail/commercial and multi-family land uses. The total project area is 65.1 acres, with 53.13 acres for retail commercial and 11.97 acres for residential uses. The retail/commercial square footage and number of residential units were estimated as follows:

- **Retail/Commercial** – It is assumed that the retail/commercial square footage is 30% of the total acreage (53.13 acres), or 30% x 53.13 acres x 43,560 square feet = 694,303 square feet.

- **Residential** – A density of 16 units per acre is assumed for the residential, or 16 units x 11.97 acres = 191 dwelling units.

1.2.3 Infrastructure Improvements

Additional right-of-way, pavements, curbs, sidewalk and street lights will be required along the Danenberg Drive and Dogwood Avenue frontages for full build-out of those 4- and 6-lane arterial streets. There are existing pressurized City water lines in Danenberg Drive and Dogwood Avenue, to the south end of the Imperial Valley Mall. A water line extension will be needed for future development to the south of the existing water main and it is likely that a 2,650-foot water line loop will be required to the west (to connect to a water main in Farnsworth Lane) (City of El Centro 2019). New gravity flow sewer mains will be needed in Dogwood Avenue (flowing north) and Danenberg Drive (flowing west to the Union Pacific Railroad [UPRR] tracks).

The City is currently planning to construct a regional sewer lift station (Southern Lift Station) along Danenberg Drive, west of the UPRR tracks, that will include a gravity sewer main extension to the east side of the UPRR tracks, where a new sewer main from the newly annexed lands will connect. The properties within the proposed annexation area have natural ground surface elevations that drain to the north and the west. It is planned to create storm water basins along the UPRR right-of-way with a central storm water collection pipeline which will flow northerly to the southeast corner of Danenberg Drive and the UPRR. The new storm water pipeline will flow to an existing drainage water pipeline which exists below the UPRR tracks and empties into a deep private earthen drainage channel that extends from the UPRR tracks to the Imperial Irrigation District's Date Drain No. 3 (at Farnsworth Lane). A gravel service road is planned to be constructed along the east side of the UPRR right-of-way to allow access to the new storm water pipeline and new storm water storage basins.

1.2.4 Project Access

The Imperial Valley Mall is located opposite the project site, on the east side of Dogwood Avenue. Currently, there are two signalized access intersections, the Dogwood Avenue/North Mall Driveway (Chili's) and the Dogwood Avenue/South Mall Driveway (ARCO) along the project frontage providing access to the Imperial Valley Mall. It is assumed that the fourth (west leg) of these existing signalized intersections will provide access to the retail/commercial portion of the project. A third, new access driveway is

assumed to provide access to the residential portion of the project (Linscott, Law & Greenspan, Engineers [LLG] 2019).

1.3 Criteria Pollutants

Air quality impacts can result from the emission of pollutants associated with construction and operation of a project. Construction impacts are short term and may result from fugitive dust, equipment exhaust, and indirect effects associated with construction workers and deliveries. Operational impacts are long term and may result from equipment and processes used in the project (e.g., water heaters, engines, boilers, and paints or solvents), motor vehicle emissions associated with the project, regional impacts resulting from growth-inducing development, and local hot-spot effects stemming from sensitive receivers being placed close to highly congested roadways. Health effects can include the following:

- Increased respiratory infections
- Increased discomfort
- Missed days from work and school
- Increased mortality

The analysis of air quality impacts is based on the National and California Ambient Air Quality Standards (NAAQS and CAAQS). NAAQS and CAAQS represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. Six pollutants of key concern known as "criteria pollutants" include ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM_{10} and $PM_{2.5}$), and lead (Pb).

1.3.1 Ozone

Ozone is the primary component of smog. Ozone is not directly emitted into the air but is formed through complex chemical reactions between precursor emissions of nitrogen oxides (NO_X) and reactive organic gases (ROG) (also known as volatile organic compounds or reactive organic compounds) in the presence of sunlight. The adverse health effects associated with exposure to ozone pertain primarily to the respiratory system. Scientific evidence indicates that ambient levels of ozone affect not only sensitive receptors, such as asthma sufferers and children, but healthy adults as well. Exposure to ozone has been found to significantly alter lung functions by increasing respiratory rates and pulmonary resistance, decreasing tidal volumes (the amount of air inhaled and exhaled), and impairing respiratory mechanics. Symptomatic responses include throat dryness, chest tightness, headache, and nausea. About half of smog-forming emissions come from automobiles.

1.3.2 Carbon Monoxide

Carbon monoxide is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes about 56 percent of all CO emissions nationwide. CO enters the bloodstream through the lungs by combining with hemoglobin, which normally supplies oxygen to the cells. However, CO

combines with hemoglobin much more readily than oxygen does, resulting in a drastic reduction in the amount of oxygen available to the cells. Adverse health effects associated with exposure to CO concentrations include such symptoms as dizziness, headaches, and fatigue (United States Environmental Protection Agency [U.S. EPA] 2017a).

Small-scale, localized concentrations of CO above the NAAQS and CAAQS may occur at intersections with stagnation points such as those that occur on major highways and heavily traveled and congested roadways. Localized high concentrations of CO are referred to as "CO hotspots" and are a concern at congested intersections, where automobile engines burn fuel less efficiently and their exhaust contains more CO.

1.3.3 Nitrogen Dioxide

Nitrogen dioxide is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO_2 are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Inhalation is the most common route of exposure to NO_2. Because NO_2 has relatively low solubility in water, the principal site of toxicity is in the lower respiratory tract. The severity of the adverse health effects depends primarily on the concentration inhaled rather than the duration of exposure. An individual may experience a variety of acute symptoms, including coughing, difficulty with breathing, vomiting, headache, and eye irritation during or shortly after exposure. After a period of approximately 4 to 12 hours, an exposed individual may experience chemical pneumonitis or pulmonary edema with breathing abnormalities, cough, cyanosis, chest pain, and rapid heartbeat.

1.3.4 Sulfur Dioxide

Sulfur dioxide is a combustion product, with the primary source being power plants and heavy industries that use coal or oil as fuel. SO_2 is also a product of diesel engine combustion. The health effects of SO_2 include lung disease and breathing problems for people with asthma. SO_2 in the atmosphere contributes to the formation of acid rain.

1.3.5 Particulate Matter

Health studies have shown a significant association between exposure to particulate matter and premature death in people with heart or lung diseases. Other important effects include aggravation of respiratory and cardiovascular disease, lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems such as heart attacks and irregular heartbeat (U.S. EPA 2017b).

1.3.5.1 Inhalable Coarse Particles (PM_{10})

PM_{10} is particulate matter with an aerodynamic diameter of 10 microns or less. Ten microns is about one-seventh of the diameter of a human hair. Particulate matter is a complex mixture of very tiny solid or liquid particles composed of chemicals, soot, and dust. Under typical conditions (i.e., no wildfires) particles classified under the PM_{10} category are

mainly emitted directly from activities that disturb the soil including travel on roads and construction, mining, or agricultural operations. Other sources include windblown dust, salts, brake dust, and tire wear.

1.3.5.2 Inhalable Fine Particles ($PM_{2.5}$)

Airborne, inhalable particles with aerodynamic diameter of 2.5 microns or less have been recognized as an air quality concern requiring regular monitoring. Federal regulations required that $PM_{2.5}$ monitoring begin January 1, 1999. Similar to PM_{10}, $PM_{2.5}$ is also inhaled into the lungs and causes serious health problems.

1.3.6 Lead

Lead is a metal found naturally in the environment as well as in manufactured products. At high levels of exposure, lead can have detrimental effects on the central nervous system. The major sources of lead emissions have historically been mobile and industrial sources. As a result of the phase-out of leaded gasoline, metal processing is currently the primary source of lead emissions.

2.0 Regulatory Framework

2.1 Federal Regulations

2.1.1 Criteria Pollutants

The NAAQS represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. The Clean Air Act (CAA) was enacted in 1970 and amended in 1977 and 1990 (42 United States Code [USC] 7401) for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, in order to achieve the purposes of Section 109 of the CAA (42 USC 7409), the U.S. EPA developed primary and secondary NAAQS.

Six criteria pollutants of primary concern have been designated: ozone, CO, SO_2, NO_2, lead, and respirable particulate matter (PM_{10} and $PM_{2.5}$). The primary NAAQS ". . . in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health . . . " and the secondary standards ". . . protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air" (42 USC 7409(b)(2)). The NAAQS are presented in Table 1 (California Air Resources Board [CARB] 2016).

Table 1
State and National Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone[8]	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM_{10})[9]	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		–		
Fine Particulate Matter ($PM_{2.5}$)[9]	24 Hour	No Separate State Standard		35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-dispersive Infrared Photometry	35 ppm (40 mg/m³)	–	Non-dispersive Infrared Photometry
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	–	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		–	–	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemi-luminescence	100 ppb (188 µg/m³)	–	Gas Phase Chemi-luminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	–	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)
	3 Hour	–		–	0.5 ppm (1,300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[10]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[10]	–	
Lead[12,13]	30 Day Average	1.5 µg/m³	Atomic Absorption	–	–	High Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	–		0.15 µg/m³		
Visibility Reducing Particles[14]	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m³	Ion Chroma-tography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m³)	Gas Chroma-tography			

See footnotes on next page.

Table 1
State and National Ambient Air Quality Standards

ppm = parts per million; ppb = parts per billion; µg/m^3 = micrograms per cubic meter; – = not applicable.

[1] California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2] National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

[3] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4] Any equivalent measurement method which can be shown to the satisfaction of the Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.

[5] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[6] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7] Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

[8] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[9] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standards of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[10] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[11] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[12] The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[13] The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[14] In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

SOURCE: CARB 2016.

An area within a state is designated as either attainment or non-attainment for a particular pollutant. States are required to adopt enforceable plans, known as a State Implementation Plan (SIP), to achieve and maintain air quality meeting the NAAQS. State plans also must control emissions that drift across state lines and harm air quality in downwind states. Once a non-attainment area has achieved the NAAQS for a particular pollutant, it is redesignated as an attainment area for that pollutant. To be redesignated, the area must meet air quality standards for three consecutive years. After redesignation to attainment, the area is known as a maintenance area and must develop a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the CAA.

The project site is located in the city of El Centro within Imperial County, which is a moderate non-attainment area for the 1997 and 2008 federal ozone standards (U.S. EPA 2017c). The Imperial Valley portion of the county is a serious non-attainment area for the 1987 federal PM10 standard (U.S. EPA 2017c). The portion of Imperial County that includes El Centro and other cities in Imperial Valley (nonattainment area is defined by townships) is a moderate non-attainment area for the 2012 federal PM2.5 standards (U.S. EPA 2017c). On May 13, 2017, the U.S. EPA issued a clean data determination declaring that Imperial County had achieved attainment of the 2006 federal PM2.5 standard (U.S. EPA 2017d).

2.1.2 Nonroad Diesel Engine Standards

The U.S. EPA developed Nonroad Diesel Engine Standards in 1994. The standards apply to all engines rated over 50 horsepower in nearly all nonroad diesel equipment. Some of the most commonly regulated types of equipment include construction and farming equipment. The primary effect of the Nonroad Diesel Engine Standards has been to reduce NO_X and PM_{10} emissions from equipment subject to the standards.

The Nonroad Diesel Engine Standards have been phased-in in tiers. Tier 1 standards applied to engines sold between 1996 and 2000, Tier 2 standards applied to engines sold between 2001 and 2006, and Tier 3 standards applied to engines sold between 2006 and 2008. Additional Tier 4 standards were authorized in 2004, and were phased in for engines sold between 2008 and 2015.

While all new equipment must meet Tier 4 standards, existing equipment may continue to circulate. The U.S. EPA maintains replacement schedules for various sizes of equipment fleets that require retrofits or replacements over time to gradually bring the existing equipment up to standard.

2.2 State Regulations

2.2.1 Criteria Pollutants

The California Clean Air Act was enacted in 1988 (California Health & Safety Code Section 39000 et seq.). Under the California Clean Air Act, CARB has developed the CAAQS and

generally has set more stringent limits on the criteria pollutants than the NAAQS (see Table 1). In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride (see Table 1).

The state of California is divided geographically into 15 air basins for managing the air resources of the state on a regional basis. Areas within each air basin are considered to share the same air masses and, therefore, are expected to have similar ambient air quality. Similar to the CAA, the state classifies these specific geographic areas as either "attainment" or "nonattainment" areas for each pollutant based on the comparison of measured data with the CAAQS.

The project site is located in the Salton Sea Air Basin (SSAB), which encompasses Imperial County and parts of Riverside County (Coachella Valley). The SSAB is a non-attainment area for the state ozone standards, the state PM_{10} standard, and the state $PM_{2.5}$ standard.

2.2.2 Toxic Air Contaminants

The public's exposure to toxic air contaminants (TACs) is a significant public health issue in California. Diesel-exhaust particulate matter (DPM) emissions have been established as TACs. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill [AB] 1807: California Health and Safety Code Sections 39650–39674). The California Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly Bill) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels.

The Children's Environmental Health Protection Act, California Senate Bill (SB) 25 (Chapter 731, Escutia, Statutes of 1999), focuses on children's exposure to air pollutants. SB 25 requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air monitoring network, and develop any additional air toxic control measures needed to protect children's health. Locally, toxic air pollutants are regulated through the Imperial County Air Pollution Control District's (ICAPCD) Regulation X. Of particular concern statewide are DPM emissions. DPM was established as a TAC in 1998, and is estimated to represent a majority of the cancer risk from TACs statewide (based on the statewide average). Diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene

and formaldehyde, have been previously identified as TACs by CARB and are listed as carcinogens either under the state's Proposition 65 or under the federal Hazardous Air Pollutants program.

Following the identification of DPM as a TAC in 1998, CARB has worked on developing strategies and regulations aimed at reducing the risk from DPM. The overall strategy for achieving these reductions is found in CARB's Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (CARB 2000). A stated goal of the plan is to reduce the statewide cancer risk arising from exposure to DPM by 85 percent by 2020.

In April 2005, CARB published the *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB 2005). The CARB Air Quality Handbook makes recommendations directed at protecting sensitive land uses from air pollutant emissions while balancing a myriad of other land use issues (e.g., housing, transportation needs, economics, etc.). It notes that the CARB Air Quality Handbook is not regulatory or binding on local agencies and recognizes that application takes a qualitative approach. As reflected in the CARB Air Quality Handbook, there is currently no adopted standard for the significance of health effects from mobile sources. Therefore, CARB has provided guidelines for the siting of land uses near heavily traveled roadways. Of pertinence to this analysis, CARB guidelines indicate that siting new sensitive land uses within 1,000 feet of distribution centers with heavy truck traffic should be avoided when possible.

As an ongoing process, CARB will continue to establish new programs and regulations for the control of diesel particulate and other air-toxics emissions as appropriate. The continued development and implementation of these programs and policies will continue to reduce the public's exposure to DPM.

2.2.3 State Implementation Plan

The California SIP is a collection of documents that set forth the state's strategies for achieving the NAAQS. The California SIP is a compilation of new and previously submitted plans, programs (such as air quality management plans, monitoring, modeling, permitting, etc.), district rules, state regulations, and federal controls. CARB is the lead agency for all purposes related to the California SIP under federal law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. CARB then forwards revisions to the U.S. EPA for approval and publication in the *Federal Register*. All of the items included in the California SIP are listed in the Code of Federal Regulations (CFR) at 40 CFR 52.220.

The ICAPCD is responsible for preparing and implementing the portion of the California SIP applicable to the portion of the SSAB that is in Imperial County. These portions include:

- Imperial County 2009 State Implementation Plan for Particulate Matter Less than 10 Microns in Aerodynamic Diameter
- Imperial County 2013 State Implementation Plan for the 2006 24-Hour $PM_{2.5}$ Moderate Non-attainment Area
- Imperial County 2017 State Implementation Plan for the 2008 8-Hour Ozone Standard

2.2.4 California In-Use Off-Road Diesel-Fueled Fleets Regulation

The California In-Use Off-Road Diesel-Fueled Fleets Regulations were approved by CARB in July 2007, and subsequent major amendments were incorporated in December 2011. The regulations are intended to reduce diesel-exhaust and NO_X emissions from in-use off-road heavy-duty diesel vehicles in California. The regulation requires that any operator of diesel-powered off-road vehicles with 25-horsepower or greater engines meet specific fleet average targets. CARB maintains schedules for small, medium, and large equipment fleets that require equipment retrofits or replacements over time to gradually bring the existing equipment up to standard. As of January 2018, all newly purchased equipment for medium and large equipment fleets will be required to meet Tier 3 or higher engine standards.

2.3 Local Regulations

2.3.1 CEQA Air Quality Handbook

The ICAPCD adopted its *CEQA Air Quality Handbook: Guidelines for the Implementation of the California Environmental Quality Act of 1970* in 2007 and amended the handbook in December 2017 (ICAPCD 2017a). The ICAPCD CEQA Air Quality Handbook provides guidance on how to determine the significance of impacts, including air pollutant emissions, related to the development of residential, commercial, and industrial projects. Where impacts are determined to be significant, the ICAPCD CEQA Air Quality Handbook provides guidance to mitigate adverse impacts to air quality from development projects.

2.3.2 Stationary Source Permitting

Pursuant to ICAPCD Rule 207 (New & Modified Stationary Source Review) and associated rules such as Rule 201 (Permits Required) and Rule 208 (Permit to Operate), the construction, installation, modification, replacement, and operation of any equipment which may emit air contaminants requires ICAPCD permits. The ICAPCD requires that all such equipment be assessed for the potential to result in health risk impacts, and permits to

operate equipment must be renewed each year equipment is in use or upon the modification of equipment.

2.3.3 Policy Number 5–Off-site Mitigation/In-Lieu Fee

The ICAPCD issued Policy Number 5, Off-site Mitigation/In-lieu Fee in April 2014. The policy references the ICAPCD CEQA Air Quality Handbook and discusses how project proponents may achieve additional mitigation by either proposing an off-site mitigation project or paying an in-lieu mitigation fee. Mitigation fees collected by the ICAPCD are used to fund the emissions offsets projects through the ICAPCD Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program). Specific projects funded by the program achieve emissions reductions by replacing old, highly polluting equipment with newer, cleaner equipment earlier than required by regulation or through normal attrition. As outlined in Policy Number 5, total in-lieu fees for mitigation of construction emissions are calculated based on the quantity and duration of the project's construction emissions and the cost-effectiveness of the Carl Moyer Program for offsetting NO_X and PM_{10} emissions.

2.3.4 Operational Development Fee Mitigation Program

Adopted in November 2007, Rule 310, Operational Development Fee Mitigation Program, is designed to assist in the reduction of excess air emissions resulting from new residential and commercial development (warehousing is considered a commercial use under the program) in the Imperial County. Funds collected by the Program are used to offset NO_X and PM_{10} emissions through a local emission reduction projects such as paving unpaved roadways to reduce fugitive dust.

The ICAPCD publishes annual accountability reports that disclose the administrative costs of the program, the projects funded, and the air emissions avoided. For the 2016–2017 fiscal year, reductions were estimated at 2.83 tons of NO_X per year and 4.227 tons of PM_{10} per year for the life of funded projects, which is required to be at least 10 years.

2.3.5 Fugitive Dust Control

The ICAPCD Regulation VIII regulates emissions of fugitive dust. Fugitive dust is:

> Particulate Matter entrained in the ambient air which is caused from man-made and natural activities such as, but not limited to, movement of soil, vehicles, equipment, blasting, and wind. This excludes Particulate Matter emitted directly in the exhaust of motor vehicles or other fuel combustion devices, from portable brazing, soldering, or welding equipment, pile drivers, and stack emissions from stationary sources (ICAPCD, Rule 800 (c)(18)).

Regulation VIII includes the following specific rules:

- Rule 800–Fugitive Dust Requirements for Control of $PM_{2.5}$
- Rule 801–Construction and Earthmoving Activities
- Rule 802–Bulk Materials
- Rule 803–Carry Out and Track Out
- Rule 804–Open Areas
- Rule 805–Paved and Unpaved Roads
- Rule 806–Conservation Management Practices

3.0 Environmental Setting

3.1 Land Use Environment

The project site is surrounded by various industrial, agricultural, retail, and residential uses. There is a fertilizer storage and distribution facility to the north (across Danenberg Drive) and a hay storage and compress facility (Wilbur-Ellis) to the west (on the south side of Danenberg Drive). The hay storage and compress facility (22.95 acres) was annexed to the City in 2015 (Annexation EC 1-13). Other light to medium industrial developments within the project area include Quality Hay Scales (1960s), Rolfe truck parking yard (early 1980s), KC Welding and Rentals (1963), AKC Mini-Storage Facility (2002), several fenced equipment storage yards and two rural residences.

3.2 Regional Setting and Climate

Climate conditions at the project site, like the rest of Imperial County, are governed by the large-scale sinking and warming of air in the semi-permanent tropical high-pressure center of the Pacific Ocean. The high-pressure ridge blocks out most storms except in winter when it is weakest and farthest south. The coastal mountains prevent the intrusion of any cool, damp air found in California coastal environs. Because of the barrier and weakened storms, Imperial County experiences clear skies, extremely hot summers, mild winters, and little rainfall (ICAPCD 2017b).

Winters are mild and dry with daily average temperatures ranging between 65 and 75 degrees Fahrenheit. Summers are extremely hot with daily average temperatures ranging between 104 and 115 degrees Fahrenheit. The flat terrain and the strong temperature differentials created by intense solar heating result in moderate winds and deep thermal convection. The combination of subsiding air, protective mountains, and distance from the ocean all combine to severely limit precipitation (ICAPCD 2017b).

The large daily oscillation of temperature produces a corresponding large variation in the relative humidity. Nocturnal humidity rises to 50 to 60 percent, but drops to about 10 percent during the day. Prevailing winds are from the west-northwest through southwest; a secondary flow maximum from the southeast is also evident. The prevailing winds from the west and northwest occur seasonally from fall through spring and are

known to be from the Los Angeles area. Occasionally, Imperial County experiences periods of extremely high wind speeds. Wind speeds can exceed 31 miles per hour (mph) and this occurs most frequently during the months of April and May. However, speeds of less than 6.8 mph account for more than one-half of the observed wind measurements (ICAPCD 2017b).

3.3 Existing Air Quality

Air quality at a particular location is a function of the kinds, amounts, and dispersal rates of pollutants being emitted into the air locally and regionally. The major factors affecting pollutant dispersion are wind speed and direction, the vertical dispersion of pollutants (which is affected by temperature inversions), and topography.

Imperial County experiences surface inversions almost every day of the year. Due to strong surface heating, these inversions are usually broken and allow pollutants to be more easily dispersed. In some circumstances, the presence of the Pacific high-pressure cell can cause the air to warm to a temperature higher than the air below. This highly stable atmospheric condition, termed a subsidence inversion, can act as a nearly impenetrable lid to the vertical mixing of pollutants. The strength of these inversions makes them difficult to disrupt. Consequently, they can persist for one or more days, causing air stagnation and the build-up of pollutants. Highest and worst-case ozone levels are often associated with the presence of subsidence inversions (ICAPCD 2017b).

Air quality is commonly expressed as the number of days in which air pollution levels exceed state standards set by CARB or federal standards set by the U.S. EPA. The ICAPCD maintains five air quality monitoring stations located throughout the region. Air pollutant concentrations and meteorological information are continuously recorded at these stations. Measurements are then used by scientists to help forecast daily air pollution levels, and to gauge compliance with state and federal air quality standards.

The nearest active monitoring station is the El Centro Monitoring Station located at 150 9th Street, approximately two miles northwest of the project site. The El Centro Monitoring Station measures ozone, NO_2, PM_{10}, and $PM_{2.5}$. Table 2 provides a summary of measurements collected at the El Centro Monitoring Station for the years 2015 through 2017.

Table 2 Summary of Air Quality Measurements - El Centro Monitoring Station			
Pollutant/Standard	2016	2017	2018
Ozone			
Days State 1-hour Standard Exceeded (0.09 ppm)	4	4	2
Days State 8-hour Standard Exceeded (0.07 ppm)	11	17	15
Days Federal 8-hour Standard Exceeded (0.07 ppm)	11	17	14
Maximum 1-hour (ppm)	0.108	0.110	0.102
Maximum 8-hour (ppm)	0.082	0.092	0.090
Nitrogen Dioxide			
Days State 1-hour Standard Exceeded (0.18 ppm)	0	0	0
Days Federal 1-hour Standard Exceeded (0.100 ppm)	0	0	0
Maximum 1-hour (ppm)	0.050	0.048	0.034
Annual Average (ppm)	0.005	--	--
PM_{10}*			
Measured Days State 24-hour Standard Exceeded (50 µg/m^3)	--	--	20
Calculated Days State 24-hour Standard Exceeded (50 µg/m^3)	--	--	--
Measured Days Federal 24-hour Standard Exceeded (150 µg/m^3)	10	4	5
Calculated Days Federal 24-hour Standard Exceeded (150 µg/m^3)	10.0	4.0	5.1
Maximum Daily (µg/m^3)	284.9	268.5	253.0
State Annual Average (µg/m^3)	--	--	--
Federal Annual Average (µg/m^3)	45.0	41.3	46.9
$PM_{2.5}$*			
Measured Days Federal 24-hour Standard Exceeded (35 µg/m^3)	0	0	0
Calculated Days Federal 24-hour Standard Exceeded (35 µg/m^3)	0.0	0.0	0.0
Maximum Daily (µg/m^3)	31.3	23.2	22.4
State Annual Average (µg/m^3)	9.5	8.4	8.7
Federal Annual Average (µg/m^3)	9.4	8.4	8.6
SOURCE: California Air Resources Board (CARB) 2019. ppm = parts per million; µg/m^3 = micrograms per cubic meter *Calculated days value. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.			

4.0 Thresholds of Significance

The California Natural Resources Agency maintains State CEQA Guidelines to assist lead agencies in developing significance thresholds for assessing potentially significant environmental impacts. According to the CEQA Guidelines Appendix G Environmental Checklist, implementation of the project would have significant environmental impacts on air quality if it would:

1) Obstruct or conflict with the implementation of the applicable air quality plan.
2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
3) Expose sensitive receptors to substantial pollutant concentration including air toxics such as diesel particulates.
4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

As stated in the State CEQA Guidelines, these questions are "intended to encourage thoughtful assessment of impacts and do not necessarily represent thresholds of significance" (Title 14, Division 6, Chapter 3 Guidelines for Implementation of the CEQA, Appendix G, Environmental Checklist Form). The State CEQA Guidelines encourage lead agencies to adopt regionally specific thresholds of significance. When adopting these thresholds, the amended Guidelines allow lead agencies to consider thresholds of significance adopted or recommended by other public agencies, or recommended by experts, provided that the thresholds are supported by substantial evidence.

The ICAPCD CEQA Air Quality Handbook establishes the following four separate evaluation categories (ICAPCD 2017a):

1) Comparison of calculated project emissions to ICAPCD emission thresholds.
2) Consistency with the most recent Clean Air Plan for Imperial County.
3) Comparison of predicted ambient pollutant concentrations resulting from the project to state and federal health standards, when applicable.
4) The evaluation of special conditions which apply to certain projects.

Any development with a potential to emit criteria pollutants below significance levels defined by the ICAPCD is called a "Tier I project," and is considered by the ICAPCD to have less than significant potential adverse impacts on local air quality. For Tier I projects, the project proponent should implement a set of feasible "standard" mitigation measures (enumerated by the ICAPCD) to reduce the air quality impact to an insignificant level. A "Tier II project" is one whose emissions exceed any of the thresholds. Its impact is significant and the project proponent should select and implement all feasible "discretionary" mitigation measures (also enumerated by the ICAPCD) in addition to the standard measures.

4.1 Operational Impacts

Table 3 provides general guidelines for determining the significance of impacts based on the total emissions that are expected from project operation established by the ICAPCD.

Table 3
Significance Thresholds for Operations

Pollutant	Tier I	Tier II
NO_X and ROG	Less than 137 lbs/day	137 lbs/day and greater
PM_{10} and SO_X	Less than 150 lbs/day	150 lbs/day and greater
CO and $PM_{2.5}$	Less than 550 lbs/day	550 lbs/day and greater

ROG = reactive organic gas; NO_X = oxides of nitrogen; CO = carbon monoxide; PM_{10} = particulate matter with an aerodynamic diameter 10 microns or less; lbs/day = pounds per day
SOURCE: ICAPCD 2017a.

As stated above, Tier 1 projects are required to implement all feasible standard measures specified by the ICAPCD. Tier II projects are required to implement all feasible standard measures as well as all feasible discretionary measures specified by the ICAPCD.

4.2 Construction Impacts

The ICAPCD has also established thresholds of significance for project construction. Table 4 provides general guidelines for determining significance of impacts based on the total emissions that are expected from project construction.

Table 4
Significance Thresholds for Construction

Pollutant	Thresholds (pounds/day)
PM_{10}	150
ROG	75
NO_X	100
CO	550

ROG = reactive organic gas; NO_X = oxides of nitrogen; CO = carbon monoxide; PM_{10} = particulate matter with an aerodynamic diameter 10 microns or less.
SOURCE: ICAPCD 2017a.

Regardless of project size, all feasible standard measures specified by the ICAPCD for construction equipment and fugitive PM_{10} control for construction activities should be implemented at construction sites. Control measures for fugitive PM_{10} construction emissions in Imperial County are found in ICAPCD Regulation VIII and in the ICAPCD CEQA Air Quality Handbook and are discussed below.

4.3 Public Nuisance Law (Odors)

State of California Health and Safety Code Sections 41700 and 41705 and ICAPCD Rule 407 prohibit emissions from any source whatsoever in quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to the public health or damage to property.

The ICAPCD CEQA Air Quality Handbook provides screening level distances for potential odor sources. If a project is proposed within one mile of a wastewater treatment plant, sanitary landfill, composting station, feedlot, asphalt plant, painting and coating operation, or rendering plant, a potential odor problem may result (ICAPCD 2017a).

5.0 Air Quality Assessment

Implementation of the project would result in air pollutant emissions associated with the construction and operation of the project. Emissions were calculated using California Emissions Estimator Model (CalEEMod) Version 2016.3.2 (California Air Pollution Control Officers Association [CAPCOA] 2017). The CalEEMod program is a tool used to estimate emissions resulting from land development projects in the state of California. CalEEMod was developed with the participation of several state air districts including the South Coast Air Quality Management District (SCAQMD).

CalEEMod estimates parameters such as the type and amount of construction equipment required, trip generation, and utility consumption based on the size and type of each specific land use using data collected from surveys performed in SCAQMD. Where available, parameters were modified to reflect project-specific data.

5.1 Construction-related Emissions

Construction-related activities are temporary, short-term sources of air pollutant emissions. Sources of construction-related emissions include:

- Fugitive dust from grading activities;
- Exhaust emissions from construction equipment;
- Application of chemical coatings (paints, stains, sealants, etc.); and
- Exhaust and fugitive dust emission from on-road vehicles (trips by workers, delivery trucks, and material-hauling trucks).

Heavy-duty construction equipment is usually diesel powered. In general, emissions from diesel-powered equipment contain more NO_X, SO_X, and particulate matter than gasoline-powered engines. However, diesel-powered engines generally produce less CO and less ROG than do gasoline-powered engines. Standard construction equipment includes tractors/loaders/backhoes, rubber-tired dozers, excavators, graders, cranes, forklifts, rollers, paving equipment, generator sets, welders, cement and mortar mixers, and air compressors.

No specific development is proposed at this time; thus, construction phasing and equipment parameters are not available. Nonetheless, air emissions may be estimated when project-specific information is unavailable using construction data built-in to CalEEMod. Construction emissions were calculated assuming total buildout of the project site would occur all at once over the CalEEMod default construction period of approximately five years. Primary inputs are the numbers of each piece of equipment and the length of each construction stage. The construction equipment estimates are based on surveys, performed by the South Coast Air Quality Management District and the Sacramento Metropolitan Air Quality Management District, of typical construction projects which provide a basis for scaling equipment needs and schedule with a project's size. Air emission estimates in CalEEMod are based on the duration of construction phases; construction equipment type, quantity, and usage; grading area; season; and ambient temperature, among other parameters.

5.1.1 Fugitive dust from Grading

Fugitive dust would be associated with construction activities that involve ground disturbance. Fugitive dust emissions vary greatly during construction and are dependent on the amount and type of activity, silt content of the soil, and the weather. Vehicles moving over paved and unpaved surfaces, demolition, excavation, earth movement, grading, and wind erosion from exposed surfaces are all sources of fugitive dust. Calculation of fugitive dust emissions are based on the area of disturbed ground and the fugitive dust measures implemented.

The ICAPCD requires that, regardless of the size of a project, all feasible standard measures for fugitive PM_{10} must be implemented at construction sites. Additionally, all feasible discretionary measures for PM_{10} apply to those construction sites that are 5 acres or more for non-residential developments or 10 acres or more in size for residential developments. Standard and discretionary measures from the ICAPCD handbook are listed below.

Standard Measures for Fugitive PM_{10} Control:

a) All disturbed areas, including Bulk Material storage which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps or other suitable material such as vegetative ground cover.

b) All on site and off site unpaved roads will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.

c) All unpaved traffic areas one (1) acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emission shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering. The transport of Bulk Materials shall be completely covered unless six inches of freeboard space from the top of the container is maintained with no spillage and loss of Bulk Material. In addition, the cargo compartment of all Haul Trucks is to be cleaned and/or washed at delivery site after removal of Bulk Material.

d) The transport of Bulk Materials shall be completely covered unless six inches of freeboard space from the top of the container is maintained with no spillage and loss of Bulk Material. In addition, the cargo compartment of all Haul Trucks is to be cleaned and/or washed at delivery site after removal of Bulk Material.

e) All Track-Out or Carry-Out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an Urban area.

f) Movement of Bulk Material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers or by sheltering or enclosing the operation and transfer line.

g) The construction of any new Unpaved Road is prohibited within any area with a population of 500 or more unless the road meets the definition of a Temporary Unpaved Road. Any temporary unpaved road shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants and/or watering.

Discretionary Mitigation Measures for Fugitive PM_{10} Control

a) Water exposed soil with adequate frequency for continued moist soil.

b) Replace ground cover in disturbed areas as quickly as possible.

c) Automatic sprinkler system installed on all soil piles.

d) Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.

e) Develop a trip reduction plan to achieve a 1.5 AVR for construction employees.

f) Implement a shuttle service to and from retail services and food establishments during lunch hours.

Construction emission estimates account for stabilization of unpaved roads, limiting vehicle speeds on unpaved roads, track-out control devices, and replacement of ground cover based on SCAQMD's Fugitive Dust Mitigation Tables (SCAQMD 2007).

5.1.2 Equipment Exhaust

The equipment anticipated to be used in project construction was provided by the project applicant and is shown below in Table 5.

Table 5
Construction Schedule and Equipment

Construction Activity/ Equipment Type	Quantity	Horsepower	Load Factor	Hours/Day
Demolition (70 days)				
Concrete/Industrial Saws	1	81	0.73	8
Excavators	3	158	0.38	8
Rubber Tired Dozers	2	247	0.40	8
Site Preparation (40 days)				
Rubber Tired Dozers	3	247	0.40	8
Tractors/Loaders/Backhoes	4	97	0.37	8
Grading (110 days)				
Excavators	2	158	0.38	8
Graders	1	187	0.41	8
Rubber Tired Dozers	1	247	0.40	8
Scrapers	2	367	0.48	8
Tractors/Loaders/Backhoes	2	97	0.37	8
Building Construction (1,110 days)				
Cranes	1	231	0.29	7
Forklifts	3	89	0.20	8
Generator Sets	1	84	0.74	8
Tractors/Loaders/Backhoes	3	97	0.37	7
Welders	1	46	0.45	8
Paving (75 days)				
Pavers	2	130	0.42	8
Paving Equipment	2	132	0.36	8
Rollers	2	80	0.38	8
Architectural Coatings (555 days – simultaneous with half of building construction)				
Air Compressors	1	78	0.48	6

CalEEMod calculates emissions of all pollutants from construction equipment using emission factors from CARB's off-road diesel equipment emission factors database, OFFROAD 2011 (CARB 2011).

The ICAPCD requires that, regardless of the size of a project, all feasible standard measures for construction equipment must be implemented at construction sites. Standard measures from the ICAPCD handbook are listed below.

Standard Measures for Construction Combustion Equipment

a) Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel powered equipment.

b) Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.

c) Limit, to the extent feasible, the hours of operation of heavy duty equipment and/or the amount of equipment in use.

d) Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).

5.1.3 On-road Vehicle Emissions

Construction would generate mobile source emissions from worker trips, hauling trips, and vendor trips. CalEEMod calculates emissions of all pollutants from on-road trucks and passenger vehicles using emission factors derived from CARB's motor vehicle emission inventory program EMFAC2014 (CARB 2014). Vehicle emission factors were multiplied by the model default total estimated number of trips and the average trip length to calculate the total mobile emissions.

5.1.4 Construction Emission Estimates

Table 6 provides a summary of the criteria pollutant emissions generated by the project construction. CalEEMod output files for project construction and operations are contained in Attachment 1.

Table 6
Maximum Daily Construction Air Pollutant Emissions

Emission Source	Maximum Daily Emissions (pounds)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Demolition	3	33	22	<1	2	2
Site Preparation	4	41	22	<1	9	6
Grading	4	46	32	<1	5	3
Building Construction	4	33	33	<1	4	2
Paving	1	9	15	<1	1	<1
Architectural Coatings	22	2	4	<1	<1	<1
Max Daily Emissions	**22**	**46**	**33**	**<1**	**9**	**6**
Significance Threshold	*75*	*100*	*550*	-	*150*	-
Exceeds Threshold?	***No***	***No***	***No***	**-**	***No***	**-**

SOURCE: Attachment 1
NOTE: Totals may vary due to independent rounding.

5.2 Operation-related Emissions

Operation-related sources of air pollutant emissions include the direct emission of criteria pollutants. Common direct emission sources include mobile sources such as project-generated traffic and area sources such as the use of landscaping equipment.

5.2.1 Mobile Sources

CalEEMod calculates mobile source emissions using emission factors derived from CARB's motor vehicle emission inventory program, EMFAC2014 (CARB 2014). At complete buildout, the project would generate a total of 23,492 daily trips without accounting for pass-by trips (LLG 2019). Standard countywide trip lengths for each trip type were used to determine total project vehicle miles traveled (CAPCOA 2017). The vehicle emission factors and fleet mix used in CalEEMod are derived from EMFAC2014.

Regional data indicates that 50 percent of roads in Imperial County are unpaved. However, the project is located within an urban area, and all roadways in the vicinity of the project site are paved. Thus, it was assumed that all project-generated trips would travel on paved roads.

5.2.2 Area Sources

Area source emissions associated with the project include consumer products, natural gas used in space and water heating, architectural coatings, landscaping equipment, and mechanical equipment such as boilers or backup generators. Hearths (fireplaces) and woodstoves are also a source of area emissions; however, the project would not include hearths or woodstoves.

Consumer products are chemically formulated products used by household and institutional consumers, including, but not limited to, detergents, cleaning compounds, polishes, floor finishes, disinfectants, sanitizers, and aerosol paints but not including other paint products, furniture coatings, or architectural coatings. Emissions due to consumer products are calculated using total building area and product emission factors.

Emissions are generated from energy use such as the combustion of natural gas used in space and water heating. Natural gas demand was based on the California Energy Commission-sponsored California Commercial End Use Survey, which identifies energy use by building type and climate zone.

For architectural coatings, emissions result from evaporation of solvents contained in surface coatings such as in paints and primers. Emissions are based on the building surface area, architectural coating emission factors, and a reapplication rate of 10 percent of area per year.

Landscaping maintenance includes fuel combustion emission from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers

as well as air compressors, generators, and pumps. Emission calculations take into account building area, equipment emission factors, and the number of operational days (summer days).

5.2.3 Operations Emission Estimates

Table 7 provides a summary of the criteria pollutant emissions generated by the project operations. CalEEMod output files for project construction and operations are contained in Attachment 1.

Table 7
Maximum Daily Operations Air Pollutant Emissions

Emission Source	Maximum Daily Emissions (pounds)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Sources	23	<1	16	<1	<1	<1
Energy Sources	<1	1	1	<1	<1	<1
Mobile Sources	33	295	319	1	46	13
Total Operations	**56**	**296**	**335**	**1**	**46**	**13**
Significance Threshold	*137*	*137*	*550*	*150*	*150*	*550*
Exceeds Threshold?	***No***	***Yes***	***No***	***No***	***No***	***No***

SOURCE: Attachment 1
NOTE: Totals may vary due to independent rounding.

5.3 Impact Analysis

1. *Would the project obstruct or conflict with the implementation of the applicable air quality plan?*

CARB is the lead agency for preparation of the California SIP, which outlines the state measures to achieve NAAQS. CARB delegates responsibility for preparation of SIP elements to local air districts and requires local air districts to prepare Air Quality Attainment Plans outlining measures required to achieve CAAQS.

The ICAPCD is the air district responsible for the project area. Applicable ICAPCD air quality plans include:

- Imperial County 2009 State Implementation Plan for Particulate matter Less than 10 Microns in Aerodynamic Diameter;
- Imperial County 2013 State Implementation Plan for the 2006 24-Hour $PM_{2.5}$ Moderate Non-attainment Area; and
- Imperial County 2017 State Implementation Plan for the 2008 8-Hour Ozone Standard.

The primary concern for assessing consistency with air quality plans is whether the project would induce growth that would result in a net increase in criteria pollutant emissions that exceeds the assumptions used to develop the plan. The basis for the air quality plans is the

population growth and regional vehicle miles traveled (VMT) projections, which are based in part on the land uses established by local general plans. As such, projects that propose development that is consistent with the local land use plans would be consistent with growth projections and air quality plans emissions estimates. In the event that a project would result in development that is less dense than anticipated by the growth projections, the project would be considered consistent with the air quality plans. In the event a project would result in development that results in greater than anticipated growth projections, the project would result in air emissions that may not have been accounted for in the air quality plans and thus may obstruct or conflict with the air quality plans.

The County land use designation for the project site is Urban Area. The Urban Area designation is intended to cover areas that will be annexed into cities. The El Centro General Plan indicates the site to be planned for General Industrial development (northern portion of site) and Low Density Residential (southern portion of site). The project would include annexation of the project site, removing it from the County Land Use Plan, and changing the City land use designation to General Commercial and High Medium Density Residential. Thus, the project would be inconsistent with the existing land use and zoning designation.

As compared to the General Industrial and Low Density Residential land use designation, future development of the project site with General Commercial and High Medium Density Residential uses would result in greater trip generation. It is not possible to conclusively determine whether the project would induce growth that would result in a net increase in criteria pollutant emissions that exceed the assumptions used to develop the air quality plans until a comprehensive update of regional VMT projections based on revised population and employment forecasts is conducted. Nonetheless, as the project would propose a land use that results in greater trip generation than the existing land use designation, the project would be anticipated to result in additional VMT growth and thereby result in air emissions that were not accounted for in the air quality plans. The project would be inconsistent with ICAPCD air quality plans. Impacts would be significant prior to mitigation.

The following mitigation measures would address the project's inconsistency with the ICAPCD air quality plans.

AIR-1 Updated Land Use Plan

Within 6 months of project approval, the City Community Development Director shall provide a revised General Plan land use map to the Southern California Association of Governments to ensure that regional population and VMT projections are updated and thereby ensure the next air quality plan updates will accurately reflect anticipated growth associated with future development of the project site.

AIR-2 Off-site Mitigation through ICAPCD Operational Development Fee Mitigation Program

Prior to the issuance of a building permit for construction on the project site, the City shall verify the Project Applicant has submitted a Mitigation Project Report and contributed to the ICAPCD Operational Development Fees Program in accordance with Rule 310 and its associated criteria.

Mitigation measure AIR-1 would require the change in land use be reported to the Southern California Association of Governments so that the regional population and VMT projections may be updated for use in the next air quality plan updates. The provision of this information would assist ICAPCD in revising the air emission forecasts; however, until the anticipated growth is included in the emission estimates of the air quality plans, direct and cumulative impacts relative to conformance with the air quality plans would remain.

Mitigation measure AIR-2 would require the Project Applicant contribute to the ICAPCD Operational Development Fee Mitigation Program. As discussed in Section 2.3.3, the ICAPCD Operational Development Fee Mitigation Program is designed to assist in the offsite mitigation of air emissions resulting from new land development in the Imperial County. Through contribution to the Program the project would offset NO_X and PM_{10} emissions. Therefore, impacts would be reduced to a level that is less than significant.

2. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

The project site is in non-attainment areas for NAAQS and CAAQS for ozone and particulate matter. The majority of regional PM_{10} and $PM_{2.5}$ emissions originate from dust stirred up by wind or by vehicle traffic on unpaved roads (ICAPCD 2009). Other PM_{10} and $PM_{2.5}$ emissions originate from grinding operations, combustion sources such as motor vehicles, power plants, wood burning, forest fires, agricultural burning, and industrial processes. Ozone is not emitted directly, but is a result of atmospheric activity on precursors. NO_X and ROG are known as the chief "precursors" of ozone. These compounds react in the presence of sunlight to produce ozone. Approximately 88 percent of NO_X and 40 percent of ROG regional emissions originate from on- and off-road vehicles (ICAPCD 2010). Other major sources include solvent evaporation and miscellaneous processes such as pesticide application.

Construction Emissions

As shown in Table 6, all construction emissions would be less than the applicable significance thresholds. The ICAPCD requires that, regardless of the size of a project, all feasible standard measures for fugitive PM_{10} and construction equipment must be implemented at construction sites. Additionally, all feasible discretionary measures for PM_{10} apply to those construction sites that are 5 acres or more for non-residential developments or 10 acres or more in size for residential developments. With implementation of these standard and measures (AIR-3), project construction would not

result in a cumulatively considerable increase in non-attainment pollutants, and impacts would be less than significant.

AIR-3 Construction Mitigation Measures

Prior to the issuance of a grading or construction permit for the project site, the Project Applicant shall provide documentation (such as a contract or other legally binding document) to the City proving that contractors and subcontractors will implement the following measures in accordance with the ICAPCD CEQA Air Quality Handbook performance criteria:

Standard Measures for Fugitive PM_{10} Control

a. All disturbed areas, including bulk material storage which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps or other suitable material such as vegetative ground cover.

b. All on site and off site unpaved roads will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.

c. All unpaved traffic areas one (1) acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emission shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.

d. The transport of bulk materials shall be completely covered unless six inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material.

e. All track-out or carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more.

f. Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers or by sheltering or enclosing the operation and transfer line.

g. The construction of any new unpaved road is prohibited unless the road meets the ICAPCD definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants and/or watering.

Discretionary Measures for Fugitive PM_{10} Control

a. Water exposed soil with adequate frequency for continued moist soil.

b. Replace ground cover in disturbed areas as quickly as possible.

c. Automatic sprinkler system installed on all soil piles.

d. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.

e. Develop a trip reduction plan to achieve a 1.5 average vehicle ridership for construction employees.

f. Implement a shuttle service to and from retail services and food establishments during lunch hours.

Measures for Construction Combustion Equipment

a. Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel powered equipment.

b. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.

c. Limit, to the extent feasible, the hours of operation of heavy duty equipment and/or the amount of equipment in use.

d. Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).

Operations Emissions

As shown in Table 7, air emissions associated with project operation would exceed the applicable ICAPCD Tier I significance thresholds for NO_X. Therefore, the project would potentially contribute to violations of NAAQS and CAAQS for ozone standards. Impacts would be significant. The following mitigation measure would address the project's contribution to air quality violations:

AIR-4 Operations Mitigation Measures

Prior to the issuance of a grading or construction permit for the project site, the Project Applicant shall be required to demonstrate to the satisfaction of ICAPCD CEQA Air Quality Handbook performance criteria for industrial project, which consists of ensuring that the following project features have been incorporated into the site-specific entitlements issued for the project:

Residential Projects – Site Design

a. Link cul-de-sacs and dead-end streets to encourage pedestrian and bicycle travel.

b. Allocate easements or land dedications for bikeways and pedestrian walkways.

c. Provide continuous sidewalks separated from the roadway by landscaping and on-street parking. Adequate lighting for sidewalks must be provided, along with crosswalks at intersections.

d. Bicycle storage at apartment complexes or condos without garages.

e. If the project is located on an established transit route, improve public transit accessibility by providing transit turnouts with direct pedestrian access to project.

f. For bus service within 0.25 mile of the project provide bus stop improvements such as shelters, route information, benches and lighting.

g. Increase street tree planting.

h. Outdoor electrical outlets to encourage the use of electric appliances and tools.

i. Provide bikeway lanes and/or link new comparable bikeway lanes to already existing lanes.

j. Increase the number of bicycle routes/lanes.

k. Provide pedestrian signalization and signage to improve pedestrian safety.

l. Synchronize traffic lights on streets impacted by development.

Residential Projects – Energy Efficiency

a. Measures which meet mandatory, prescriptive and/or performance measures as required by Title 24.

b. Use roof material with a solar reflectance value meeting the EPA/DEO Energy Star® rating to reduce summer cooling needs.

c. Use high efficiency gas or solar water heaters.

d. Use built-in energy efficient appliances.

e. Use double-paned windows.

f. Use low energy street lighting (i.e., sodium).

g. Use energy efficient interior lighting.

h. Use low energy traffic signals (i.e., light emitting diode).

i. Install door sweeps and weather stripping if more efficient doors and windows are not available.

Commercial Projects – Site Design

a. Provide on-site bicycle lockers and/or racks.

b. Provide on-site eating, refrigeration and food vending facilities to reduce lunchtime trips.

c. Provide shower and locker facilities to encourage employees to bike and/or walk to work.

d. Provide for paving a minimum of 100 feet from the property line for commercial driveways that access County paved roads as per County Standard Commercial Driveway Detail 410B (formerly SW-131A).

e. Increase street tree planting.

f. Shade tree planting in parking lots to reduce evaporative emissions from parked vehicles.

g. Increase number of bicycle routes/lanes.

h. If the project is located on an established transit route, improve public transit accessibility by providing transit turnouts with direct pedestrian access to protect or improve transit stop amenities.

i. For bus service within a 0.25 mile of the project provide bus stop improvements such as shelters, route information, benches and lighting.

j. Implement on-site circulation design elements in parking lots to reduce vehicle queuing and improve the pedestrian environment.

k. Provide pedestrian signalization and signage to improve pedestrian safety.

l. Synchronize traffic lights on streets impacted by development.

Commercial Projects – Energy Efficiency

a. Measures which meet mandatory, prescriptive and/or performance measures as required by Title 24.

b. Use roof material with a solar reflectance value meeting the EPA/DOE Energy Star® rating to reduce summer cooling needs.

c. Use built-in energy efficient appliances, where applicable.

d. Use double-paned windows.

e. Use low energy parking lot and street lights (i.e. sodium).

f. Use energy efficient interior lighting.

g. Use low energy traffic signals (i.e. light emitting diode).

h. Install door sweeps and weather stripping if more efficient doors and windows are not available.

i. Install high efficiency gas/electric space heating.

Additional emission reductions would be associated with mitigation requirements that promote carpool, mass transit, biking, walking, and other alternative transit modes; however, additional emission reductions associated with these requirements were not quantified due to the high degree of variability of reductions achieved by these requirements. Due to the magnitude of future development of the project site and the associated vehicle trip generation, it would be likely that incorporation of all feasible on-site mitigation would not reduce air quality emissions below ICAPCD Tier I significance thresholds. After implementation of mitigation measure AIR-4, operational emissions would continue to exceed applicable significance thresholds for NO_x emissions.

To further reduce operational emissions, mitigation measure AIR-2 would be implemented. As discussed previously, mitigation measure AIR-2 would require the Project Applicant contribute to the ICAPCD Operational Development Fee Mitigation Program and would

thereby fund local emission reduction projects in the County to offset emissions associated with the future development of the project site through off-site mitigation. As the project would fund local air emission offsets, impacts would be reduced to a level that is less than significant.

3. *Would the project expose sensitive receptors to substantial pollutant concentration including air toxics such as diesel particulates?*

The term "sensitive receptor" refers to a person in the population who is more susceptible to health effects due to exposure to an air contaminant than the population at large or to a land use that may reasonably be associated with such a person. Examples include schools, day care centers, hospitals, retirement homes, convalescence facilities, and residences. There are residential uses located in the vicinity of the project site.

Construction-related Diesel Particulate Matter

Construction of the project and associated infrastructure would result in short-term diesel exhaust emissions from on-site heavy-duty equipment. Construction of the project would result in the generation of diesel-exhaust DPM emissions from the use of off-road diesel equipment required for site grading and excavation, paving, and other construction activities and on-road diesel equipment used to bring materials to and from the project site.

Generation of DPM from construction projects typically occurs in a single area for a short period of time. Health risks are generally evaluated over a 30-year exposure period. The duration of construction activities near any specific sensitive receptor would temporary and short term. Additionally, with ongoing implementation of U.S. EPA and CARB requirements for cleaner fuels; off-road diesel engine retrofits; and new, low-emission diesel engine types, the DPM emissions of individual equipment would be substantially reduced over the years as the project construction continues. Impacts associated with temporary DPM emissions would be less than significant.

CO Hot Spots

Localized CO concentration is a direct function of motor vehicle activity at signalized intersections (e.g., idling time and traffic flow conditions), particularly during peak commute hours and meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels with respect to local sensitive land uses. CO hot spots due to traffic almost exclusively occur at signalized intersections that operate at a Level of Service (LOS) E or below. Projects may result in or contribute to a CO hot spot if they worsen traffic flow at signalized intersections operating at LOS E or F. Based on the Transportation Impact Analysis, the project would not result in a signalized intersection to operate at a LOS E or worse (LLG 2019); therefore, it is not anticipated to result in a CO hot spot. Therefore, localized air quality impacts to sensitive receptors would be less than significant.

4. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

The project does not include heavy industrial or agricultural uses that are typically associated with odor complaints. During construction, diesel equipment may generate some nuisance odors. Sensitive receptors near the project site include residential uses; however, exposure to odors associated with project construction would be short term and temporary in nature. Additionally, the measures outlined above would reduce construction exhaust emissions, which would also reduce construction-related odors. Impacts would be less than significant.

6.0 Conclusions

The project was evaluated for consistency with the ICAPCD ozone, PM_{10}, and $PM_{2.5}$ air quality plans. The project would include annexation of the project site, removing it from the County Land Use Plan, and changing the City land use designation to General Commercial and High Medium Density Residential. Thus, the project would be inconsistent with the existing land use and zoning designation. As compared to the General Industrial and Low Density Residential land use designation, future development of the project site with General Commercial and High Medium Density Residential uses would result in greater trip generation. Thus, without mitigation the project would result in air emissions that were not accounted for in the ICAPCD air quality plans and thus would be inconsistent with ICAPCD air quality plans. Mitigation measures AIR-1 and AIR-2 would require that the City provide the ICAPCD with revised land use plan so that these emissions may be accounted for in the next air quality plan updates and would require that the Project Applicant contribute to the ICAPCD Operational Development Fee Mitigation Program. Payment to the Operational Development Fee Program would fund local emission reduction projects in the County to offset of the increased air emissions associated with the future development of the project site through offsite mitigation. As contribution to the Program the project would offset ozone precursor and PM_{10} emissions, the project would not result in a net increase in criteria pollutant emissions that is not accounted for in the air quality plans. The project would be consistent with applicable air quality plans after the implementation of mitigation measures AIR-1 and AIR-2. Impacts would be reduced to a level that is less than significant.

As shown in Table 6, construction emissions associated with of future construction of the project site would be less than all applicable ICAPCD significance thresholds. The ICAPCD requires that, regardless of the size of a project, all feasible standard measures for fugitive PM_{10} and construction equipment must be implemented at construction sites. Additionally, all feasible discretionary measures for PM_{10} apply to those construction sites that are 5 acres or more for non-residential developments or 10 acres or more in size for residential developments. With implementation of these standard and measures (AIR-3), project construction would not result in a cumulatively considerable increase in non-attainment pollutants, and impacts would be less than significant.

As shown in Table 7, air emissions associated with project operation would exceed the applicable ICAPCD significance thresholds for NO_X, an ozone precursor. Therefore the project would be required to incorporated mitigation. Mitigation measure AIR-4 would require implementation ICAPCD recommended standard, discretionary, and enhanced operation mitigation measures and would thereby substantially reduce air emissions associated with operation. Additionally, as required by mitigation measure AIR-2, the project would contribute to the ICAPCD Operational Development Fee Mitigation Program to offset remaining operations emissions. With the implementation of measures to reduce operational emissions and participation in the local air emission offset program, operations would not result in a cumulatively considerable net increase in non-attainment criteria pollutant emissions. Impacts would be reduced to a level that is less than significant.

Future development of the project site may expose sensitive receptors to increased pollutant concentrations including DPM from construction equipment use and hauling trips and CO hotspots from traffic generated by future development of the project site. However, due to the temporary nature of construction activities, the fact that the duration of construction activities near any specific sensitive receptor would temporary and short term, as well as ongoing implementation of U.S. EPA and CARB requirements for cleaner construction equipment, impacts associated with temporary DPM emissions would be less than significant. Once operational, all signalized intersections are projected to operate at LOS D or better; therefore, it is not anticipated to result in a CO hot spot. Therefore, localized air quality impacts to sensitive receptors would be less than significant.

The project does not include heavy industrial or agricultural uses that are typically associated with odor complaints. During construction, diesel equipment may generate some nuisance odors. Sensitive receptors near the project site include residential uses; however, exposure to odors associated with project construction would be short term and temporary in nature. Additionally, the measures outlined above would reduce construction exhaust emissions, which would also reduce construction-related odors. Impacts would be less than significant.

7.0 References Cited

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ATTACHMENT 1

CalEEMod Output Files

9489 South Dogwood Annexation - 2035

Imperial County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	191.00	Dwelling Unit	11.92	191,000.00	617
Regional Shopping Center	694.30	1000sqft	53.13	694,303.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	12
Climate Zone	15			**Operational Year**	2035
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MWhr)	688.19	**CH4 Intensity (lb/MWhr)**	0.016	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

9489 South Dogwood Annexation - 2035 - Imperial County APCD Air District, Summer

Project Characteristics - Energy intensity factors reduced to reflect RPS 2030 50% mandate
(688.1949, .0157, .00334)

Land Use - 191 dwelling units/11.92 acres
694,303 sf retail/53.13 acres
65.05 net acres

Construction Phase - Architectural coatings simultaneous with half of building construction

Demolition -

Vehicle Trips - Multi-Family - 1,039 ADT (5.44 per unit)
Commercial/Retail - 22,453 ADT (32.34 per ksf)

Road Dust - 100% of roads in vicinity of project are paved

Woodstoves - No woodstoves or fireplaces

Energy Use -

Water And Wastewater - CalGreen requires 20% decrease in indoor water use that is not included in model (9,955,535.11 gallons, 41,142,841.34 gallons)

Waste Mitigation -

On-road Fugitive Dust - 100% of the roads in the vicinity of the project are paved

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	75.00	555.00
tblFireplaces	FireplaceDayYear	4.30	0.00
tblFireplaces	FireplaceHourDay	2.79	0.00
tblFireplaces	FireplaceWoodMass	2,080.00	0.00
tblFireplaces	NumberGas	105.05	0.00
tblFireplaces	NumberNoFireplace	0.00	191.00
tblLandUse	LandUseSquareFeet	694,300.00	694,303.00
tblLandUse	LotAcreage	5.03	11.92
tblLandUse	LotAcreage	15.94	53.13

tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.016
tblProjectCharacteristics	CO2IntensityFactor	1270.9	688.19
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblRoadDust	RoadPercentPave	50	100
tblVehicleTrips	ST_TR	6.39	5.44
tblVehicleTrips	ST_TR	49.97	32.34
tblVehicleTrips	SU_TR	5.86	5.44
tblVehicleTrips	SU_TR	25.24	32.34
tblVehicleTrips	WD_TR	6.65	5.44

tblVehicleTrips	WD_TR	42.70	32.34
tblWater	IndoorWaterUseRate	12,444,418.89	9,955,535.11
tblWater	IndoorWaterUseRate	51,428,551.67	41,142,841.34

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.7553	46.4786	37.0181	0.0902	18.1663	2.0451	20.2114	9.9572	1.8815	11.8387	0.0000	9,052.0538	9,052.0538	1.9516	0.0000	9,077.0182
2022	4.3635	29.7923	35.0635	0.0891	3.1069	0.8511	3.9581	0.8493	0.8010	1.6503	0.0000	8,947.3198	8,947.3198	0.9683	0.0000	8,971.5279
2023	26.2965	26.7504	37.9258	0.0942	3.5070	0.7968	4.3038	0.9555	0.7539	1.7093	0.0000	9,428.0227	9,428.0227	0.9398	0.0000	9,451.5180
2024	26.0222	25.5347	36.6779	0.0933	3.5070	0.7000	4.2070	0.9555	0.6620	1.6175	0.0000	9,344.0711	9,344.0711	0.9233	0.0000	9,367.1546
2025	25.7579	24.2791	35.5277	0.0922	3.5070	0.6043	4.1113	0.9555	0.5714	1.5268	0.0000	9,234.3714	9,234.3714	0.9081	0.0000	9,257.0725
2026	25.6227	24.1046	34.7013	0.0912	3.5070	0.6036	4.1106	0.9555	0.5707	1.5262	0.0000	9,137.7658	9,137.7658	0.8997	0.0000	9,160.2588
Maximum	**26.2965**	**46.4786**	**37.9258**	**0.0942**	**18.1663**	**2.0451**	**20.2114**	**9.9572**	**1.8815**	**11.8387**	**0.0000**	**9,428.0227**	**9,428.0227**	**1.9516**	**0.0000**	**9,451.5180**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.7553	46.4786	37.0181	0.0902	7.1458	2.0451	9.1910	3.8995	1.8815	5.7810	0.0000	9,052.0538	9,052.0538	1.9516	0.0000	9,077.0182
2022	4.3635	29.7923	35.0635	0.0891	3.1069	0.8511	3.9581	0.8493	0.8010	1.6503	0.0000	8,947.3198	8,947.3198	0.9683	0.0000	8,971.5279
2023	26.2965	26.7504	37.9258	0.0942	3.5070	0.7968	4.3038	0.9555	0.7539	1.7093	0.0000	9,428.0227	9,428.0227	0.9398	0.0000	9,451.5180
2024	26.0222	25.5347	36.6779	0.0933	3.5070	0.7000	4.2070	0.9555	0.6620	1.6175	0.0000	9,344.0711	9,344.0711	0.9233	0.0000	9,367.1546
2025	25.7579	24.2791	35.5277	0.0922	3.5070	0.6043	4.1113	0.9555	0.5714	1.5268	0.0000	9,234.3714	9,234.3714	0.9081	0.0000	9,257.0725
2026	25.6227	24.1046	34.7013	0.0912	3.5070	0.6036	4.1106	0.9555	0.5707	1.5262	0.0000	9,137.7658	9,137.7658	0.8997	0.0000	9,160.2588
Maximum	**26.2965**	**46.4786**	**37.9258**	**0.0942**	**7.1458**	**2.0451**	**9.1910**	**3.8995**	**1.8815**	**5.7810**	**0.0000**	**9,428.0227**	**9,428.0227**	**1.9516**	**0.0000**	**9,451.5180**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**31.22**	**0.00**	**26.94**	**41.41**	**0.00**	**30.49**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	22.7213	0.1818	15.7728	8.4000e-004		0.0876	0.0876		0.0876	0.0876	0.0000	28.5254	28.5254	0.0274	0.0000	29.2105
Energy	0.1290	1.1275	0.6514	7.0400e-003		0.0892	0.0892		0.0892	0.0892		1,407.5816	1,407.5816	0.0270	0.0258	1,415.9462
Mobile	44.0785	316.1662	446.6403	1.2253	70.2281	0.3549	70.5830	18.8198	0.3323	19.1520		125,832.6577	125,832.6577	9.4685		126,069.3708
Total	**66.9288**	**317.4755**	**463.0645**	**1.2332**	**70.2281**	**0.5317**	**70.7597**	**18.8198**	**0.5090**	**19.3288**	**0.0000**	**127,268.7648**	**127,268.7648**	**9.5229**	**0.0258**	**127,514.5274**

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	22.7213	0.1818	15.7728	8.4000e-004		0.0876	0.0876		0.0876	0.0876	0.0000	28.5254	28.5254	0.0274	0.0000	29.2105
Energy	0.1290	1.1275	0.6514	7.0400e-003		0.0892	0.0892		0.0892	0.0892		1,407.5816	1,407.5816	0.0270	0.0258	1,415.9462
Mobile	40.3605	302.2560	349.1357	0.9668	45.8825	0.2592	46.1417	12.2956	0.2424	12.5380		99,512.2913	99,512.2913	8.2003		99,717.2996
Total	**63.2109**	**303.5652**	**365.5599**	**0.9746**	**45.8825**	**0.4360**	**46.3185**	**12.2956**	**0.4192**	**12.7148**	**0.0000**	**100,948.3984**	**100,948.3984**	**8.2547**	**0.0258**	**101,162.4562**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**5.56**	**4.38**	**21.06**	**20.97**	**34.67**	**18.00**	**34.54**	**34.67**	**17.65**	**34.22**	**0.00**	**20.68**	**20.68**	**13.32**	**0.00**	**20.67**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	4/8/2021	5	70	
2	Site Preparation	Site Preparation	4/9/2021	6/3/2021	5	40	
3	Grading	Grading	6/4/2021	11/4/2021	5	110	
4	Building Construction	Building Construction	11/5/2021	2/5/2026	5	1110	
5	Paving	Paving	2/6/2026	5/21/2026	5	75	
6	Architectural Coating	Architectural Coating	12/22/2023	2/5/2026	5	555	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 0

Residential Indoor: 386,775; Residential Outdoor: 128,925; Non-Residential Indoor: 1,041,455; Non-Residential Outdoor: 347,152; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

9489 South Dogwood Annexation - 2035 - Imperial County APCD Air District, Summer

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	455.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	360.00	134.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	72.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4612	0.0000	1.4612	0.2213	0.0000	0.2213			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**1.4612**	**1.5513**	**3.0125**	**0.2213**	**1.4411**	**1.6624**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0324	1.3751	0.1840	5.0300e-003	0.1140	4.2700e-003	0.1182	0.0313	4.0800e-003	0.0353		527.2863	527.2863	0.0198		527.7820
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	0.0971	0.0591	0.6983	8.3000e-004	0.0833	5.5000e-004	0.0839	0.0221	5.0000e-004	0.0226		82.0069	82.0069	6.6000e-003		82.1720
Total	**0.1295**	**1.4342**	**0.8823**	**5.8600e-003**	**0.1973**	**4.8200e-003**	**0.2021**	**0.0534**	**4.5800e-003**	**0.0580**		**609.2932**	**609.2932**	**0.0264**		**609.9539**

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					0.5699	0.0000	0.5699	0.0863	0.0000	0.0863			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**0.5699**	**1.5513**	**2.1212**	**0.0863**	**1.4411**	**1.5274**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0324	1.3751	0.1840	5.0300e-003	0.1140	4.2700e-003	0.1182	0.0313	4.0800e-003	0.0353		527.2863	527.2863	0.0198		527.7820
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	0.0971	0.0591	0.6983	8.3000e-004	0.0833	5.5000e-004	0.0839	0.0221	5.0000e-004	0.0226		82.0069	82.0069	6.6000e-003		82.1720
Total	**0.1295**	**1.4342**	**0.8823**	**5.8600e-003**	**0.1973**	**4.8200e-003**	**0.2021**	**0.0534**	**4.5800e-003**	**0.0580**		**609.2932**	**609.2932**	**0.0264**		**609.9539**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1165	0.0709	0.8379	1.0000e-003	0.1000	6.6000e-004	0.1007	0.0265	6.0000e-004	0.0271		98.4083	98.4083	7.9200e-003		98.6063
Total	**0.1165**	**0.0709**	**0.8379**	**1.0000e-003**	**0.1000**	**6.6000e-004**	**0.1007**	**0.0265**	**6.0000e-004**	**0.0271**		**98.4083**	**98.4083**	**7.9200e-003**		**98.6063**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**7.0458**	**2.0445**	**9.0903**	**3.8730**	**1.8809**	**5.7539**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1165	0.0709	0.8379	1.0000e-003	0.1000	6.6000e-004	0.1007	0.0265	6.0000e-004	0.0271		98.4083	98.4083	7.9200e-003		98.6063
Total	**0.1165**	**0.0709**	**0.8379**	**1.0000e-003**	**0.1000**	**6.6000e-004**	**0.1007**	**0.0265**	**6.0000e-004**	**0.0271**		**98.4083**	**98.4083**	**7.9200e-003**		**98.6063**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1295	0.0788	0.9310	1.1100e-003	0.1111	7.3000e-004	0.1118	0.0295	6.7000e-004	0.0302		109.3425	109.3425	8.8000e-003		109.5626
Total	**0.1295**	**0.0788**	**0.9310**	**1.1100e-003**	**0.1111**	**7.3000e-004**	**0.1118**	**0.0295**	**6.7000e-004**	**0.0302**		**109.3425**	**109.3425**	**8.8000e-003**		**109.5626**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**3.3826**	**1.9853**	**5.3679**	**1.4026**	**1.8265**	**3.2292**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1295	0.0788	0.9310	1.1100e-003	0.1111	7.3000e-004	0.1118	0.0295	6.7000e-004	0.0302		109.3425	109.3425	8.8000e-003		109.5626
Total	**0.1295**	**0.0788**	**0.9310**	**1.1100e-003**	**0.1111**	**7.3000e-004**	**0.1118**	**0.0295**	**6.7000e-004**	**0.0302**		**109.3425**	**109.3425**	**8.8000e-003**		**109.5626**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

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

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5240	13.7211	3.6843	0.0433	1.1069	0.0349	1.1418	0.3187	0.0334	0.3520		4,530.5245	4,530.5245	0.2241		4,536.1271
Worker	2.3304	1.4177	16.7586	0.0199	2.0001	0.0131	2.0132	0.5307	0.0121	0.5428		1,968.1654	1,968.1654	0.1585		1,972.1268
Total	**2.8544**	**15.1388**	**20.4429**	**0.0633**	**3.1070**	**0.0480**	**3.1550**	**0.8493**	**0.0455**	**0.8948**		**6,498.6899**	**6,498.6899**	**0.3826**		**6,508.2539**

Mitigated Construction On-Site

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

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5240	13.7211	3.6843	0.0433	1.1069	0.0349	1.1418	0.3187	0.0334	0.3520		4,530.5245	4,530.5245	0.2241		4,536.1271
Worker	2.3304	1.4177	16.7586	0.0199	2.0001	0.0131	2.0132	0.5307	0.0121	0.5428		1,968.1654	1,968.1654	0.1585		1,972.1268
Total	**2.8544**	**15.1388**	**20.4429**	**0.0633**	**3.1070**	**0.0480**	**3.1550**	**0.8493**	**0.0455**	**0.8948**		**6,498.6899**	**6,498.6899**	**0.3826**		**6,508.2539**

3.5 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	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.4856	12.8759	3.3502	0.0430	1.1069	0.0296	1.1364	0.3187	0.0283	0.3469		4,496.6066	4,496.6066	0.2117		4,501.8993
Worker	2.1717	1.3008	15.3499	0.0192	2.0001	0.0126	2.0126	0.5307	0.0116	0.5422		1,896.3796	1,896.3796	0.1447		1,899.9964
Total	**2.6573**	**14.1767**	**18.7001**	**0.0622**	**3.1069**	**0.0421**	**3.1491**	**0.8493**	**0.0398**	**0.8892**		**6,392.9862**	**6,392.9862**	**0.3564**		**6,401.8957**

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.4856	12.8759	3.3502	0.0430	1.1069	0.0296	1.1364	0.3187	0.0283	0.3469		4,496.6066	4,496.6066	0.2117		4,501.8993
Worker	2.1717	1.3008	15.3499	0.0192	2.0001	0.0126	2.0126	0.5307	0.0116	0.5422		1,896.3796	1,896.3796	0.1447		1,899.9964
Total	**2.6573**	**14.1767**	**18.7001**	**0.0622**	**3.1069**	**0.0421**	**3.1491**	**0.8493**	**0.0398**	**0.8892**		**6,392.9862**	**6,392.9862**	**0.3564**		**6,401.8957**

3.5 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	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

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	0.3937	9.6238	2.9348	0.0421	1.1069	0.0118	1.1187	0.3187	0.0113	0.3300		4,401.9933	4,401.9933	0.1561		4,405.8955
Worker	2.0304	1.1989	14.1132	0.0185	2.0001	0.0121	2.0121	0.5307	0.0111	0.5418		1,824.4763	1,824.4763	0.1325		1,827.7895
Total	**2.4241**	**10.8227**	**17.0480**	**0.0606**	**3.1070**	**0.0239**	**3.1308**	**0.8493**	**0.0224**	**0.8717**		**6,226.4695**	**6,226.4695**	**0.2886**		**6,233.6850**

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

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	0.3937	9.6238	2.9348	0.0421	1.1069	0.0118	1.1187	0.3187	0.0113	0.3300		4,401.9933	4,401.9933	0.1561		4,405.8955
Worker	2.0304	1.1989	14.1132	0.0185	2.0001	0.0121	2.0121	0.5307	0.0111	0.5418		1,824.4763	1,824.4763	0.1325		1,827.7895
Total	**2.4241**	**10.8227**	**17.0480**	**0.0606**	**3.1070**	**0.0239**	**3.1308**	**0.8493**	**0.0224**	**0.8717**		**6,226.4695**	**6,226.4695**	**0.2886**		**6,233.6850**

3.5 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	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

3.5 Building Construction - 2024

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	0.3783	9.5282	2.7440	0.0419	1.1069	0.0116	1.1185	0.3187	0.0111	0.3298		4,385.6011	4,385.6011	0.1536		4,389.4406
Worker	1.9081	1.1199	13.2975	0.0179	2.0001	0.0118	2.0119	0.5307	0.0109	0.5415		1,767.7692	1,767.7692	0.1246		1,770.8851
Total	**2.2864**	**10.6482**	**16.0415**	**0.0598**	**3.1070**	**0.0235**	**3.1304**	**0.8493**	**0.0220**	**0.8713**		**6,153.3703**	**6,153.3703**	**0.2782**		**6,160.3257**

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

3.5 Building Construction - 2024

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	0.3783	9.5282	2.7440	0.0419	1.1069	0.0116	1.1185	0.3187	0.0111	0.3298		4,385.6011	4,385.6011	0.1536		4,389.4406
Worker	1.9081	1.1199	13.2975	0.0179	2.0001	0.0118	2.0119	0.5307	0.0109	0.5415		1,767.7692	1,767.7692	0.1246		1,770.8851
Total	**2.2864**	**10.6482**	**16.0415**	**0.0598**	**3.1070**	**0.0235**	**3.1304**	**0.8493**	**0.0220**	**0.8713**		**6,153.3703**	**6,153.3703**	**0.2782**		**6,160.3257**

3.5 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	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

3.5 Building Construction - 2025

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	0.3637	9.3985	2.5691	0.0417	1.1069	0.0114	1.1183	0.3187	0.0109	0.3296		4,360.0752	4,360.0752	0.1510		4,363.8505
Worker	1.7950	1.0545	12.5541	0.0172	2.0001	0.0115	2.0116	0.5307	0.0106	0.5412		1,696.9781	1,696.9781	0.1173		1,699.9101
Total	**2.1588**	**10.4530**	**15.1231**	**0.0588**	**3.1070**	**0.0229**	**3.1299**	**0.8493**	**0.0215**	**0.8708**		**6,057.0534**	**6,057.0534**	**0.2683**		**6,063.7605**

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

3.5 Building Construction - 2025

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	0.3637	9.3985	2.5691	0.0417	1.1069	0.0114	1.1183	0.3187	0.0109	0.3296		4,360.0752	4,360.0752	0.1510		4,363.8505
Worker	1.7950	1.0545	12.5541	0.0172	2.0001	0.0115	2.0116	0.5307	0.0106	0.5412		1,696.9781	1,696.9781	0.1173		1,699.9101
Total	**2.1588**	**10.4530**	**15.1231**	**0.0588**	**3.1070**	**0.0229**	**3.1299**	**0.8493**	**0.0215**	**0.8708**		**6,057.0534**	**6,057.0534**	**0.2683**		**6,063.7605**

3.5 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	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

3.5 Building Construction - 2026

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	0.3503	9.2822	2.4178	0.0415	1.1069	0.0112	1.1181	0.3187	0.0107	0.3294		4,337.5634	4,337.5634	0.1487		4,341.2812
Worker	1.6936	1.0061	11.9914	0.0165	2.0001	0.0111	2.0112	0.5307	0.0102	0.5409		1,635.2333	1,635.2333	0.1123		1,638.0397
Total	**2.0439**	**10.2882**	**14.4092**	**0.0580**	**3.1070**	**0.0223**	**3.1293**	**0.8493**	**0.0209**	**0.8703**		**5,972.7967**	**5,972.7967**	**0.2610**		**5,979.3209**

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

3.5 Building Construction - 2026

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	0.3503	9.2822	2.4178	0.0415	1.1069	0.0112	1.1181	0.3187	0.0107	0.3294		4,337.5634	4,337.5634	0.1487		4,341.2812
Worker	1.6936	1.0061	11.9914	0.0165	2.0001	0.0111	2.0112	0.5307	0.0102	0.5409		1,635.2333	1,635.2333	0.1123		1,638.0397
Total	**2.0439**	**10.2882**	**14.4092**	**0.0580**	**3.1070**	**0.0223**	**3.1293**	**0.8493**	**0.0209**	**0.8703**		**5,972.7967**	**5,972.7967**	**0.2610**		**5,979.3209**

3.6 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	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

3.6 Paving - 2026

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	0.0706	0.0419	0.4996	6.9000e-004	0.0833	4.6000e-004	0.0838	0.0221	4.3000e-004	0.0225		68.1347	68.1347	4.6800e-003		68.2517
Total	**0.0706**	**0.0419**	**0.4996**	**6.9000e-004**	**0.0833**	**4.6000e-004**	**0.0838**	**0.0221**	**4.3000e-004**	**0.0225**		**68.1347**	**68.1347**	**4.6800e-003**		**68.2517**

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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

3.6 Paving - 2026

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	0.0706	0.0419	0.4996	6.9000e-004	0.0833	4.6000e-004	0.0838	0.0221	4.3000e-004	0.0225		68.1347	68.1347	4.6800e-003		68.2517
Total	**0.0706**	**0.0419**	**0.4996**	**6.9000e-004**	**0.0833**	**4.6000e-004**	**0.0838**	**0.0221**	**4.3000e-004**	**0.0225**		**68.1347**	**68.1347**	**4.6800e-003**		**68.2517**

3.7 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	lb/day										lb/day					
Archit. Coating	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**21.8936**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

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	0.4061	0.2398	2.8227	3.6900e-003	0.4000	2.4100e-003	0.4024	0.1061	2.2200e-003	0.1084		364.8953	364.8953	0.0265		365.5579
Total	**0.4061**	**0.2398**	**2.8227**	**3.6900e-003**	**0.4000**	**2.4100e-003**	**0.4024**	**0.1061**	**2.2200e-003**	**0.1084**		**364.8953**	**364.8953**	**0.0265**		**365.5579**

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	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**21.8936**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

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	0.4061	0.2398	2.8227	3.6900e-003	0.4000	2.4100e-003	0.4024	0.1061	2.2200e-003	0.1084		364.8953	364.8953	0.0265		365.5579
Total	**0.4061**	**0.2398**	**2.8227**	**3.6900e-003**	**0.4000**	**2.4100e-003**	**0.4024**	**0.1061**	**2.2200e-003**	**0.1084**		**364.8953**	**364.8953**	**0.0265**		**365.5579**

3.7 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	lb/day										lb/day					
Archit. Coating	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**21.8827**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

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	0.3816	0.2240	2.6595	3.5700e-003	0.4000	2.3600e-003	0.4024	0.1061	2.1700e-003	0.1083		353.5538	353.5538	0.0249		354.1770
Total	**0.3816**	**0.2240**	**2.6595**	**3.5700e-003**	**0.4000**	**2.3600e-003**	**0.4024**	**0.1061**	**2.1700e-003**	**0.1083**		**353.5538**	**353.5538**	**0.0249**		**354.1770**

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	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**21.8827**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

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	0.3816	0.2240	2.6595	3.5700e-003	0.4000	2.3600e-003	0.4024	0.1061	2.1700e-003	0.1083		353.5538	353.5538	0.0249		354.1770
Total	**0.3816**	**0.2240**	**2.6595**	**3.5700e-003**	**0.4000**	**2.3600e-003**	**0.4024**	**0.1061**	**2.1700e-003**	**0.1083**		**353.5538**	**353.5538**	**0.0249**		**354.1770**

3.7 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	lb/day										lb/day					
Archit. Coating	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**21.8728**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.7 Architectural Coating - 2025

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	0.3590	0.2109	2.5108	3.4300e-003	0.4000	2.3000e-003	0.4023	0.1061	2.1200e-003	0.1083		339.3956	339.3956	0.0235		339.9820
Total	**0.3590**	**0.2109**	**2.5108**	**3.4300e-003**	**0.4000**	**2.3000e-003**	**0.4023**	**0.1061**	**2.1200e-003**	**0.1083**		**339.3956**	**339.3956**	**0.0235**		**339.9820**

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	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**21.8728**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.7 Architectural Coating - 2025

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	0.3590	0.2109	2.5108	3.4300e-003	0.4000	2.3000e-003	0.4023	0.1061	2.1200e-003	0.1083		339.3956	339.3956	0.0235		339.9820
Total	**0.3590**	**0.2109**	**2.5108**	**3.4300e-003**	**0.4000**	**2.3000e-003**	**0.4023**	**0.1061**	**2.1200e-003**	**0.1083**		**339.3956**	**339.3956**	**0.0235**		**339.9820**

3.7 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	lb/day										lb/day					
Archit. Coating	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**21.8728**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.7 Architectural Coating - 2026

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	0.3387	0.2012	2.3983	3.3000e-003	0.4000	2.2200e-003	0.4022	0.1061	2.0400e-003	0.1082		327.0467	327.0467	0.0225		327.6079
Total	**0.3387**	**0.2012**	**2.3983**	**3.3000e-003**	**0.4000**	**2.2200e-003**	**0.4022**	**0.1061**	**2.0400e-003**	**0.1082**		**327.0467**	**327.0467**	**0.0225**		**327.6079**

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	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**21.8728**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.7 Architectural Coating - 2026

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	0.3387	0.2012	2.3983	3.3000e-003	0.4000	2.2200e-003	0.4022	0.1061	2.0400e-003	0.1082		327.0467	327.0467	0.0225		327.6079
Total	**0.3387**	**0.2012**	**2.3983**	**3.3000e-003**	**0.4000**	**2.2200e-003**	**0.4022**	**0.1061**	**2.0400e-003**	**0.1082**		**327.0467**	**327.0467**	**0.0225**		**327.6079**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	40.3605	302.2560	349.1357	0.9668	45.8825	0.2592	46.1417	12.2956	0.2424	12.5380		99,512.2913	99,512.2913	8.2003		99,717.2996
Unmitigated	44.0785	316.1662	446.6403	1.2253	70.2281	0.3549	70.5830	18.8198	0.3323	19.1520		125,832.6577	125,832.6577	9.4685		126,069.3708

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,039.04	1,039.04	1039.04	1,741,743	1,137,943
Regional Shopping Center	22,453.66	22,453.66	22453.66	30,954,578	20,223,735
Total	23,492.70	23,492.70	23,492.70	32,696,321	21,361,678

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
Apartments Mid Rise	7.30	3.90	3.70	40.20	19.20	40.60	86	11	3
Regional Shopping Center	6.70	5.00	8.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.548557	0.028969	0.163336	0.096191	0.009629	0.004088	0.017564	0.119842	0.003955	0.001371	0.005304	0.000688	0.000504
Regional Shopping Center	0.548557	0.028969	0.163336	0.096191	0.009629	0.004088	0.017564	0.119842	0.003955	0.001371	0.005304	0.000688	0.000504

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1290	1.1275	0.6514	7.0400e-003		0.0892	0.0892		0.0892	0.0892		1,407.5816	1,407.5816	0.0270	0.0258	1,415.9462
NaturalGas Unmitigated	0.1290	1.1275	0.6514	7.0400e-003		0.0892	0.0892		0.0892	0.0892		1,407.5816	1,407.5816	0.0270	0.0258	1,415.9462

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					
Apartments Mid Rise	7741.56	0.0835	0.7134	0.3036	4.5500e-003		0.0577	0.0577		0.0577	0.0577		910.7717	910.7717	0.0175	0.0167	916.1840
Regional Shopping Center	4222.88	0.0455	0.4140	0.3478	2.4800e-003		0.0315	0.0315		0.0315	0.0315		496.8099	496.8099	9.5200e-003	9.1100e-003	499.7622
Total		**0.1290**	**1.1275**	**0.6514**	**7.0300e-003**		**0.0891**	**0.0891**		**0.0891**	**0.0891**		**1,407.5816**	**1,407.5816**	**0.0270**	**0.0258**	**1,415.9462**

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					
Apartments Mid Rise	7.74156	0.0835	0.7134	0.3036	4.5500e-003		0.0577	0.0577		0.0577	0.0577		910.7717	910.7717	0.0175	0.0167	916.1840
Regional Shopping Center	4.22288	0.0455	0.4140	0.3478	2.4800e-003		0.0315	0.0315		0.0315	0.0315		496.8099	496.8099	9.5200e-003	9.1100e-003	499.7622
Total		**0.1290**	**1.1275**	**0.6514**	**7.0300e-003**		**0.0891**	**0.0891**		**0.0891**	**0.0891**		**1,407.5816**	**1,407.5816**	**0.0270**	**0.0258**	**1,415.9462**

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	22.7213	0.1818	15.7728	8.4000e-004		0.0876	0.0876		0.0876	0.0876	0.0000	28.5254	28.5254	0.0274	0.0000	29.2105
Unmitigated	22.7213	0.1818	15.7728	8.4000e-004		0.0876	0.0876		0.0876	0.0876	0.0000	28.5254	28.5254	0.0274	0.0000	29.2105

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	3.2999					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	18.9455					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	0.4759	0.1818	15.7728	8.4000e-004		0.0876	0.0876		0.0876	0.0876		28.5254	28.5254	0.0274		29.2105
Total	**22.7213**	**0.1818**	**15.7728**	**8.4000e-004**		**0.0876**	**0.0876**		**0.0876**	**0.0876**	**0.0000**	**28.5254**	**28.5254**	**0.0274**	**0.0000**	**29.2105**

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	3.2999					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	18.9455					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	0.4759	0.1818	15.7728	8.4000e-004		0.0876	0.0876		0.0876	0.0876		28.5254	28.5254	0.0274		29.2105
Total	**22.7213**	**0.1818**	**15.7728**	**8.4000e-004**		**0.0876**	**0.0876**		**0.0876**	**0.0876**	**0.0000**	**28.5254**	**28.5254**	**0.0274**	**0.0000**	**29.2105**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

9489 South Dogwood Annexation - 2035

Imperial County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	191.00	Dwelling Unit	11.92	191,000.00	617
Regional Shopping Center	694.30	1000sqft	53.13	694,303.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	12
Climate Zone	15			**Operational Year**	2035
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MWhr)	688.19	**CH4 Intensity (lb/MWhr)**	0.016	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

9489 South Dogwood Annexation - 2035 - Imperial County APCD Air District, Winter

Project Characteristics - Energy intensity factors reduced to reflect RPS 2030 50% mandate
(688.1949, .0157, .00334)

Land Use - 191 dwelling units/11.92 acres
694,303 sf retail/53.13 acres
65.05 net acres

Construction Phase - Architectural coatings simultaneous with half of building construction

Demolition -

Vehicle Trips - Multi-Family - 1,039 ADT (5.44 per unit)
Commercial/Retail - 22,453 ADT (32.34 per ksf)

Road Dust - 100% of roads in vicinity of project are paved

Woodstoves - No woodstoves or fireplaces

Energy Use -

Water And Wastewater - CalGreen requires 20% decrease in indoor water use that is not included in model (9,955,535.11 gallons, 41,142,841.34 gallons)

Waste Mitigation -

On-road Fugitive Dust - 100% of the roads in the vicinity of the project are paved

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	75.00	555.00
tblFireplaces	FireplaceDayYear	4.30	0.00
tblFireplaces	FireplaceHourDay	2.79	0.00
tblFireplaces	FireplaceWoodMass	2,080.00	0.00
tblFireplaces	NumberGas	105.05	0.00
tblFireplaces	NumberNoFireplace	0.00	191.00
tblLandUse	LandUseSquareFeet	694,300.00	694,303.00
tblLandUse	LotAcreage	5.03	11.92
tblLandUse	LotAcreage	15.94	53.13

tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	HaulingPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	VendorPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblOnRoadDust	WorkerPercentPave	50.00	100.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.016
tblProjectCharacteristics	CO2IntensityFactor	1270.9	688.19
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblRoadDust	RoadPercentPave	50	100
tblVehicleTrips	ST_TR	6.39	5.44
tblVehicleTrips	ST_TR	49.97	32.34
tblVehicleTrips	SU_TR	5.86	5.44
tblVehicleTrips	SU_TR	25.24	32.34
tblVehicleTrips	WD_TR	6.65	5.44

tblVehicleTrips	WD_TR	42.70	32.34
tblWater	IndoorWaterUseRate	12,444,418.89	9,955,535.11
tblWater	IndoorWaterUseRate	51,428,551.67	41,142,841.34

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.3259	46.4823	33.4455	0.0854	18.1663	2.0451	20.2114	9.9572	1.8815	11.8387	0.0000	8,571.9193	8,571.9193	1.9499	0.0000	8,596.7790
2022	3.9718	29.9634	31.7962	0.0845	3.1069	0.8522	3.9591	0.8493	0.8020	1.6513	0.0000	8,478.5903	8,478.5903	0.9665	0.0000	8,502.7535
2023	25.8563	26.7966	34.1301	0.0891	3.5070	0.7972	4.3042	0.9555	0.7542	1.7097	0.0000	8,916.5173	8,916.5173	0.9286	0.0000	8,939.7333
2024	25.6172	25.5651	33.0799	0.0883	3.5070	0.7004	4.2074	0.9555	0.6623	1.6178	0.0000	8,844.8801	8,844.8801	0.9143	0.0000	8,867.7360
2025	25.3771	24.2929	32.1315	0.0874	3.5070	0.6046	4.1116	0.9555	0.5717	1.5272	0.0000	8,750.6705	8,750.6705	0.9008	0.0000	8,773.1908
2026	25.2676	24.1044	31.4508	0.0866	3.5070	0.6039	4.1109	0.9555	0.5710	1.5265	0.0000	8,667.4927	8,667.4927	0.8937	0.0000	8,689.8347
Maximum	**25.8563**	**46.4823**	**34.1301**	**0.0891**	**18.1663**	**2.0451**	**20.2114**	**9.9572**	**1.8815**	**11.8387**	**0.0000**	**8,916.5173**	**8,916.5173**	**1.9499**	**0.0000**	**8,939.7333**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.3259	46.4823	33.4455	0.0854	7.1458	2.0451	9.1910	3.8995	1.8815	5.7810	0.0000	8,571.9193	8,571.9193	1.9499	0.0000	8,596.7790
2022	3.9718	29.9634	31.7962	0.0845	3.1069	0.8522	3.9591	0.8493	0.8020	1.6513	0.0000	8,478.5903	8,478.5903	0.9665	0.0000	8,502.7535
2023	25.8563	26.7966	34.1301	0.0891	3.5070	0.7972	4.3042	0.9555	0.7542	1.7097	0.0000	8,916.5173	8,916.5173	0.9286	0.0000	8,939.7333
2024	25.6172	25.5651	33.0799	0.0883	3.5070	0.7004	4.2074	0.9555	0.6623	1.6178	0.0000	8,844.8801	8,844.8801	0.9143	0.0000	8,867.7360
2025	25.3771	24.2929	32.1315	0.0874	3.5070	0.6046	4.1116	0.9555	0.5717	1.5272	0.0000	8,750.6705	8,750.6705	0.9008	0.0000	8,773.1908
2026	25.2676	24.1044	31.4508	0.0866	3.5070	0.6039	4.1109	0.9555	0.5710	1.5265	0.0000	8,667.4927	8,667.4927	0.8937	0.0000	8,689.8347
Maximum	**25.8563**	**46.4823**	**34.1301**	**0.0891**	**7.1458**	**2.0451**	**9.1910**	**3.8995**	**1.8815**	**5.7810**	**0.0000**	**8,916.5173**	**8,916.5173**	**1.9499**	**0.0000**	**8,939.7333**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**31.22**	**0.00**	**26.94**	**41.41**	**0.00**	**30.48**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	22.7213	0.1818	15.7728	8.4000e-004		0.0876	0.0876		0.0876	0.0876	0.0000	28.5254	28.5254	0.0274	0.0000	29.2105
Energy	0.1290	1.1275	0.6514	7.0400e-003		0.0892	0.0892		0.0892	0.0892		1,407.5816	1,407.5816	0.0270	0.0258	1,415.9462
Mobile	35.7613	309.5058	383.1700	1.1010	70.2281	0.3613	70.5893	18.8198	0.3384	19.1581		113,205.1960	113,205.1960	9.6344		113,446.0560
Total	**58.6117**	**310.8150**	**399.5942**	**1.1089**	**70.2281**	**0.5380**	**70.7661**	**18.8198**	**0.5151**	**19.3349**	**0.0000**	**114,641.3031**	**114,641.3031**	**9.6888**	**0.0258**	**114,891.2126**

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	22.7213	0.1818	15.7728	8.4000e-004		0.0876	0.0876		0.0876	0.0876	0.0000	28.5254	28.5254	0.0274	0.0000	29.2105
Energy	0.1290	1.1275	0.6514	7.0400e-003		0.0892	0.0892		0.0892	0.0892		1,407.5816	1,407.5816	0.0270	0.0258	1,415.9462
Mobile	32.6817	294.5647	318.5044	0.8646	45.8825	0.2656	46.1481	12.2956	0.2485	12.5441		89,051.2018	89,051.2018	8.6250		89,266.8257
Total	**55.5320**	**295.8740**	**334.9286**	**0.8725**	**45.8825**	**0.4423**	**46.3249**	**12.2956**	**0.4253**	**12.7209**	**0.0000**	**90,487.3089**	**90,487.3089**	**8.6793**	**0.0258**	**90,711.9823**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**5.25**	**4.81**	**16.18**	**21.32**	**34.67**	**17.79**	**34.54**	**34.67**	**17.44**	**34.21**	**0.00**	**21.07**	**21.07**	**10.42**	**0.00**	**21.05**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	4/8/2021	5	70	
2	Site Preparation	Site Preparation	4/9/2021	6/3/2021	5	40	
3	Grading	Grading	6/4/2021	11/4/2021	5	110	
4	Building Construction	Building Construction	11/5/2021	2/5/2026	5	1110	
5	Paving	Paving	2/6/2026	5/21/2026	5	75	
6	Architectural Coating	Architectural Coating	12/22/2023	2/5/2026	5	555	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 0

Residential Indoor: 386,775; Residential Outdoor: 128,925; Non-Residential Indoor: 1,041,455; Non-Residential Outdoor: 347,152; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

9489 South Dogwood Annexation - 2035 - Imperial County APCD Air District, Winter

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	455.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	360.00	134.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	72.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4612	0.0000	1.4612	0.2213	0.0000	0.2213			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**1.4612**	**1.5513**	**3.0125**	**0.2213**	**1.4411**	**1.6624**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0344	1.4105	0.2212	4.8800e-003	0.1140	4.3600e-003	0.1183	0.0313	4.1800e-003	0.0354		511.7931	511.7931	0.0223		512.3496
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	0.0784	0.0619	0.5264	7.0000e-004	0.0833	5.5000e-004	0.0839	0.0221	5.0000e-004	0.0226		68.7771	68.7771	5.3400e-003		68.9106
Total	**0.1127**	**1.4723**	**0.7476**	**5.5800e-003**	**0.1973**	**4.9100e-003**	**0.2022**	**0.0534**	**4.6800e-003**	**0.0580**		**580.5702**	**580.5702**	**0.0276**		**581.2603**

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					0.5699	0.0000	0.5699	0.0863	0.0000	0.0863			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**0.5699**	**1.5513**	**2.1212**	**0.0863**	**1.4411**	**1.5274**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0344	1.4105	0.2212	4.8800e-003	0.1140	4.3600e-003	0.1183	0.0313	4.1800e-003	0.0354		511.7931	511.7931	0.0223		512.3496
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	0.0784	0.0619	0.5264	7.0000e-004	0.0833	5.5000e-004	0.0839	0.0221	5.0000e-004	0.0226		68.7771	68.7771	5.3400e-003		68.9106
Total	**0.1127**	**1.4723**	**0.7476**	**5.5800e-003**	**0.1973**	**4.9100e-003**	**0.2022**	**0.0534**	**4.6800e-003**	**0.0580**		**580.5702**	**580.5702**	**0.0276**		**581.2603**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0940	0.0743	0.6316	8.3000e-004	0.1000	6.6000e-004	0.1007	0.0265	6.0000e-004	0.0271		82.5326	82.5326	6.4100e-003		82.6928
Total	**0.0940**	**0.0743**	**0.6316**	**8.3000e-004**	**0.1000**	**6.6000e-004**	**0.1007**	**0.0265**	**6.0000e-004**	**0.0271**		**82.5326**	**82.5326**	**6.4100e-003**		**82.6928**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**7.0458**	**2.0445**	**9.0903**	**3.8730**	**1.8809**	**5.7539**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0940	0.0743	0.6316	8.3000e-004	0.1000	6.6000e-004	0.1007	0.0265	6.0000e-004	0.0271		82.5326	82.5326	6.4100e-003		82.6928
Total	**0.0940**	**0.0743**	**0.6316**	**8.3000e-004**	**0.1000**	**6.6000e-004**	**0.1007**	**0.0265**	**6.0000e-004**	**0.0271**		**82.5326**	**82.5326**	**6.4100e-003**		**82.6928**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1045	0.0825	0.7018	9.3000e-004	0.1111	7.3000e-004	0.1118	0.0295	6.7000e-004	0.0302		91.7028	91.7028	7.1200e-003		91.8808
Total	**0.1045**	**0.0825**	**0.7018**	**9.3000e-004**	**0.1111**	**7.3000e-004**	**0.1118**	**0.0295**	**6.7000e-004**	**0.0302**		**91.7028**	**91.7028**	**7.1200e-003**		**91.8808**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**3.3826**	**1.9853**	**5.3679**	**1.4026**	**1.8265**	**3.2292**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1045	0.0825	0.7018	9.3000e-004	0.1111	7.3000e-004	0.1118	0.0295	6.7000e-004	0.0302		91.7028	91.7028	7.1200e-003		91.8808
Total	**0.1045**	**0.0825**	**0.7018**	**9.3000e-004**	**0.1111**	**7.3000e-004**	**0.1118**	**0.0295**	**6.7000e-004**	**0.0302**		**91.7028**	**91.7028**	**7.1200e-003**		**91.8808**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

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

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5444	13.8877	4.2377	0.0418	1.1069	0.0361	1.1429	0.3187	0.0345	0.3531		4,367.9043	4,367.9043	0.2502		4,374.1596
Worker	1.8806	1.4849	12.6327	0.0167	2.0001	0.0131	2.0132	0.5307	0.0121	0.5428		1,650.6511	1,650.6511	0.1282		1,653.8551
Total	**2.4249**	**15.3727**	**16.8703**	**0.0585**	**3.1070**	**0.0492**	**3.1561**	**0.8493**	**0.0466**	**0.8959**		**6,018.5554**	**6,018.5554**	**0.3784**		**6,028.0147**

Mitigated Construction On-Site

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

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5444	13.8877	4.2377	0.0418	1.1069	0.0361	1.1429	0.3187	0.0345	0.3531		4,367.9043	4,367.9043	0.2502		4,374.1596
Worker	1.8806	1.4849	12.6327	0.0167	2.0001	0.0131	2.0132	0.5307	0.0121	0.5428		1,650.6511	1,650.6511	0.1282		1,653.8551
Total	**2.4249**	**15.3727**	**16.8703**	**0.0585**	**3.1070**	**0.0492**	**3.1561**	**0.8493**	**0.0466**	**0.8959**		**6,018.5554**	**6,018.5554**	**0.3784**		**6,028.0147**

3.5 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	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.5056	12.9874	3.8770	0.0415	1.1069	0.0306	1.1375	0.3187	0.0293	0.3480		4,333.8003	4,333.8003	0.2371		4,339.7268
Worker	1.7600	1.3603	11.5558	0.0161	2.0001	0.0126	2.0126	0.5307	0.0116	0.5422		1,590.4564	1,590.4564	0.1175		1,593.3944
Total	**2.2656**	**14.3477**	**15.4328**	**0.0575**	**3.1069**	**0.0432**	**3.1501**	**0.8493**	**0.0409**	**0.8902**		**5,924.2567**	**5,924.2567**	**0.3546**		**5,933.1213**

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

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	0.5056	12.9874	3.8770	0.0415	1.1069	0.0306	1.1375	0.3187	0.0293	0.3480		4,333.8003	4,333.8003	0.2371		4,339.7268
Worker	1.7600	1.3603	11.5558	0.0161	2.0001	0.0126	2.0126	0.5307	0.0116	0.5422		1,590.4564	1,590.4564	0.1175		1,593.3944
Total	**2.2656**	**14.3477**	**15.4328**	**0.0575**	**3.1069**	**0.0432**	**3.1501**	**0.8493**	**0.0409**	**0.8902**		**5,924.2567**	**5,924.2567**	**0.3546**		**5,933.1213**

3.5 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	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

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	0.4080	9.6066	3.3398	0.0406	1.1069	0.0122	1.1191	0.3187	0.0117	0.3303		4,243.6259	4,243.6259	0.1742		4,247.9799
Worker	1.6516	1.2518	10.6127	0.0155	2.0001	0.0121	2.0121	0.5307	0.0111	0.5418		1,530.1945	1,530.1945	0.1082		1,532.8986
Total	**2.0597**	**10.8584**	**13.9524**	**0.0561**	**3.1070**	**0.0243**	**3.1312**	**0.8493**	**0.0228**	**0.8721**		**5,773.8204**	**5,773.8204**	**0.2823**		**5,780.8785**

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

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	0.4080	9.6066	3.3398	0.0406	1.1069	0.0122	1.1191	0.3187	0.0117	0.3303		4,243.6259	4,243.6259	0.1742		4,247.9799
Worker	1.6516	1.2518	10.6127	0.0155	2.0001	0.0121	2.0121	0.5307	0.0111	0.5418		1,530.1945	1,530.1945	0.1082		1,532.8986
Total	**2.0597**	**10.8584**	**13.9524**	**0.0561**	**3.1070**	**0.0243**	**3.1312**	**0.8493**	**0.0228**	**0.8721**		**5,773.8204**	**5,773.8204**	**0.2823**		**5,780.8785**

3.5 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	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

3.5 Building Construction - 2024

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	0.3928	9.5014	3.1385	0.0405	1.1069	0.0120	1.1189	0.3187	0.0115	0.3301		4,228.7500	4,228.7500	0.1717		4,233.0418
Worker	1.5585	1.1676	9.9703	0.0150	2.0001	0.0118	2.0119	0.5307	0.0109	0.5415		1,482.4859	1,482.4859	0.1020		1,485.0353
Total	**1.9513**	**10.6690**	**13.1089**	**0.0554**	**3.1070**	**0.0238**	**3.1308**	**0.8493**	**0.0223**	**0.8717**		**5,711.2359**	**5,711.2359**	**0.2737**		**5,718.0771**

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

3.5 Building Construction - 2024

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	0.3928	9.5014	3.1385	0.0405	1.1069	0.0120	1.1189	0.3187	0.0115	0.3301		4,228.7500	4,228.7500	0.1717		4,233.0418
Worker	1.5585	1.1676	9.9703	0.0150	2.0001	0.0118	2.0119	0.5307	0.0109	0.5415		1,482.4859	1,482.4859	0.1020		1,485.0353
Total	**1.9513**	**10.6690**	**13.1089**	**0.0554**	**3.1070**	**0.0238**	**3.1308**	**0.8493**	**0.0223**	**0.8717**		**5,711.2359**	**5,711.2359**	**0.2737**		**5,718.0771**

3.5 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	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

3.5 Building Construction - 2025

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	0.3784	9.3598	2.9541	0.0402	1.1069	0.0118	1.1186	0.3187	0.0112	0.3299		4,204.8831	4,204.8831	0.1691		4,209.1097
Worker	1.4655	1.0983	9.4030	0.0144	2.0001	0.0115	2.0116	0.5307	0.0106	0.5412		1,423.2208	1,423.2208	0.0962		1,425.6260
Total	**1.8438**	**10.4581**	**12.3571**	**0.0546**	**3.1070**	**0.0232**	**3.1302**	**0.8493**	**0.0218**	**0.8711**		**5,628.1039**	**5,628.1039**	**0.2653**		**5,634.7357**

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

3.5 Building Construction - 2025

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	0.3784	9.3598	2.9541	0.0402	1.1069	0.0118	1.1186	0.3187	0.0112	0.3299		4,204.8831	4,204.8831	0.1691		4,209.1097
Worker	1.4655	1.0983	9.4030	0.0144	2.0001	0.0115	2.0116	0.5307	0.0106	0.5412		1,423.2208	1,423.2208	0.0962		1,425.6260
Total	**1.8438**	**10.4581**	**12.3571**	**0.0546**	**3.1070**	**0.0232**	**3.1302**	**0.8493**	**0.0218**	**0.8711**		**5,628.1039**	**5,628.1039**	**0.2653**		**5,634.7357**

3.5 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	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

3.5 Building Construction - 2026

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	0.3650	9.2328	2.7944	0.0400	1.1069	0.0115	1.1184	0.3187	0.0110	0.3297		4,183.8267	4,183.8267	0.1667		4,187.9948
Worker	1.3853	1.0470	8.9688	0.0138	2.0001	0.0111	2.0112	0.5307	0.0102	0.5409		1,371.4530	1,371.4530	0.0922		1,373.7583
Total	**1.7503**	**10.2798**	**11.7632**	**0.0539**	**3.1070**	**0.0226**	**3.1296**	**0.8493**	**0.0212**	**0.8706**		**5,555.2797**	**5,555.2797**	**0.2589**		**5,561.7531**

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

3.5 Building Construction - 2026

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	0.3650	9.2328	2.7944	0.0400	1.1069	0.0115	1.1184	0.3187	0.0110	0.3297		4,183.8267	4,183.8267	0.1667		4,187.9948
Worker	1.3853	1.0470	8.9688	0.0138	2.0001	0.0111	2.0112	0.5307	0.0102	0.5409		1,371.4530	1,371.4530	0.0922		1,373.7583
Total	**1.7503**	**10.2798**	**11.7632**	**0.0539**	**3.1070**	**0.0226**	**3.1296**	**0.8493**	**0.0212**	**0.8706**		**5,555.2797**	**5,555.2797**	**0.2589**		**5,561.7531**

3.6 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	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

3.6 Paving - 2026

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	0.0577	0.0436	0.3737	5.8000e-004	0.0833	4.6000e-004	0.0838	0.0221	4.3000e-004	0.0225		57.1439	57.1439	3.8400e-003		57.2399
Total	**0.0577**	**0.0436**	**0.3737**	**5.8000e-004**	**0.0833**	**4.6000e-004**	**0.0838**	**0.0221**	**4.3000e-004**	**0.0225**		**57.1439**	**57.1439**	**3.8400e-003**		**57.2399**

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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

3.6 Paving - 2026

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	0.0577	0.0436	0.3737	5.8000e-004	0.0833	4.6000e-004	0.0838	0.0221	4.3000e-004	0.0225		57.1439	57.1439	3.8400e-003		57.2399
Total	**0.0577**	**0.0436**	**0.3737**	**5.8000e-004**	**0.0833**	**4.6000e-004**	**0.0838**	**0.0221**	**4.3000e-004**	**0.0225**		**57.1439**	**57.1439**	**3.8400e-003**		**57.2399**

3.7 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	lb/day										lb/day					
Archit. Coating	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**21.8936**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

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	0.3303	0.2504	2.1225	3.0900e-003	0.4000	2.4100e-003	0.4024	0.1061	2.2200e-003	0.1084		306.0389	306.0389	0.0216		306.5797
Total	**0.3303**	**0.2504**	**2.1225**	**3.0900e-003**	**0.4000**	**2.4100e-003**	**0.4024**	**0.1061**	**2.2200e-003**	**0.1084**		**306.0389**	**306.0389**	**0.0216**		**306.5797**

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	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**21.8936**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

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	0.3303	0.2504	2.1225	3.0900e-003	0.4000	2.4100e-003	0.4024	0.1061	2.2200e-003	0.1084		306.0389	306.0389	0.0216		306.5797
Total	**0.3303**	**0.2504**	**2.1225**	**3.0900e-003**	**0.4000**	**2.4100e-003**	**0.4024**	**0.1061**	**2.2200e-003**	**0.1084**		**306.0389**	**306.0389**	**0.0216**		**306.5797**

3.7 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	lb/day										lb/day					
Archit. Coating	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**21.8827**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

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	0.3117	0.2335	1.9941	2.9900e-003	0.4000	2.3600e-003	0.4024	0.1061	2.1700e-003	0.1083		296.4972	296.4972	0.0204		297.0071
Total	**0.3117**	**0.2335**	**1.9941**	**2.9900e-003**	**0.4000**	**2.3600e-003**	**0.4024**	**0.1061**	**2.1700e-003**	**0.1083**		**296.4972**	**296.4972**	**0.0204**		**297.0071**

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	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**21.8827**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

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	0.3117	0.2335	1.9941	2.9900e-003	0.4000	2.3600e-003	0.4024	0.1061	2.1700e-003	0.1083		296.4972	296.4972	0.0204		297.0071
Total	**0.3117**	**0.2335**	**1.9941**	**2.9900e-003**	**0.4000**	**2.3600e-003**	**0.4024**	**0.1061**	**2.1700e-003**	**0.1083**		**296.4972**	**296.4972**	**0.0204**		**297.0071**

3.7 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	lb/day										lb/day					
Archit. Coating	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**21.8728**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.7 Architectural Coating - 2025

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	0.2931	0.2197	1.8806	2.8700e-003	0.4000	2.3000e-003	0.4023	0.1061	2.1200e-003	0.1083		284.6442	284.6442	0.0192		285.1252
Total	**0.2931**	**0.2197**	**1.8806**	**2.8700e-003**	**0.4000**	**2.3000e-003**	**0.4023**	**0.1061**	**2.1200e-003**	**0.1083**		**284.6442**	**284.6442**	**0.0192**		**285.1252**

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	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**21.8728**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.7 Architectural Coating - 2025

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	0.2931	0.2197	1.8806	2.8700e-003	0.4000	2.3000e-003	0.4023	0.1061	2.1200e-003	0.1083		284.6442	284.6442	0.0192		285.1252
Total	**0.2931**	**0.2197**	**1.8806**	**2.8700e-003**	**0.4000**	**2.3000e-003**	**0.4023**	**0.1061**	**2.1200e-003**	**0.1083**		**284.6442**	**284.6442**	**0.0192**		**285.1252**

3.7 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	lb/day										lb/day					
Archit. Coating	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**21.8728**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.7 Architectural Coating - 2026

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	0.2771	0.2094	1.7938	2.7700e-003	0.4000	2.2200e-003	0.4022	0.1061	2.0400e-003	0.1082		274.2906	274.2906	0.0184		274.7517
Total	**0.2771**	**0.2094**	**1.7938**	**2.7700e-003**	**0.4000**	**2.2200e-003**	**0.4022**	**0.1061**	**2.0400e-003**	**0.1082**		**274.2906**	**274.2906**	**0.0184**		**274.7517**

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	21.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**21.8728**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.7 Architectural Coating - 2026

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	0.2771	0.2094	1.7938	2.7700e-003	0.4000	2.2200e-003	0.4022	0.1061	2.0400e-003	0.1082		274.2906	274.2906	0.0184		274.7517
Total	**0.2771**	**0.2094**	**1.7938**	**2.7700e-003**	**0.4000**	**2.2200e-003**	**0.4022**	**0.1061**	**2.0400e-003**	**0.1082**		**274.2906**	**274.2906**	**0.0184**		**274.7517**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	32.6817	294.5647	318.5044	0.8646	45.8825	0.2656	46.1481	12.2956	0.2485	12.5441		89,051.2018	89,051.2018	8.6250		89,266.8257
Unmitigated	35.7613	309.5058	383.1700	1.1010	70.2281	0.3613	70.5893	18.8198	0.3384	19.1581		113,205.1960	113,205.1960	9.6344		113,446.0560

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,039.04	1,039.04	1039.04	1,741,743	1,137,943
Regional Shopping Center	22,453.66	22,453.66	22453.66	30,954,578	20,223,735
Total	23,492.70	23,492.70	23,492.70	32,696,321	21,361,678

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
Apartments Mid Rise	7.30	3.90	3.70	40.20	19.20	40.60	86	11	3
Regional Shopping Center	6.70	5.00	8.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.548557	0.028969	0.163336	0.096191	0.009629	0.004088	0.017564	0.119842	0.003955	0.001371	0.005304	0.000688	0.000504
Regional Shopping Center	0.548557	0.028969	0.163336	0.096191	0.009629	0.004088	0.017564	0.119842	0.003955	0.001371	0.005304	0.000688	0.000504

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1290	1.1275	0.6514	7.0400e-003		0.0892	0.0892		0.0892	0.0892		1,407.5816	1,407.5816	0.0270	0.0258	1,415.9462
NaturalGas Unmitigated	0.1290	1.1275	0.6514	7.0400e-003		0.0892	0.0892		0.0892	0.0892		1,407.5816	1,407.5816	0.0270	0.0258	1,415.9462

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					
Apartments Mid Rise	7741.56	0.0835	0.7134	0.3036	4.5500e-003		0.0577	0.0577		0.0577	0.0577		910.7717	910.7717	0.0175	0.0167	916.1840
Regional Shopping Center	4222.88	0.0455	0.4140	0.3478	2.4800e-003		0.0315	0.0315		0.0315	0.0315		496.8099	496.8099	9.5200e-003	9.1100e-003	499.7622
Total		**0.1290**	**1.1275**	**0.6514**	**7.0300e-003**		**0.0891**	**0.0891**		**0.0891**	**0.0891**		**1,407.5816**	**1,407.5816**	**0.0270**	**0.0258**	**1,415.9462**

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					
Apartments Mid Rise	7.74156	0.0835	0.7134	0.3036	4.5500e-003		0.0577	0.0577		0.0577	0.0577		910.7717	910.7717	0.0175	0.0167	916.1840
Regional Shopping Center	4.22288	0.0455	0.4140	0.3478	2.4800e-003		0.0315	0.0315		0.0315	0.0315		496.8099	496.8099	9.5200e-003	9.1100e-003	499.7622
Total		**0.1290**	**1.1275**	**0.6514**	**7.0300e-003**		**0.0891**	**0.0891**		**0.0891**	**0.0891**		**1,407.5816**	**1,407.5816**	**0.0270**	**0.0258**	**1,415.9462**

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	22.7213	0.1818	15.7728	8.4000e-004		0.0876	0.0876		0.0876	0.0876	0.0000	28.5254	28.5254	0.0274	0.0000	29.2105
Unmitigated	22.7213	0.1818	15.7728	8.4000e-004		0.0876	0.0876		0.0876	0.0876	0.0000	28.5254	28.5254	0.0274	0.0000	29.2105

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	3.2999					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	18.9455					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	0.4759	0.1818	15.7728	8.4000e-004		0.0876	0.0876		0.0876	0.0876		28.5254	28.5254	0.0274		29.2105
Total	**22.7213**	**0.1818**	**15.7728**	**8.4000e-004**		**0.0876**	**0.0876**		**0.0876**	**0.0876**	**0.0000**	**28.5254**	**28.5254**	**0.0274**	**0.0000**	**29.2105**

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	3.2999					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	18.9455					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	0.4759	0.1818	15.7728	8.4000e-004		0.0876	0.0876		0.0876	0.0876		28.5254	28.5254	0.0274		29.2105
Total	**22.7213**	**0.1818**	**15.7728**	**8.4000e-004**		**0.0876**	**0.0876**		**0.0876**	**0.0876**	**0.0000**	**28.5254**	**28.5254**	**0.0274**	**0.0000**	**29.2105**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation