AIR QUALITY AND GREENHOUSE GAS EMISSIONS ANALYSIS

West Avenue I Subdivision Project

City of Lancaster, California

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1.0 INTRODUCTION

The purpose of this Air Quality Impact Analysis is to identify, describe, and evaluate the significance of potential air quality impacts resulting from the construction and operation of the West Avenue I Subdivision Project (Project), a proposed development of a 163-lot single family subdivision in the City of Lancaster (City).

The Project would develop a vacant site for a 163-lot single family subdivision on 30 gross acres (Project site) located on W. Avenue I, West of W. 40th Street, comprised of four (3) Assessor Parcel Numbers (APNs 3105-018-14, -44, -45, -46). The site location is shown in **Figure 1, Regional Location Map**. The Project site is an undeveloped vacant lot bounded by vacant land to the north, east, and west; and a single-family housing development to the south, which is currently under construction.

2.0 ATMOSPHERIC SETTING

The Project site is located in the northern, desert portion of Los Angeles County, within the boundaries of the Mojave Desert Air Basin (MDAB or Basin) and within the jurisdiction of the Antelope Valley Air Quality Management District (AVAQMD or District). The mountain ranges bordering the air basin channel winds through the Antelope Valley (valley), affecting both the climate and dispersion of air pollutants. Temperature inversions, when the upper air is warmer than the air beneath it, trap pollutant emissions near the earth's surface and prevent upward dispersal to the atmosphere. The AVAQMD experiences air pollution problems due to the proximity of more populated urban areas of southern California and prevailing winds that transport pollutants from more congested urban areas to northern Los Angeles County.[1]

3.0 PROPOSED DEVELOPMENT

The Project would construct a single family residential subdivision consisting of 163 lots and 5.1 acres of associated paving. During construction, site grading activities would include approximately 55,000 cubic yards (cy) of cut and 55,000 cy of fill, to be balanced on-site.[2] The Project is expected to begin construction in 2022 and be completed and operational in 2025.

4.0 AIR QUALITY SETTING

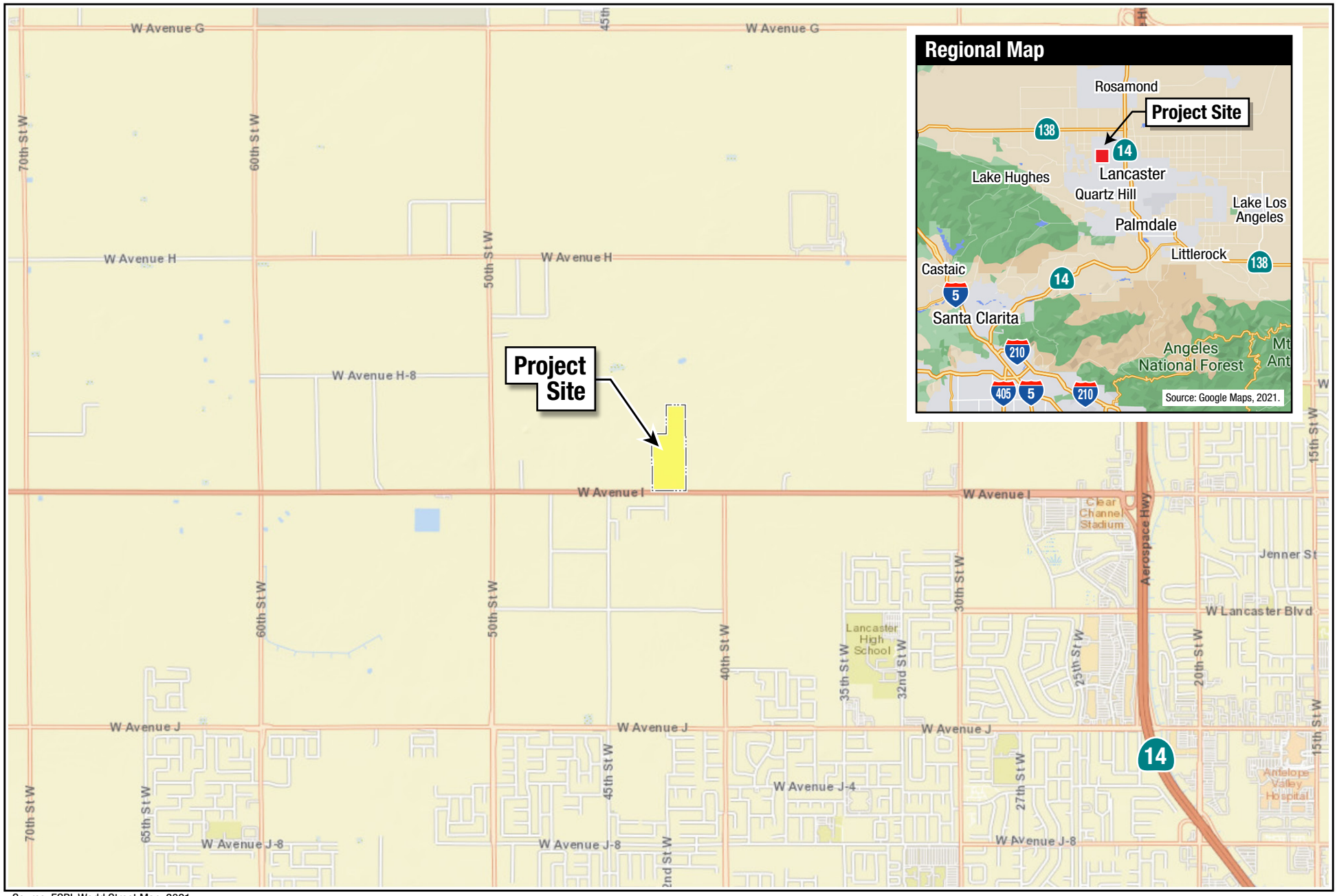
Ambient Air Quality Standards

The criteria pollutants subject to federal and state standards most relevant to air quality planning and regulation are ozone, carbon monoxide, fine suspended particulate matter, sulfur dioxide, and lead. Each these is described below.

- Ozone (O3) is a gas formed when volatile organic compounds (VOCs) and nitrogen oxides (NOX), which are both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant. Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the subgroups most susceptible to O3 effects. Short-term exposures (lasting for a few hours)

[1] Antelope Valley Air Quality Management District, Air Quality, Accessed on April 6, 2021 at: https://avaqmd.ca.gov/air-quality.

[2] Imad Aboujawdah, Civil Design and Drafting, Inc., Email correspondence with Envicom Corporation, March 26, 2021.



Source: ESRI, World Street Map, 2021.

envicom

Regional Location Map

FEET 0 1,500 3,000

FIGURE 1

- to O3 at levels typically observed in southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

- Carbon Monoxide (CO) is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during the winter morning, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. CO is a health concern because it competes with oxygen, often replacing it in the blood and reducing the blood's ability to transport oxygen to vital organs. Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include patients with diseases involving heart and blood vessels, fetuses, and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes.

- Respirable Particulate Matter (PM10) and Fine Particulate Matter (PM2.5) consists of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter, respectively, that can lodge in the lungs when inhaled. Some sources of particulate matter, like pollen and windstorms, are naturally occurring. However, in populated areas, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities. Inhaled particulate matter can contribute to respiratory problems, and can cause permanent lung damage. Inhalable particulates can also have a damaging effect on health by interfering with the body's mechanism for clearing the respiratory tract or by acting as a carrier of an absorbed toxic substance.

- Nitrogen dioxide (NO_2) is a compound produced by the combustion of fossil fuels, such as in internal combustion engines (both gasoline and diesel powered), as well as point sources, especially power plants. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts quickly to form NO_2, creating the mixture of NO and NO_2 commonly called NOx, a major contributor to O_3 formation. NO_2 also contributes to the formation of PM10. High concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase of bronchitis in children (2-3 years old) has been observed at concentrations below 0.3 parts per million (ppm).

- Sulfur dioxide (SO_2) is a colorless gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When sulfur dioxide oxidizes in the atmosphere, it forms sulfates (SO_4). Collectively, these pollutants are referred to as sulfur oxides (SO_X). Generally, the highest levels of SO_2 are found near large industrial complexes. SO_2 is an irritant gas that attacks the throat and lungs. It can cause acute respiratory symptoms and diminished ventilator function in children.

- Lead (Pb) occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne lead in the Basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so the majority of such combustion emissions are associated with off-road vehicles such as racecars. Other sources of lead include the

manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and the use of secondary lead smelters. Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction, particularly for exposure during infancy and childhood.

National and State Ambient Air Quality Standards (AAQS),[3] shown in **Table 1, Ambient Air Quality Standards**, are the air quality levels of criteria pollutants that are considered safe, with an adequate margin of safety, to protect the public health and welfare of "sensitive receptors," which include the elderly, young children, the acutely and chronically ill (e.g., those with cardio-respiratory disease, including asthma), and persons engaged in strenuous work or exercise.

Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Recent research has shown, however, that chronic exposure to ozone (O_3), the primary ingredient in photochemical smog, may lead to adverse respiratory health, even at concentrations close to the ambient standard. **Table 2, Health Effects of Major Criteria Pollutants**, provides a summary of the pollutants discussed above, examples of sources, and health effects.

[3] California Air Resources Board. California and National Ambient Air Quality Standards. Available at: https://www.arb.ca.gov/research/aaqs/aaqs2.pdf?_ga=2.111850244.1417595818.1550763932-1724706578.1550763932. Accessed on March 24, 2020.

Table 1
Ambient Air Quality Standards

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 (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

See footnotes on next page

For more information please call ARB-PIO at (916) 322-2990 **California Air Resources Board (5/4/16)**

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, 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 PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, 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 ARB 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 PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ 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 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard 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 $\mu g/m^3$ 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.

For more information please call ARB-PIO at (916) 322-2990 **California Air Resources Board (5/4/16)**

Table 2
Health Effects of Major Criteria Pollutants

Pollutants	Sources	Primary Effects
Ozone (O_3)	• Formed when reactive organic gases (ROG) and nitrogen oxides react in the presence of sunlight. ROG sources include any source that burns fuels, (e.g., gasoline, natural gas, wood, oil) solvents, petroleum processing and storage, and pesticides.	• Respiratory symptoms • Worsening of lung disease leading to premature death • Damage to lung tissue
Carbon Monoxide (CO)	• Sources that burn fuel, such as automobiles, trucks, heavy construction equipment, farming equipment, and residential heating.	• Chest pain in heart patients. • Headaches. • Light-headedness • Reduced mental alertness.
Respirable Particulate Matter (PM-10)	• Road Dust. • Windblown Dust (Agriculture). • Construction (Fireplaces). • Also formed from other pollutants (acid rain, NOx, SOx, organics). • Incomplete combustion of any fuel.	• Increased respiratory disease. • Lung damage. • Increased risk of cancer. • Increased risk of premature death.
Fine Particulate Matter (PM-2.5)	• Fuel Combustion in Motor Vehicles, Equipment and Industrial Sources. • Residential and Agricultural Burning. • Also formed from the reaction of other pollutants (acid rain, NOx, Sox, and organics).	• Increased respiratory disease. • Lung damage. • Increased risk of cancer. • Increased risk of premature death. • Increased risk of hospitalization for worsening of cardiovascular disease. • Asthma-related emergency room visits
Nitrogen Dioxide (NO_2)	• Sources that burn fuel, such as automobiles, trucks, heavy construction equipment, farming equipment, and residential heating. • Reacts in the atmosphere to form ozone and acid rain.	• Lung irritation and damage. • Enhanced allergic responses.
Sulfur Dioxide (SO_2)	• Coal or Oil Burning Power Plants and Industries. • Refineries. • Diesel Engines.	• Increases lung disease and breathing problems for asthmatics.
Lead (Pb)	• Metal Smelters. • Resource Recovery. • Leaded Gasoline. • Deterioration of Lead Paint.	• Learning disabilities. • Impaired mental functioning in children. • Brain and kidney damage.

Source: California Air Resources Board, Common Air Pollutants, Accessed on April 6, 2021 at: https://ww2.arb.ca.gov/resources/common-air-pollutants.

Baseline Air Quality

Ambient air quality levels in the Project area are documented from measurements reported by the AVAQMD air monitoring station located in the City at 43301 Division Street, approximately 2.8 miles east of the Project site. **Table 3, Project Area Air Quality Monitoring Summary 2016-2018** provides available air monitoring data from the Project vicinity for the previous three years (2016-2018) for which this data is available.

Table 3
Project Area Air Quality Monitoring Summary 2016-2018

Pollutant/Standard (S = State, F = Federal)	2016	2017	2018
Ozone (O_3)			
Number of Days Standards Exceeded			
1-Hour > 0.09 ppm (S)	3	10	5
8-Hour > 0.07 ppm (S)	65	43	49
8- Hour > 0.075 ppm (F)	30	22	19
Maximum Observed Concentration			
Max. 1-Hour Conc. (ppm)	0.108	0.109	0.125
Max. 8-Hour Conc. (ppm)	0.091	0.087	0.105
Carbon Monoxide (CO)[a]			
Number of Days Standards Exceeded			
8-Hour > 9.0 ppm (S, F)	-	-	-
Maximum Observed Concentration			
Max 8-Hour Conc. (ppm)	-	-	-
Nitrogen Dioxide (NO2)			
Number of Days Standards Exceeded			
1-Hour > 0.18 ppm (S)	0	0	0
Maximum Observed Concentration			
Max. 1-Hour Conc. (ppm)	0.048	0.046	0.047
Inhalable Particulates (PM-10)			
Number of Days Standards Exceeded/Days Monitored			
24-Hour > 50 $\mu g/m^3$ (S) [b]	-	-	-
24-Hour > 150 $\mu g/m^3$ (F)	0	0	0
Maximum Observed Concentration			
Max. 24-Hr. Conc. ($\mu g/m^3$) [c]	145.0	82.4	89.3
Ultra-Fine Particulates (PM-2.5)			
Number of Days Standards Exceeded/Days Monitored			
24-Hour > 35 $\mu g/m^3$ (F)	2	0	1
Maximum Observed Concentration			
Max. 24-Hr. Conc. ($\mu g/m^3$)	64.8	26.6	40.4

Source: California Air Resources Board, iADAM: Air Quality Data Statistics, accessed at: https://www.arb.ca.gov/adam/select8/sc8start.php, and https://www.arb.ca.gov/adam/topfour/topfour1.php on March 24, 2020.

[a] There was no data available to determine the value.

[b] There was insufficient (or no) data available to determine the value.

[c] PM-10 statistics may include data that are related to an exceptional event.

As documented in Table 3, the air quality data and trends in the Project vicinity may be summarized as follows:

1. O_3 levels exceeded the 1-hour State standard a total of 18 days from 2016-2018.
2. O_3 levels exceeded the Federal 8-hour standard, and the State 8-hour standard an average of 24 and 52 days, respectively, from 2016-2018.
3. PM-10 levels did not exceed the National 24-hour standard from 2016-2018; however, there was no data provided regarding PM-10 levels in relation to the State 24-hour standard in that period.
4. PM-2.5 levels exceeded the current National 24-hour standard on 2 days in 2016, zero days in 2017, and 1 day in 2018.
5. NOx levels have not exceeded applicable standards from 2016-2018, and no data was provided regarding CO levels in the same period.

Air Quality Planning

The AVAQMD has been designated as non-attainment of national and state standards for ozone and particulate matter (PM-10),[4] as monitored pollutant concentrations consistently violate those standards. The AVAQMD has jurisdiction over the northern, desert portion of Los Angeles County regarding air quality issues in the air basin, and has prepared guidelines for preparing environmental analysis. These guidelines include emission thresholds for construction and operation of development projects. The AVAQMD adopted the Ozone Attainment Plan in 2004 to develop the methods and reduction measures to ensure applicable ozone attainment goals and standards are met for the area. The attainment plan focuses on pollutants including NO_X and reactive organic gases (ROGs), which are precursors that react in the atmosphere to form ozone.

The AVAQMD establishes rules and regulations for the purpose of achieving attainment of state and national air quality standards. All development projects within the AVAQMD are required to comply with existing rules as they apply to each specific project. Some of the District rules the Project may be subject to include:

- Rule 401 – Visible Emissions
- Rule 402 – Nuisance
- Rule 403 – Fugitive Dust
- Rule 431.2 – Sulfur Content of Liquid Fuels
- Rule 2100 – Registration of Portable Equipment

Primary Pollutants

Primary pollutants are emitted in their already unhealthful form. CO is an example of a primary pollutant, which can have effects at a localized level, near an individual source of emissions or a collection of sources, such as a crowded intersection or parking lot. Many particulates, especially fugitive dust emissions, are also primary pollutants.

Secondary Pollutants

Secondary pollutants transform over time from more benign components directly emitted from a source(s) to a more unhealthful contaminant. O_3 is an example of a secondary pollutant, which is created through chemical reactions involving primary precursors (ROG and NOx) and sunlight.

[4] Antelope Valley Air Quality Management District, Antelope Valley AQMD Attainment Status, Accessed on April 6, 2021 at: https://avaqmd.ca.gov/files/e0986ab83/AVAQMD+2017+Attainment+Status+Table.pdf.

5.0 AIR QUALITY IMPACTS

Significance Criteria

State California Environmental Quality Act Guidelines

Air quality impacts of a project are considered significant if they cause clean air standards to be violated where they are currently met, or if they substantially contribute to an existing violation of standards. Substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions such as dust or odors, that are generated by a project, would also be considered significant impacts.

As set forth in Appendix G, Environmental Checklist, of the State California Environmental Quality Act (CEQA) Guidelines, a project could have a potentially significant impact if it would:

a. Conflict with or obstruct implementation of the applicable air quality plan;
b. 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;
c. Expose sensitive receptors to substantial pollutant concentrations; and/or
d. Result in other emissions such as those leading to odors adversely affecting a substantial number of people.

AVAQMD Emissions Thresholds

The AVAQMD has provided daily and annual emission thresholds for emissions of criteria pollutants by which to determine the significance of a development project's effects on air quality. The AVAQMD recommends that projects exceeding the annual or daily emissions shown in **Table 4, AVAQMD CEQA Daily Emissions Thresholds**, would be considered to have a potentially significant impact under CEQA.

Table 4
AVAQMD CEQA Daily Emissions Thresholds

Pollutant	Annual Threshold (tons)	Daily Threshold (lbs/day)
Carbon Monoxide (CO)	100	548
Nitrogen oxides (NO_X)	25	137
Reactive organic gases (ROG) (VOC)	25	137
Sulfur oxide (SO_X)	25	137
Particulate Matter (PM-10)	15	82
Particulate Matter (PM-2.5)	12	65
Source: AVAQMD, California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, August 2016.		

Air Quality Plan Consistency

Air quality plans are based on projected growth estimates to account for emissions from anticipated future development in the region. A residential project that is consistent with projected population growth in a particular region, and is consistent with the General Plan Land Use designation, would generally be consistent with the air quality plan and would not obstruct its implementation.

The proposed residential development would be consistent with the site's land use designation and zoning of MU – N (Mixed Use – Neighborhood). Additionally, according to the Southern California Association

of Governments (SCAG) 2020-2045 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), the City is projected to have approximately 74,600 dwelling units by 2045, an increase of approximately 27,700 over the City's housing units in 2016.[5] Based on these projections, the Project would represent approximately 0.2% of the overall projections for the total number of housing units in the City, or approximately 0.6% of the anticipated growth in housing from 2016 to 2045. As such, the Project would not substantially conflict with the air quality plan or obstruct its implementation, impacts regarding plan consistency would be less than significant.

Regional Air Pollutants

Emissions Modeling

The Project's estimated emissions of criteria pollutants were modeled using the California Emissions Estimator Model® (CalEEMod). CalEEMod is a Statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operation activities, as well as indirect emissions associated with energy use, solid waste disposal, vegetation planting and/or removal, and water use. The model was developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with the California Air Districts. The output reports from CalEEMod are included as **Appendix A** to this report.

Construction Impacts

Construction emissions were modeled based on the lot acreage to be graded, the duration of construction activities, anticipated equipment fleet, soil export volume, amount of buildings to be constructed, and amount parking space to be provided. As the Project is located on a vacant site, no demolition or site preparation would be required. A conceptual construction equipment fleet list and approximate duration of each construction phase is shown in **Table 5, Conceptual Construction Equipment Fleet**.

Table 5
Conceptual Construction Equipment Fleet

Phase Name and Duration	Equipment
Grading (80 days)	1 Grader
	2 Scrapers
	1 Rubber tired dozer
	1 Off-Highway Truck (water truck)
Construction (750 days)	1 Crane
	3 Forklift
	1 Welder
	1 Generator Set
	3 Tractor/Loader/Backhoe
	1 Pump
	1 Off-Highway Truck (water truck)
Paving (75 days)	2 Pavers
	2 Paving Equipment
	2 Rollers
Architectural Coating (75 days)	1 Air Compressor
Source: CalEEMod Output, May 4, 2021, Appendix A.	

[5] SCAG, Current Context Demographics and Growth Forecast, Technical Report, Adopted on September 3, 2020.

The Project would be required to comply with applicable AVAQMD rules, including Rule 403, Fugitive Dust, which requires the implementation of fugitive dust control measures which includes application of water to exposed soil surfaces. The Project's maximum daily construction emissions, as calculated by CalEEMod, are listed in **Table 6, Construction Emissions**.

Table 6
Construction Emissions

	Criteria Pollutant					
	ROG	**NO_X**	**CO**	**SO_2**	**PM-10**	**PM-2.5**
Maximum Daily Construction Emissions [a]	Pounds/Day					
	74.3	47.0	52.8	0.1	6.5	1.7
Daily Thresholds	137	137	548	137	82	65
Significant Impact? Yes/No	**No**	**No**	**No**	**No**	**No**	**No**
Annual Construction Emissions [a]	Tons/Year					
	4.2	13.6	15.4	< 0.1	1.3	0.7
Daily Thresholds	25	25	100	25	15	12
Significant Impact? Yes/No	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod Output, May 4, 2021, Appendix A.
[a] Incorporation of Rule 403 requirement for application of water to exposed soils for dust reduction.

As shown in Table 6, the Project's construction-related emissions of criteria pollutants would be below the AVAQMD's daily and annual significance threshold. Therefore, the Project's potential to result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment during construction would be less than significant.

Operational Impacts

During operations, the proposed land uses would result in emissions of criteria pollutants from area sources, energy sources, and mobile sources. The AVAQMD thresholds for air quality impacts from operations are shown above in Table 4. Operations of the proposed development would not be anticipated to exceed significance thresholds for criteria pollutants as shown in **Table 7, Operational Emissions**. Therefore, the project's potential to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment during operations would be less than significant.

The operations model reflects the project assumptions that there is no intent to offer wood-burning fireplaces as a residential amenity. It must be noted, however, that if the proposed residences included wood-burning fireplaces, operational emissions for NOx would exceed CEQA thresholds. However, up to 89 of the proposed residences could potentially be equipped with natural gas fireplaces without exceeding applicable emissions thresholds, as long as they were not equipped to allow use for wood burning.

Table 7
Operational Emissions

	Criteria Pollutant					
	ROG	**NO_X**	**CO**	**SO_2**	**PM-10**	**PM-2.5**
Daily Operations Emissions	Pounds/Day					
	11.5	14.8	46.7	0.1	10.2	3.0
Daily Thresholds	137	137	548	137	82	65
Significant Impact? Yes/No	**No**	**No**	**No**	**No**	**No**	**No**
Annual Operational Emissions	Tons/Year					
	1.9	2.4	6.3	0.02	1.7	0.5
Daily Thresholds	25	25	100	25	15	12
Significant Impact? Yes/No	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod Output, May 4, 2021, Appendix A.
[a] Incorporation of Rule 403 requirement for application of water to exposed soils for dust reduction.

As shown in Table 7, Project operations would not be anticipated to exceed significance thresholds for criteria pollutants.

Sensitive Receptors

Some land uses are more sensitive to air pollution than others due to associated population groups and activities. Sensitive receptor land uses include places that could be occupied for extended periods by persons with the greatest sensitivity to air pollution exposure, including residences, schools, daycare centers, playgrounds and medical facilities. The nearest sensitive receptor to the Project site is the single-family residential development, which is currently under construction, located approximately 150 feet south of the Project site boundary.

Toxic Air Contaminants

Diesel-powered equipment exhaust contains carcinogenic compounds, or toxic air contaminants (TACs). As residential projects do not generate a substantial quantity of diesel truck trips during operations, any measurable diesel TAC emissions from the project would occur for only a brief period during construction activities that would require on-site use of heavy-duty equipment. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 day per year, 70-year lifetime exposure. As health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe rather than a relatively brief construction period, evaluations of health risks associated with construction-related diesel emissions are generally not required due to the short period such emissions would be generated. As such, potential impacts of the Project due to emissions of toxic air contaminants would be less than significant.

Odor Impacts

A significant impact may occur if a project would create objectionable odors affecting a substantial number of people. Objectionable odors are typically associated with manufacturing, industrial, or sewage treatment processes, rather than the proposed residential development. Rules for odor compliance are mandated under the California Health and Safety Code, Section 41700, and they are also addressed in AVAQMD Rule 402, Nuisance. This rule states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to

cause, injury or damage to business or property." During construction, temporary odors associated with use and application of construction materials, such as paints and asphalt, could be generated by the Project. However, potential construction-related odors would not be unique or unusual for a development project, and would be temporary, which would not result in substantial impacts. During construction and operation of the Project, trash receptacles would be covered and properly maintained to control odors and not create a nuisance as required by law. Therefore, odor impacts of the Project during construction and operation would be less than significant.

6.0 GREENHOUSE GAS EMISSIONS IMPACTS

Greenhouse gases (GHGs) emitted by human activity are implicated in global climate change. GHGs contribute to an increase in the temperature of the earth's atmosphere by preventing long wavelength heat radiation in some parts of the infrared spectrum from leaving the atmosphere. For purposes of planning and regulation, Section 15364.5 of the California Code of Regulations defines GHGs as including carbon dioxide (CO_2), carbon monoxide (CO), nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Carbon dioxide is the primary GHG emitted in California, accounting for 84 percent of total GHG emissions in 2015.[6] Because the warming potential of the identified GHGs differs, GHG emissions are typically expressed in terms of CO_2 equivalents (CO_2e), providing a common expression for the combined volume and warming potential of the GHGs generated by a particular emitter. The total GHG emissions from individual sources are generally reported in metric tons (MT) and are expressed as MT of CO_2 equivalents ($MTCO_2e$).

Fossil fuel combustion from "mobile sources" in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately half of GHG emissions globally. The transportation sector, primarily on-road travel, is the single largest source of CO_2 emissions in California. Additionally, about 50 percent of the industrial source emissions of CO_2 are from the refinery and oil and gas sectors. When the industrial source emissions from the oil and gas sectors are attributed to the transportation sector, the emissions associated with transportation amount to approximately half of Statewide GHG emissions.[7]

The Global Warming Solutions Act of 2006, Assembly Bill (AB) 32, required that the California Air Resources Board (CARB) determine the Statewide 1990 GHG emission level and approve a Statewide GHG emissions limit, equal to the 1990 level, to be achieved by 2020. As reported in the 2017 Climate Change Scoping Plan, California is on track to exceed its 2020 GHG reduction target. Executive Order B-30-15 and Senate Bill (SB) 32 extended the goals of AB 32 and set a 2030 goal of reducing emissions by 40 percent from 2020 levels.

Thresholds of Significance

Based on the CEQA Appendix G guidelines, a project would have a potentially significant GHG impact if it would:

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

[6] California Air Resources Board, California's 2017 Climate Change Scoping Plan, November 2017.
[7] California Air Resources Board, California's 2017 Climate Change Scoping Plan, November 2017.

In determining the significance of impacts from GHG emissions, Section 15064.4 of the CEQA Guidelines specifies that a lead agency has the discretion to determine whether to quantify project-related GHG emissions or to rely on a qualitative analysis or performance-based standards. Section 15064.4 of the CEQA Guidelines also states that a lead agency should consider the extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of GHG emissions. For this analysis, the project's GHG emissions were estimated for construction and operations using CalEEMod. The AVAQMD provides significance thresholds for annual and daily GHG emissions from development projects.[8]

GHG Emissions Impacts

Construction Activity GHG Emissions

Based on the CalEEMod output in Appendix A, the Project's maximum annual GHG emissions during construction would be 3,527 $MTCO_2e$ and the maximum daily GHG emissions during construction would be 12,055 pounds CO_2e. **Table 8, Construction Greenhouse Gas Emissions**, shows the Project's GHG emissions from construction and the AVAQMD thresholds.

Table 8
Construction Greenhouse Gas Emissions

Annual Emissions (CO_2e)			Daily Emissions (CO_2e)		
Peak Annual Emissions (MT/yr)	**Threshold (MT/yr) [a]**	**Significant Impact?**	**Peak Daily Emissions (lbs/day)**	**Threshold (lbs/day)**	**Significant Impact?**
3,527	110,231	No	12,055	548,000	No

Source: CalEEMod Output, May 4, 2021, Appendix A.
MT = metric tons.
[a] Expressed in Metric Tons (AVAQMD threshold is 100,000 tons)

As shown in Table 8, the maximum annual and daily emissions levels resulting from construction of the project would be well below the applicable thresholds, and potential GHG impacts associated with construction would be less than significant.

Project Operational GHG Emissions

Based on the CalEEMod output in Appendix A, the Project's annual operational GHG emissions from a combination of area sources, energy use, mobile, water use, and waste disposal would be 2,184 $MTCO_2e$, and the maximum daily GHG emissions during operations would be 15,374 pounds CO_2e. **Table 9, Operational Greenhouse Gas Emissions**, shows the project's GHG emissions from operations and the AVAQMD thresholds.

Table 9
Operational Greenhouse Gas Emissions

Annual Emissions (CO_2e)			Daily Emissions (CO_2e)		
Annual Emissions (MT/yr)	**Threshold (MT/yr) [a]**	**Significant Impact?**	**Daily Emissions (lbs/day)**	**Threshold (lbs/day)**	**Significant Impact?**
2,184	110,231 MT	No	15,374	548,000	No

Source: CalEEMod Output, May 4, 2021, Appendix A.
MT = metric tons.
[a] Expressed in Metric Tons (AVAQMD threshold is 100,000 tons)

[8] AVAQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, August 2016.

As shown in Table 9, the maximum annual and daily emissions levels resulting from operations of the project would be well below the applicable thresholds, and as such, potential GHG impacts associated with long-term operations would be less than significant.

GHG Reduction Plan, Policy, and Regulation Consistency

The Project is consistent with the General Plan Land Use designation, would not require a general plan amendment or zone change, and represents a small fraction of the City's growth projections. The Project would be required to comply with all applicable GHG reduction regulations, including California Code of Regulations Title 24, Parts 6 and 11, which provide Building Efficiency Standards and the Green Building Code, respectively, which include standards that reduce potential GHG emissions from new development. The Project would provide housing within proximity to existing commercial uses in the City. Although no local bus lines serve the vicinity, a regional rail service (MetroLink) provides mass transit opportunities from the City of Lancaster to the City of Santa Clarita and the greater Los Angeles metropolitan area.

Although the City's General Plan[9] does not provide policies that specifically address GHG reduction, the Project would be consistent with General Plan policies aimed at improving air quality, which would also result in GHG reductions. These policies include:

- Policy 3.3.1: Minimize the amount of vehicular miles traveled (VMT).
- Policy 3.3.2: Facilitate the development and use of public transportation and travel modes such as bicycle riding and walking.
- Policy 3.3.3: Minimize air pollutant emissions generated by new and existing development.

The Project would be consistent with these policies by providing high-density housing proximate to existing commercial uses, which would minimize VMT, be located within close proximity to mass transit opportunities, and minimize potential air pollutants (including GHGs) from new development. Therefore, the Project would not substantially conflict with an applicable plan, policy or regulation adopted to reduce GHG emissions, impacts would be less than significant.

7.0 CONCLUSIONS

As evaluated above, the project's potential air quality impacts during construction, including pollutants, TACs, odors, and GHG emissions, would be less than significant. The project's potential air quality impacts from operations would be less than significant as well. As noted above, although there is no intent to include woodstoves or wood-burning fireplaces in the housing units, NOx thresholds would be violated if such amenities were present. To ensure operations do not exceed thresholds Envicom recommends including the following restriction concerning fireplaces as a project entitlement condition:

- All building plans shall specify that no wood or pellet burning fireplaces shall be constructed with, or allowed in the proposed residences within the development. Fireplaces that use natural gas only may be allowed in up to 89 units total, which may be vented through a chimney, provided the chimney shall be designed so that it cannot be converted for use with a wood-burning fireplace.

[9] City of Lancaster, General Plan 2030, July 14, 2009.

Appendix A

CalEEMod Version 2016.3.2
Computer Model Output

West Avenue I

Antelope Valley APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	163.00	Dwelling Unit	52.92	293,400.00	466
Other Asphalt Surfaces	5.10	Acre	5.10	222,156.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2025
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

West Avenue I - Antelope Valley APCD Air District, Annual

Project Characteristics -

Land Use - 163 SF, 5.1 acres of parking

Construction Phase - no demo or site prep, 3 years of construction

Off-road Equipment - water truck

Off-road Equipment - water truck and concrete pump

Off-road Equipment -

Off-road Equipment -

Architectural Coating - 100 g/L

Grading - grading- 55,00 cy import/55,000 cy export (balanced on-site)

Construction Off-road Equipment Mitigation -

Woodstoves - no woodstoves, no wood fireplace

Area Coating - 100 g/L

Off-road Equipment -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstructionPhase	NumDays	1,110.00	750.00
tblConstructionPhase	NumDays	70.00	0.00
tblConstructionPhase	NumDays	110.00	80.00
tblConstructionPhase	NumDays	40.00	0.00
tblConstructionPhase	PhaseEndDate	1/4/2027	10/17/2025
tblConstructionPhase	PhaseEndDate	6/8/2026	9/5/2025
tblConstructionPhase	PhaseEndDate	8/9/2021	5/3/2021
tblConstructionPhase	PhaseEndDate	3/7/2022	10/21/2022
tblConstructionPhase	PhaseEndDate	9/21/2026	10/17/2025

tblConstructionPhase	PhaseEndDate	10/4/2021	8/9/2021
tblConstructionPhase	PhaseStartDate	9/22/2026	7/7/2025
tblConstructionPhase	PhaseStartDate	3/8/2022	10/24/2022
tblConstructionPhase	PhaseStartDate	10/5/2021	7/4/2022
tblConstructionPhase	PhaseStartDate	6/9/2026	7/7/2025
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberWood	57.05	0.00
tblGrading	AcresOfGrading	200.00	275.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblWoodstoves	NumberCatalytic	8.15	0.00
tblWoodstoves	NumberNoncatalytic	8.15	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	0.2951	2.7656	2.3765	5.9800e-003	0.4344	0.1129	0.5473	0.1610	0.1050	0.2660	0.0000	527.5133	527.5133	0.1375	0.0000	530.9496
2023	0.5030	4.1320	4.6496	0.0122	0.2059	0.1614	0.3673	0.0558	0.1533	0.2090	0.0000	1,078.5754	1,078.5754	0.1869	0.0000	1,083.2486
2024	0.4814	3.9192	4.6004	0.0122	0.2075	0.1443	0.3518	0.0562	0.1369	0.1931	0.0000	1,079.7251	1,079.7251	0.1872	0.0000	1,084.4058
2025	2.9624	2.8291	3.7334	9.3200e-003	0.1546	0.1021	0.2566	0.0418	0.0965	0.1383	0.0000	824.6351	824.6351	0.1514	0.0000	828.4189
Maximum	**2.9624**	**4.1320**	**4.6496**	**0.0122**	**0.4344**	**0.1614**	**0.5473**	**0.1610**	**0.1533**	**0.2660**	**0.0000**	**1,079.7251**	**1,079.7251**	**0.1872**	**0.0000**	**1,084.4058**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	0.2951	2.7656	2.3765	5.9800e-003	0.2217	0.1129	0.3346	0.0795	0.1050	0.1845	0.0000	527.5128	527.5128	0.1375	0.0000	530.9490
2023	0.5030	4.1320	4.6496	0.0122	0.2059	0.1614	0.3673	0.0558	0.1533	0.2090	0.0000	1,078.5745	1,078.5745	0.1869	0.0000	1,083.2477
2024	0.4814	3.9192	4.6004	0.0122	0.2075	0.1443	0.3518	0.0562	0.1369	0.1931	0.0000	1,079.7242	1,079.7242	0.1872	0.0000	1,084.4049
2025	2.9624	2.8291	3.7334	9.3200e-003	0.1546	0.1021	0.2566	0.0418	0.0965	0.1383	0.0000	824.6344	824.6344	0.1514	0.0000	828.4182
Maximum	**2.9624**	**4.1320**	**4.6496**	**0.0122**	**0.2217**	**0.1614**	**0.3673**	**0.0795**	**0.1533**	**0.2090**	**0.0000**	**1,079.7242**	**1,079.7242**	**0.1872**	**0.0000**	**1,084.4049**

	ROG	NOx	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**	**21.22**	**0.00**	**13.96**	**25.89**	**0.00**	**10.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
5	**5-4-2022**	**8-3-2022**	0.5729	0.5729
6	**8-4-2022**	**11-3-2022**	1.6154	1.6154
7	**11-4-2022**	**2-3-2023**	1.2522	1.2522
8	**2-4-2023**	**5-3-2023**	1.1327	1.1327
9	**5-4-2023**	**8-3-2023**	1.1722	1.1722
10	**8-4-2023**	**11-3-2023**	1.1714	1.1714

11	**11-4-2023**	**2-3-2024**	1.1450	1.1450
12	**2-4-2024**	**5-3-2024**	1.0791	1.0791
13	**5-4-2024**	**8-3-2024**	1.1045	1.1045
14	**8-4-2024**	**11-3-2024**	1.1037	1.1037
15	**11-4-2024**	**2-3-2025**	1.0723	1.0723
16	**2-4-2025**	**5-3-2025**	0.9884	0.9884
17	**5-4-2025**	**8-3-2025**	1.8291	1.8291
18	**8-4-2025**	**9-30-2025**	2.0368	2.0368
		Highest	2.0368	2.0368

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4638	0.0749	1.2351	4.5000e-004		0.0116	0.0116		0.0116	0.0116	0.0000	72.5899	72.5899	3.2500e-003	1.2900e-003	73.0568
Energy	0.0242	0.2064	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.9823	238.9823	4.5800e-003	4.3800e-003	240.4024
Mobile	0.4186	2.1370	5.0166	0.0191	1.6613	0.0136	1.6749	0.4454	0.0127	0.4580	0.0000	1,757.8527	1,757.8527	0.0668	0.0000	1,759.5235
Waste						0.0000	0.0000		0.0000	0.0000	38.7835	0.0000	38.7835	2.2920	0.0000	96.0844
Water						0.0000	0.0000		0.0000	0.0000	3.3693	0.0000	3.3693	0.3461	8.1700e-003	14.4557
Total	**1.9065**	**2.4183**	**6.3395**	**0.0209**	**1.6613**	**0.0420**	**1.7032**	**0.4454**	**0.0410**	**0.4864**	**42.1527**	**2,069.4248**	**2,111.5775**	**2.7128**	**0.0138**	**2,183.5228**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4638	0.0749	1.2351	4.5000e-004		0.0116	0.0116		0.0116	0.0116	0.0000	72.5899	72.5899	3.2500e-003	1.2900e-003	73.0568
Energy	0.0242	0.2064	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.9823	238.9823	4.5800e-003	4.3800e-003	240.4024
Mobile	0.4186	2.1370	5.0166	0.0191	1.6613	0.0136	1.6749	0.4454	0.0127	0.4580	0.0000	1,757.8527	1,757.8527	0.0668	0.0000	1,759.5235
Waste						0.0000	0.0000		0.0000	0.0000	38.7835	0.0000	38.7835	2.2920	0.0000	96.0844
Water						0.0000	0.0000		0.0000	0.0000	3.3693	0.0000	3.3693	0.3461	8.1700e-003	14.4557
Total	**1.9065**	**2.4183**	**6.3395**	**0.0209**	**1.6613**	**0.0420**	**1.7032**	**0.4454**	**0.0410**	**0.4864**	**42.1527**	**2,069.4248**	**2,111.5775**	**2.7128**	**0.0138**	**2,183.5228**

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

3.0 Construction Detail

Construction Phase

West Avenue I - Antelope Valley APCD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/4/2021	5/3/2021	5	0	
2	Site Preparation	Site Preparation	8/10/2021	8/9/2021	5	0	
3	Grading	Grading	7/4/2022	10/21/2022	5	80	
4	Building Construction	Building Construction	10/24/2022	9/5/2025	5	750	
5	Paving	Paving	7/7/2025	10/17/2025	5	75	
6	Architectural Coating	Architectural Coating	7/7/2025	10/17/2025	5	75	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 5.1

Residential Indoor: 594,135; Residential Outdoor: 198,045; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,329 (Architectural Coating – sqft)

OffRoad Equipment

West Avenue I - Antelope Valley APCD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
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
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45
Grading	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Grading	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Off-Highway Trucks	1	8.00	402	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	152.00	54.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

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

3.2 Demolition - 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 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	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

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

3.3 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3867	0.0000	0.3867	0.1482	0.0000	0.1482	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1874	1.8756	1.4310	3.5400e-003		0.0771	0.0771		0.0709	0.0709	0.0000	311.1925	311.1925	0.1007	0.0000	313.7087
Total	**0.1874**	**1.8756**	**1.4310**	**3.5400e-003**	**0.3867**	**0.0771**	**0.4638**	**0.1482**	**0.0709**	**0.2191**	**0.0000**	**311.1925**	**311.1925**	**0.1007**	**0.0000**	**313.7087**

3.4 Grading - 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5900e-003	2.8200e-003	0.0317	8.0000e-005	8.0500e-003	7.0000e-005	8.1200e-003	2.1400e-003	6.0000e-005	2.2000e-003	0.0000	7.0450	7.0450	2.3000e-004	0.0000	7.0507
Total	**3.5900e-003**	**2.8200e-003**	**0.0317**	**8.0000e-005**	**8.0500e-003**	**7.0000e-005**	**8.1200e-003**	**2.1400e-003**	**6.0000e-005**	**2.2000e-003**	**0.0000**	**7.0450**	**7.0450**	**2.3000e-004**	**0.0000**	**7.0507**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1740	0.0000	0.1740	0.0667	0.0000	0.0667	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1874	1.8756	1.4310	3.5400e-003		0.0771	0.0771		0.0709	0.0709	0.0000	311.1922	311.1922	0.1007	0.0000	313.7083
Total	**0.1874**	**1.8756**	**1.4310**	**3.5400e-003**	**0.1740**	**0.0771**	**0.2511**	**0.0667**	**0.0709**	**0.1376**	**0.0000**	**311.1922**	**311.1922**	**0.1007**	**0.0000**	**313.7083**

3.4 Grading - 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5900e-003	2.8200e-003	0.0317	8.0000e-005	8.0500e-003	7.0000e-005	8.1200e-003	2.1400e-003	6.0000e-005	2.2000e-003	0.0000	7.0450	7.0450	2.3000e-004	0.0000	7.0507
Total	**3.5900e-003**	**2.8200e-003**	**0.0317**	**8.0000e-005**	**8.0500e-003**	**7.0000e-005**	**8.1200e-003**	**2.1400e-003**	**6.0000e-005**	**2.2000e-003**	**0.0000**	**7.0450**	**7.0450**	**2.3000e-004**	**0.0000**	**7.0507**

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	tons/yr										MT/yr					
Off-Road	0.0867	0.7400	0.7640	1.6600e-003		0.0353	0.0353		0.0335	0.0335	0.0000	144.3505	144.3505	0.0341	0.0000	145.2038
Total	**0.0867**	**0.7400**	**0.7640**	**1.6600e-003**		**0.0353**	**0.0353**		**0.0335**	**0.0335**	**0.0000**	**144.3505**	**144.3505**	**0.0341**	**0.0000**	**145.2038**

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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e-003	0.1364	0.0294	4.0000e-004	8.9900e-003	1.9000e-004	9.1800e-003	2.6000e-003	1.8000e-004	2.7800e-003	0.0000	38.1541	38.1541	1.5800e-003	0.0000	38.1937
Worker	0.0136	0.0107	0.1203	3.0000e-004	0.0306	2.5000e-004	0.0309	8.1300e-003	2.3000e-004	8.3600e-003	0.0000	26.7711	26.7711	8.7000e-004	0.0000	26.7928
Total	**0.0174**	**0.1471**	**0.1497**	**7.0000e-004**	**0.0396**	**4.4000e-004**	**0.0400**	**0.0107**	**4.1000e-004**	**0.0111**	**0.0000**	**64.9252**	**64.9252**	**2.4500e-003**	**0.0000**	**64.9864**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0867	0.7400	0.7640	1.6600e-003		0.0353	0.0353		0.0335	0.0335	0.0000	144.3503	144.3503	0.0341	0.0000	145.2036
Total	**0.0867**	**0.7400**	**0.7640**	**1.6600e-003**		**0.0353**	**0.0353**		**0.0335**	**0.0335**	**0.0000**	**144.3503**	**144.3503**	**0.0341**	**0.0000**	**145.2036**

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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e-003	0.1364	0.0294	4.0000e-004	8.9900e-003	1.9000e-004	9.1800e-003	2.6000e-003	1.8000e-004	2.7800e-003	0.0000	38.1541	38.1541	1.5800e-003	0.0000	38.1937
Worker	0.0136	0.0107	0.1203	3.0000e-004	0.0306	2.5000e-004	0.0309	8.1300e-003	2.3000e-004	8.3600e-003	0.0000	26.7711	26.7711	8.7000e-004	0.0000	26.7928
Total	**0.0174**	**0.1471**	**0.1497**	**7.0000e-004**	**0.0396**	**4.4000e-004**	**0.0400**	**0.0107**	**4.1000e-004**	**0.0111**	**0.0000**	**64.9252**	**64.9252**	**2.4500e-003**	**0.0000**	**64.9864**

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	tons/yr										MT/yr					
Off-Road	0.4210	3.5158	3.9374	8.6600e-003		0.1597	0.1597		0.1516	0.1516	0.0000	750.9396	750.9396	0.1763	0.0000	755.3468
Total	**0.4210**	**3.5158**	**3.9374**	**8.6600e-003**		**0.1597**	**0.1597**		**0.1516**	**0.1516**	**0.0000**	**750.9396**	**750.9396**	**0.1763**	**0.0000**	**755.3468**

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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0155	0.5656	0.1350	2.0400e-003	0.0468	5.3000e-004	0.0473	0.0135	5.0000e-004	0.0140	0.0000	193.4829	193.4829	6.5600e-003	0.0000	193.6468
Worker	0.0666	0.0507	0.5772	1.4900e-003	0.1591	1.2600e-003	0.1604	0.0423	1.1600e-003	0.0434	0.0000	134.1528	134.1528	4.0800e-003	0.0000	134.2549
Total	**0.0820**	**0.6163**	**0.7122**	**3.5300e-003**	**0.2059**	**1.7900e-003**	**0.2077**	**0.0558**	**1.6600e-003**	**0.0574**	**0.0000**	**327.6358**	**327.6358**	**0.0106**	**0.0000**	**327.9018**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4210	3.5157	3.9374	8.6600e-003		0.1597	0.1597		0.1516	0.1516	0.0000	750.9387	750.9387	0.1763	0.0000	755.3459
Total	**0.4210**	**3.5157**	**3.9374**	**8.6600e-003**		**0.1597**	**0.1597**		**0.1516**	**0.1516**	**0.0000**	**750.9387**	**750.9387**	**0.1763**	**0.0000**	**755.3459**

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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0155	0.5656	0.1350	2.0400e-003	0.0468	5.3000e-004	0.0473	0.0135	5.0000e-004	0.0140	0.0000	193.4829	193.4829	6.5600e-003	0.0000	193.6468
Worker	0.0666	0.0507	0.5772	1.4900e-003	0.1591	1.2600e-003	0.1604	0.0423	1.1600e-003	0.0434	0.0000	134.1528	134.1528	4.0800e-003	0.0000	134.2549
Total	**0.0820**	**0.6163**	**0.7122**	**3.5300e-003**	**0.2059**	**1.7900e-003**	**0.2077**	**0.0558**	**1.6600e-003**	**0.0574**	**0.0000**	**327.6358**	**327.6358**	**0.0106**	**0.0000**	**327.9018**

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	tons/yr										MT/yr					
Off-Road	0.4035	3.3108	3.9461	8.7300e-003		0.1426	0.1426		0.1353	0.1353	0.0000	756.8842	756.8842	0.1770	0.0000	761.3094
Total	**0.4035**	**3.3108**	**3.9461**	**8.7300e-003**		**0.1426**	**0.1426**		**0.1353**	**0.1353**	**0.0000**	**756.8842**	**756.8842**	**0.1770**	**0.0000**	**761.3094**

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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0149	0.5619	0.1272	2.0300e-003	0.0471	5.2000e-004	0.0476	0.0136	5.0000e-004	0.0141	0.0000	192.6633	192.6633	6.5200e-003	0.0000	192.8263
Worker	0.0631	0.0465	0.5271	1.4400e-003	0.1604	1.2300e-003	0.1616	0.0426	1.1300e-003	0.0437	0.0000	130.1776	130.1776	3.7000e-003	0.0000	130.2702
Total	**0.0779**	**0.6084**	**0.6543**	**3.4700e-003**	**0.2075**	**1.7500e-003**	**0.2092**	**0.0562**	**1.6300e-003**	**0.0578**	**0.0000**	**322.8409**	**322.8409**	**0.0102**	**0.0000**	**323.0965**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4035	3.3108	3.9461	8.7300e-003		0.1426	0.1426		0.1353	0.1353	0.0000	756.8833	756.8833	0.1770	0.0000	761.3084
Total	**0.4035**	**3.3108**	**3.9461**	**8.7300e-003**		**0.1426**	**0.1426**		**0.1353**	**0.1353**	**0.0000**	**756.8833**	**756.8833**	**0.1770**	**0.0000**	**761.3084**

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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0149	0.5619	0.1272	2.0300e-003	0.0471	5.2000e-004	0.0476	0.0136	5.0000e-004	0.0141	0.0000	192.6633	192.6633	6.5200e-003	0.0000	192.8263
Worker	0.0631	0.0465	0.5271	1.4400e-003	0.1604	1.2300e-003	0.1616	0.0426	1.1300e-003	0.0437	0.0000	130.1776	130.1776	3.7000e-003	0.0000	130.2702
Total	**0.0779**	**0.6084**	**0.6543**	**3.4700e-003**	**0.2075**	**1.7500e-003**	**0.2092**	**0.0562**	**1.6300e-003**	**0.0578**	**0.0000**	**322.8409**	**322.8409**	**0.0102**	**0.0000**	**323.0965**

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	tons/yr										MT/yr					
Off-Road	0.2579	2.0531	2.6613	5.9300e-003		0.0832	0.0832		0.0789	0.0789	0.0000	514.1724	514.1724	0.1196	0.0000	517.1622
Total	**0.2579**	**2.0531**	**2.6613**	**5.9300e-003**		**0.0832**	**0.0832**		**0.0789**	**0.0789**	**0.0000**	**514.1724**	**514.1724**	**0.1196**	**0.0000**	**517.1622**

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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.9000e-003	0.3787	0.0836	1.3700e-003	0.0320	3.5000e-004	0.0324	9.2400e-003	3.3000e-004	9.5700e-003	0.0000	130.1914	130.1914	4.3700e-003	0.0000	130.3007
Worker	0.0406	0.0289	0.3325	9.4000e-004	0.1090	8.2000e-004	0.1098	0.0289	7.5000e-004	0.0297	0.0000	85.0189	85.0189	2.3000e-003	0.0000	85.0765
Total	**0.0505**	**0.4076**	**0.4161**	**2.3100e-003**	**0.1410**	**1.1700e-003**	**0.1421**	**0.0382**	**1.0800e-003**	**0.0393**	**0.0000**	**215.2104**	**215.2104**	**6.6700e-003**	**0.0000**	**215.3773**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2579	2.0531	2.6613	5.9300e-003		0.0832	0.0832		0.0789	0.0789	0.0000	514.1718	514.1718	0.1196	0.0000	517.1616
Total	**0.2579**	**2.0531**	**2.6613**	**5.9300e-003**		**0.0832**	**0.0832**		**0.0789**	**0.0789**	**0.0000**	**514.1718**	**514.1718**	**0.1196**	**0.0000**	**517.1616**

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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.9000e-003	0.3787	0.0836	1.3700e-003	0.0320	3.5000e-004	0.0324	9.2400e-003	3.3000e-004	9.5700e-003	0.0000	130.1914	130.1914	4.3700e-003	0.0000	130.3007
Worker	0.0406	0.0289	0.3325	9.4000e-004	0.1090	8.2000e-004	0.1098	0.0289	7.5000e-004	0.0297	0.0000	85.0189	85.0189	2.3000e-003	0.0000	85.0765
Total	**0.0505**	**0.4076**	**0.4161**	**2.3100e-003**	**0.1410**	**1.1700e-003**	**0.1421**	**0.0382**	**1.0800e-003**	**0.0393**	**0.0000**	**215.2104**	**215.2104**	**6.6700e-003**	**0.0000**	**215.3773**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0343	0.3218	0.5467	8.5000e-004		0.0157	0.0157		0.0144	0.0144	0.0000	75.0722	75.0722	0.0243	0.0000	75.6792
Paving	6.6800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0410**	**0.3218**	**0.5467**	**8.5000e-004**		**0.0157**	**0.0157**		**0.0144**	**0.0144**	**0.0000**	**75.0722**	**75.0722**	**0.0243**	**0.0000**	**75.6792**

3.6 Paving - 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6900e-003	1.2000e-003	0.0138	4.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.5351	3.5351	1.0000e-004	0.0000	3.5375
Total	**1.6900e-003**	**1.2000e-003**	**0.0138**	**4.0000e-005**	**4.5300e-003**	**3.0000e-005**	**4.5600e-003**	**1.2000e-003**	**3.0000e-005**	**1.2300e-003**	**0.0000**	**3.5351**	**3.5351**	**1.0000e-004**	**0.0000**	**3.5375**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0343	0.3218	0.5467	8.5000e-004		0.0157	0.0157		0.0144	0.0144	0.0000	75.0721	75.0721	0.0243	0.0000	75.6791
Paving	6.6800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0410**	**0.3218**	**0.5467**	**8.5000e-004**		**0.0157**	**0.0157**		**0.0144**	**0.0144**	**0.0000**	**75.0721**	**75.0721**	**0.0243**	**0.0000**	**75.6791**

3.6 Paving - 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6900e-003	1.2000e-003	0.0138	4.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.5351	3.5351	1.0000e-004	0.0000	3.5375
Total	**1.6900e-003**	**1.2000e-003**	**0.0138**	**4.0000e-005**	**4.5300e-003**	**3.0000e-005**	**4.5600e-003**	**1.2000e-003**	**3.0000e-005**	**1.2300e-003**	**0.0000**	**3.5351**	**3.5351**	**1.0000e-004**	**0.0000**	**3.5375**

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	tons/yr										MT/yr					
Archit. Coating	2.6016					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4100e-003	0.0430	0.0678	1.1000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	9.5747	9.5747	5.2000e-004	0.0000	9.5878
Total	**2.6080**	**0.0430**	**0.0678**	**1.1000e-004**		**1.9300e-003**	**1.9300e-003**		**1.9300e-003**	**1.9300e-003**	**0.0000**	**9.5747**	**9.5747**	**5.2000e-004**	**0.0000**	**9.5878**

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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3700e-003	2.4100e-003	0.0277	8.0000e-005	9.0600e-003	7.0000e-005	9.1300e-003	2.4100e-003	6.0000e-005	2.4700e-003	0.0000	7.0703	7.0703	1.9000e-004	0.0000	7.0750
Total	**3.3700e-003**	**2.4100e-003**	**0.0277**	**8.0000e-005**	**9.0600e-003**	**7.0000e-005**	**9.1300e-003**	**2.4100e-003**	**6.0000e-005**	**2.4700e-003**	**0.0000**	**7.0703**	**7.0703**	**1.9000e-004**	**0.0000**	**7.0750**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.6016					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4100e-003	0.0430	0.0678	1.1000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	9.5747	9.5747	5.2000e-004	0.0000	9.5878
Total	**2.6080**	**0.0430**	**0.0678**	**1.1000e-004**		**1.9300e-003**	**1.9300e-003**		**1.9300e-003**	**1.9300e-003**	**0.0000**	**9.5747**	**9.5747**	**5.2000e-004**	**0.0000**	**9.5878**

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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3700e-003	2.4100e-003	0.0277	8.0000e-005	9.0600e-003	7.0000e-005	9.1300e-003	2.4100e-003	6.0000e-005	2.4700e-003	0.0000	7.0703	7.0703	1.9000e-004	0.0000	7.0750
Total	**3.3700e-003**	**2.4100e-003**	**0.0277**	**8.0000e-005**	**9.0600e-003**	**7.0000e-005**	**9.1300e-003**	**2.4100e-003**	**6.0000e-005**	**2.4700e-003**	**0.0000**	**7.0703**	**7.0703**	**1.9000e-004**	**0.0000**	**7.0750**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4186	2.1370	5.0166	0.0191	1.6613	0.0136	1.6749	0.4454	0.0127	0.4580	0.0000	1,757.8527	1,757.8527	0.0668	0.0000	1,759.5235
Unmitigated	0.4186	2.1370	5.0166	0.0191	1.6613	0.0136	1.6749	0.4454	0.0127	0.4580	0.0000	1,757.8527	1,757.8527	0.0668	0.0000	1,759.5235

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,551.76	1,615.33	1405.06	4,373,456	4,373,456
Total	1,551.76	1,615.33	1,405.06	4,373,456	4,373,456

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
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.634670	0.034757	0.148672	0.092896	0.013276	0.004503	0.019040	0.038634	0.002318	0.001886	0.006862	0.001512	0.000973
Single Family Housing	0.634670	0.034757	0.148672	0.092896	0.013276	0.004503	0.019040	0.038634	0.002318	0.001886	0.006862	0.001512	0.000973

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0242	0.2064	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.9823	238.9823	4.5800e-003	4.3800e-003	240.4024
NaturalGas Unmitigated	0.0242	0.2064	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.9823	238.9823	4.5800e-003	4.3800e-003	240.4024

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	4.47836e+006	0.0242	0.2064	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.9823	238.9823	4.5800e-003	4.3800e-003	240.4024
Total		**0.0242**	**0.2064**	**0.0878**	**1.3200e-003**		**0.0167**	**0.0167**		**0.0167**	**0.0167**	**0.0000**	**238.9823**	**238.9823**	**4.5800e-003**	**4.3800e-003**	**240.4024**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	4.47836e+006	0.0242	0.2064	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.9823	238.9823	4.5800e-003	4.3800e-003	240.4024
Total		**0.0242**	**0.2064**	**0.0878**	**1.3200e-003**		**0.0167**	**0.0167**		**0.0167**	**0.0167**	**0.0000**	**238.9823**	**238.9823**	**4.5800e-003**	**4.3800e-003**	**240.4024**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.33795e +006	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.33795e +006	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4638	0.0749	1.2351	4.5000e-004		0.0116	0.0116		0.0116	0.0116	0.0000	72.5899	72.5899	3.2500e-003	1.2900e-003	73.0568
Unmitigated	1.4638	0.0749	1.2351	4.5000e-004		0.0116	0.0116		0.0116	0.0116	0.0000	72.5899	72.5899	3.2500e-003	1.2900e-003	73.0568

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2602					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1602					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.1400e-003	0.0610	0.0260	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	70.6128	70.6128	1.3500e-003	1.2900e-003	71.0324
Landscaping	0.0363	0.0139	1.2092	6.0000e-005		6.7100e-003	6.7100e-003		6.7100e-003	6.7100e-003	0.0000	1.9771	1.9771	1.8900e-003	0.0000	2.0244
Total	**1.4638**	**0.0749**	**1.2351**	**4.5000e-004**		**0.0116**	**0.0116**		**0.0116**	**0.0116**	**0.0000**	**72.5899**	**72.5899**	**3.2400e-003**	**1.2900e-003**	**73.0568**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2602					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1602					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.1400e-003	0.0610	0.0260	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	70.6128	70.6128	1.3500e-003	1.2900e-003	71.0324
Landscaping	0.0363	0.0139	1.2092	6.0000e-005		6.7100e-003	6.7100e-003		6.7100e-003	6.7100e-003	0.0000	1.9771	1.9771	1.8900e-003	0.0000	2.0244
Total	**1.4638**	**0.0749**	**1.2351**	**4.5000e-004**		**0.0116**	**0.0116**		**0.0116**	**0.0116**	**0.0000**	**72.5899**	**72.5899**	**3.2400e-003**	**1.2900e-003**	**73.0568**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.3693	0.3461	8.1700e-003	14.4557
Unmitigated	3.3693	0.3461	8.1700e-003	14.4557

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	10.6201 / 6.69528	3.3693	0.3461	8.1700e-003	14.4557
Total		**3.3693**	**0.3461**	**8.1700e-003**	**14.4557**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	10.6201 / 6.69528	3.3693	0.3461	8.1700e-003	14.4557
Total		**3.3693**	**0.3461**	**8.1700e-003**	**14.4557**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	38.7835	2.2920	0.0000	96.0844
Unmitigated	38.7835	2.2920	0.0000	96.0844

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	191.06	38.7835	2.2920	0.0000	96.0844
Total		**38.7835**	**2.2920**	**0.0000**	**96.0844**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	191.06	38.7835	2.2920	0.0000	96.0844
Total		**38.7835**	**2.2920**	**0.0000**	**96.0844**

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

West Avenue I

Antelope Valley APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	163.00	Dwelling Unit	52.92	293,400.00	466
Other Asphalt Surfaces	5.10	Acre	5.10	222,156.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2025
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

West Avenue I - Antelope Valley APCD Air District, Summer

Project Characteristics -

Land Use - 163 SF, 5.1 acres of parking

Construction Phase - no demo or site prep, 3 years of construction

Off-road Equipment - water truck

Off-road Equipment - water truck and concrete pump

Off-road Equipment -

Off-road Equipment -

Architectural Coating - 100 g/L

Grading - grading- 55,00 cy import/55,000 cy export (balanced on-site)

Construction Off-road Equipment Mitigation -

Woodstoves - no woodstoves, no wood fireplace

Area Coating - 100 g/L

Off-road Equipment -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstructionPhase	NumDays	1,110.00	750.00
tblConstructionPhase	NumDays	70.00	0.00
tblConstructionPhase	NumDays	110.00	80.00
tblConstructionPhase	NumDays	40.00	0.00
tblConstructionPhase	PhaseEndDate	1/4/2027	10/17/2025
tblConstructionPhase	PhaseEndDate	6/8/2026	9/5/2025
tblConstructionPhase	PhaseEndDate	8/9/2021	5/3/2021
tblConstructionPhase	PhaseEndDate	3/7/2022	10/21/2022
tblConstructionPhase	PhaseEndDate	9/21/2026	10/17/2025

tblConstructionPhase	PhaseEndDate	10/4/2021	8/9/2021
tblConstructionPhase	PhaseStartDate	9/22/2026	7/7/2025
tblConstructionPhase	PhaseStartDate	3/8/2022	10/24/2022
tblConstructionPhase	PhaseStartDate	10/5/2021	7/4/2022
tblConstructionPhase	PhaseStartDate	6/9/2026	7/7/2025
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberWood	57.05	0.00
tblGrading	AcresOfGrading	200.00	275.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblWoodstoves	NumberCatalytic	8.15	0.00
tblWoodstoves	NumberNoncatalytic	8.15	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	3.5980	0.0000	0.0000	3.3241	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	4.7897	46.9540	37.2620	0.0960	9.8729	1.9292	11.8021	3.7583	1.7748	5.5332	0.0000	9,374.7077	9,374.7077	2.7806	0.0000	9,415.0555
2023	3.9569	31.7176	36.4430	0.0951	1.6142	1.2418	2.8561	0.4365	1.1789	1.6153	0.0000	9,287.3803	9,287.3803	1.5865	0.0000	9,327.0423
2024	3.7566	29.8579	35.7251	0.0945	1.6143	1.1015	2.7157	0.4365	1.0449	1.4814	0.0000	9,222.6066	9,222.6066	1.5765	0.0000	9,262.0185
2025	74.3395	37.4070	52.8236	0.1231	1.9839	1.4205	3.4044	0.5345	1.3382	1.8727	0.0000	11,997.4320	11,997.4320	2.3031	0.0000	12,055.0096
Maximum	**74.3395**	**46.9540**	**52.8236**	**0.1231**	**9.8729**	**3.5980**	**11.8021**	**3.7583**	**3.3241**	**5.5332**	**0.0000**	**11,997.4320**	**11,997.4320**	**2.7806**	**0.0000**	**12,055.0096**

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	0.0000	0.0000	0.0000	0.0000	0.0000	3.5980	0.0000	0.0000	3.3241	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	4.7897	46.9540	37.2620	0.0960	4.5558	1.9292	6.4849	1.7212	1.7748	3.4960	0.0000	9,374.7077	9,374.7077	2.7806	0.0000	9,415.0555
2023	3.9569	31.7176	36.4430	0.0951	1.6142	1.2418	2.8561	0.4365	1.1789	1.6153	0.0000	9,287.3803	9,287.3803	1.5865	0.0000	9,327.0423
2024	3.7566	29.8579	35.7251	0.0945	1.6143	1.1015	2.7157	0.4365	1.0449	1.4814	0.0000	9,222.6066	9,222.6066	1.5765	0.0000	9,262.0185
2025	74.3395	37.4070	52.8236	0.1231	1.9839	1.4205	3.4044	0.5345	1.3382	1.8727	0.0000	11,997.4320	11,997.4320	2.3031	0.0000	12,055.0096
Maximum	**74.3395**	**46.9540**	**52.8236**	**0.1231**	**4.5558**	**3.5980**	**6.4849**	**1.7212**	**3.3241**	**3.4960**	**0.0000**	**11,997.4320**	**11,997.4320**	**2.7806**	**0.0000**	**12,055.0096**

	ROG	NOx	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**	**35.25**	**0.00**	**25.59**	**39.44**	**0.00**	**19.40**	**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	8.3604	1.6419	14.0683	0.0102		0.1948	0.1948		0.1948	0.1948	0.0000	1,922.6857	1,922.6857	0.0596	0.0348	1,934.5472
Energy	0.1323	1.1307	0.4812	7.2200e-003		0.0914	0.0914		0.0914	0.0914		1,443.4676	1,443.4676	0.0277	0.0265	1,452.0454
Mobile	3.0030	11.9901	32.1627	0.1181	9.7633	0.0786	9.8419	2.6131	0.0731	2.6862		11,976.5212	11,976.5212	0.4338		11,987.3657
Total	**11.4958**	**14.7627**	**46.7122**	**0.1355**	**9.7633**	**0.3648**	**10.1281**	**2.6131**	**0.3593**	**2.9724**	**0.0000**	**15,342.6745**	**15,342.6745**	**0.5210**	**0.0613**	**15,373.9583**

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	8.3604	1.6419	14.0683	0.0102		0.1948	0.1948		0.1948	0.1948	0.0000	1,922.6857	1,922.6857	0.0596	0.0348	1,934.5472
Energy	0.1323	1.1307	0.4812	7.2200e-003		0.0914	0.0914		0.0914	0.0914		1,443.4676	1,443.4676	0.0277	0.0265	1,452.0454
Mobile	3.0030	11.9901	32.1627	0.1181	9.7633	0.0786	9.8419	2.6131	0.0731	2.6862		11,976.5212	11,976.5212	0.4338		11,987.3657
Total	**11.4958**	**14.7627**	**46.7122**	**0.1355**	**9.7633**	**0.3648**	**10.1281**	**2.6131**	**0.3593**	**2.9724**	**0.0000**	**15,342.6745**	**15,342.6745**	**0.5210**	**0.0613**	**15,373.9583**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/4/2021	5/3/2021	5	0	
2	Site Preparation	Site Preparation	8/10/2021	8/9/2021	5	0	
3	Grading	Grading	7/4/2022	10/21/2022	5	80	
4	Building Construction	Building Construction	10/24/2022	9/5/2025	5	750	
5	Paving	Paving	7/7/2025	10/17/2025	5	75	
6	Architectural Coating	Architectural Coating	7/7/2025	10/17/2025	5	75	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 5.1

Residential Indoor: 594,135; Residential Outdoor: 198,045; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,329 (Architectural Coating – sqft)

OffRoad Equipment

West Avenue I - Antelope Valley APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
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
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45
Grading	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Grading	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Off-Highway Trucks	1	8.00	402	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	152.00	54.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 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					
Fugitive Dust					9.6676	0.0000	9.6676	3.7039	0.0000	3.7039			0.0000			0.0000
Off-Road	4.6843	46.8910	35.7758	0.0886		1.9275	1.9275		1.7733	1.7733		8,575.7761	8,575.7761	2.7736		8,645.1156
Total	**4.6843**	**46.8910**	**35.7758**	**0.0886**	**9.6676**	**1.9275**	**11.5951**	**3.7039**	**1.7733**	**5.4772**		**8,575.7761**	**8,575.7761**	**2.7736**		**8,645.1156**

3.4 Grading - 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	0.0000	0.0000	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	0.1054	0.0630	0.9238	2.1500e-003	0.2054	1.6400e-003	0.2070	0.0545	1.5100e-003	0.0560		213.5314	213.5314	7.0100e-003		213.7068
Total	**0.1054**	**0.0630**	**0.9238**	**2.1500e-003**	**0.2054**	**1.6400e-003**	**0.2070**	**0.0545**	**1.5100e-003**	**0.0560**		**213.5314**	**213.5314**	**7.0100e-003**		**213.7068**

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					4.3504	0.0000	4.3504	1.6667	0.0000	1.6667			0.0000			0.0000
Off-Road	4.6843	46.8910	35.7758	0.0886		1.9275	1.9275		1.7733	1.7733	0.0000	8,575.7761	8,575.7761	2.7736		8,645.1155
Total	**4.6843**	**46.8910**	**35.7758**	**0.0886**	**4.3504**	**1.9275**	**6.2779**	**1.6667**	**1.7733**	**3.4401**	**0.0000**	**8,575.7761**	**8,575.7761**	**2.7736**		**8,645.1155**

3.4 Grading - 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	0.0000	0.0000	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	0.1054	0.0630	0.9238	2.1500e-003	0.2054	1.6400e-003	0.2070	0.0545	1.5100e-003	0.0560		213.5314	213.5314	7.0100e-003		213.7068
Total	**0.1054**	**0.0630**	**0.9238**	**2.1500e-003**	**0.2054**	**1.6400e-003**	**0.2070**	**0.0545**	**1.5100e-003**	**0.0560**		**213.5314**	**213.5314**	**7.0100e-003**		**213.7068**

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	3.4695	29.6008	30.5614	0.0666		1.4130	1.4130		1.3417	1.3417		6,364.7682	6,364.7682	1.5049		6,402.3907
Total	**3.4695**	**29.6008**	**30.5614**	**0.0666**		**1.4130**	**1.4130**		**1.3417**	**1.3417**		**6,364.7682**	**6,364.7682**	**1.5049**		**6,402.3907**

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	0.1483	5.4079	1.0842	0.0163	0.3656	7.5400e-003	0.3731	0.1053	7.2100e-003	0.1125		1,711.6684	1,711.6684	0.0664		1,713.3277
Worker	0.6409	0.3830	5.6164	0.0131	1.2486	9.9900e-003	1.2586	0.3312	9.2000e-003	0.3404		1,298.2711	1,298.2711	0.0426		1,299.3371
Total	**0.7892**	**5.7909**	**6.7007**	**0.0294**	**1.6142**	**0.0175**	**1.6318**	**0.4365**	**0.0164**	**0.4529**		**3,009.9395**	**3,009.9395**	**0.1090**		**3,012.6648**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4695	29.6008	30.5614	0.0666		1.4130	1.4130		1.3417	1.3417	0.0000	6,364.7682	6,364.7682	1.5049		6,402.3907
Total	**3.4695**	**29.6008**	**30.5614**	**0.0666**		**1.4130**	**1.4130**		**1.3417**	**1.3417**	**0.0000**	**6,364.7682**	**6,364.7682**	**1.5049**		**6,402.3907**

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	0.1483	5.4079	1.0842	0.0163	0.3656	7.5400e-003	0.3731	0.1053	7.2100e-003	0.1125		1,711.6684	1,711.6684	0.0664		1,713.3277
Worker	0.6409	0.3830	5.6164	0.0131	1.2486	9.9900e-003	1.2586	0.3312	9.2000e-003	0.3404		1,298.2711	1,298.2711	0.0426		1,299.3371
Total	**0.7892**	**5.7909**	**6.7007**	**0.0294**	**1.6142**	**0.0175**	**1.6318**	**0.4365**	**0.0164**	**0.4529**		**3,009.9395**	**3,009.9395**	**0.1090**		**3,012.6648**

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	3.2386	27.0442	30.2880	0.0666		1.2281	1.2281		1.1661	1.1661		6,367.4555	6,367.4555	1.4948		6,404.8257
Total	**3.2386**	**27.0442**	**30.2880**	**0.0666**		**1.2281**	**1.2281**		**1.1661**	**1.1661**		**6,367.4555**	**6,367.4555**	**1.4948**		**6,404.8257**

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	0.1162	4.3253	0.9650	0.0159	0.3656	4.0000e-003	0.3696	0.1053	3.8300e-003	0.1091		1,668.8514	1,668.8514	0.0530		1,670.1756
Worker	0.6022	0.3481	5.1900	0.0126	1.2486	9.7200e-003	1.2584	0.3312	8.9500e-003	0.3402		1,251.0734	1,251.0734	0.0387		1,252.0410
Total	**0.7183**	**4.6734**	**6.1550**	**0.0285**	**1.6142**	**0.0137**	**1.6280**	**0.4365**	**0.0128**	**0.4492**		**2,919.9248**	**2,919.9248**	**0.0917**		**2,922.2166**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2386	27.0442	30.2880	0.0666		1.2281	1.2281		1.1661	1.1661	0.0000	6,367.4555	6,367.4555	1.4948		6,404.8257
Total	**3.2386**	**27.0442**	**30.2880**	**0.0666**		**1.2281**	**1.2281**		**1.1661**	**1.1661**	**0.0000**	**6,367.4555**	**6,367.4555**	**1.4948**		**6,404.8257**

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	0.1162	4.3253	0.9650	0.0159	0.3656	4.0000e-003	0.3696	0.1053	3.8300e-003	0.1091		1,668.8514	1,668.8514	0.0530		1,670.1756
Worker	0.6022	0.3481	5.1900	0.0126	1.2486	9.7200e-003	1.2584	0.3312	8.9500e-003	0.3402		1,251.0734	1,251.0734	0.0387		1,252.0410
Total	**0.7183**	**4.6734**	**6.1550**	**0.0285**	**1.6142**	**0.0137**	**1.6280**	**0.4365**	**0.0128**	**0.4492**		**2,919.9248**	**2,919.9248**	**0.0917**		**2,922.2166**

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	3.0798	25.2732	30.1231	0.0666		1.0882	1.0882		1.0325	1.0325		6,368.8707	6,368.8707	1.4894		6,406.1061
Total	**3.0798**	**25.2732**	**30.1231**	**0.0666**		**1.0882**	**1.0882**		**1.0325**	**1.0325**		**6,368.8707**	**6,368.8707**	**1.4894**		**6,406.1061**

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	0.1108	4.2681	0.8999	0.0157	0.3656	3.9100e-003	0.3695	0.1053	3.7400e-003	0.1090		1,649.2167	1,649.2167	0.0522		1,650.5228
Worker	0.5660	0.3166	4.7021	0.0121	1.2486	9.4000e-003	1.2581	0.3312	8.6600e-003	0.3399		1,204.5193	1,204.5193	0.0348		1,205.3896
Total	**0.6767**	**4.5847**	**5.6019**	**0.0278**	**1.6143**	**0.0133**	**1.6276**	**0.4365**	**0.0124**	**0.4489**		**2,853.7360**	**2,853.7360**	**0.0871**		**2,855.9124**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.0798	25.2732	30.1231	0.0666		1.0882	1.0882		1.0325	1.0325	0.0000	6,368.8706	6,368.8706	1.4894		6,406.1061
Total	**3.0798**	**25.2732**	**30.1231**	**0.0666**		**1.0882**	**1.0882**		**1.0325**	**1.0325**	**0.0000**	**6,368.8706**	**6,368.8706**	**1.4894**		**6,406.1061**

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	0.1108	4.2681	0.8999	0.0157	0.3656	3.9100e-003	0.3695	0.1053	3.7400e-003	0.1090		1,649.2167	1,649.2167	0.0522		1,650.5228
Worker	0.5660	0.3166	4.7021	0.0121	1.2486	9.4000e-003	1.2581	0.3312	8.6600e-003	0.3399		1,204.5193	1,204.5193	0.0348		1,205.3896
Total	**0.6767**	**4.5847**	**5.6019**	**0.0278**	**1.6143**	**0.0133**	**1.6276**	**0.4365**	**0.0124**	**0.4489**		**2,853.7360**	**2,853.7360**	**0.0871**		**2,855.9124**

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	2.8972	23.0685	29.9024	0.0666		0.9347	0.9347		0.8869	0.8869		6,368.2927	6,368.2927	1.4812		6,405.3226
Total	**2.8972**	**23.0685**	**29.9024**	**0.0666**		**0.9347**	**0.9347**		**0.8869**	**0.8869**		**6,368.2927**	**6,368.2927**	**1.4812**		**6,405.3226**

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	0.1085	4.2353	0.8697	0.0157	0.3656	3.8700e-003	0.3695	0.1053	3.7000e-003	0.1090		1,640.2984	1,640.2984	0.0515		1,641.5870
Worker	0.5361	0.2902	4.3705	0.0116	1.2486	9.2100e-003	1.2579	0.3312	8.4800e-003	0.3397		1,157.8601	1,157.8601	0.0319		1,158.6569
Total	**0.6446**	**4.5255**	**5.2402**	**0.0273**	**1.6143**	**0.0131**	**1.6274**	**0.4365**	**0.0122**	**0.4486**		**2,798.1585**	**2,798.1585**	**0.0834**		**2,800.2439**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.8972	23.0685	29.9024	0.0666		0.9347	0.9347		0.8869	0.8869	0.0000	6,368.2927	6,368.2927	1.4812		6,405.3226
Total	**2.8972**	**23.0685**	**29.9024**	**0.0666**		**0.9347**	**0.9347**		**0.8869**	**0.8869**	**0.0000**	**6,368.2927**	**6,368.2927**	**1.4812**		**6,405.3226**

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	0.1085	4.2353	0.8697	0.0157	0.3656	3.8700e-003	0.3695	0.1053	3.7000e-003	0.1090		1,640.2984	1,640.2984	0.0515		1,641.5870
Worker	0.5361	0.2902	4.3705	0.0116	1.2486	9.2100e-003	1.2579	0.3312	8.4800e-003	0.3397		1,157.8601	1,157.8601	0.0319		1,158.6569
Total	**0.6446**	**4.5255**	**5.2402**	**0.0273**	**1.6143**	**0.0131**	**1.6274**	**0.4365**	**0.0122**	**0.4486**		**2,798.1585**	**2,798.1585**	**0.0834**		**2,800.2439**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1782					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0933**	**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 - 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	0.0529	0.0286	0.4313	1.1500e-003	0.1232	9.1000e-004	0.1241	0.0327	8.4000e-004	0.0335		114.2625	114.2625	3.1500e-003		114.3411
Total	**0.0529**	**0.0286**	**0.4313**	**1.1500e-003**	**0.1232**	**9.1000e-004**	**0.1241**	**0.0327**	**8.4000e-004**	**0.0335**		**114.2625**	**114.2625**	**3.1500e-003**		**114.3411**

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	0.1782					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0933**	**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 - 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	0.0529	0.0286	0.4313	1.1500e-003	0.1232	9.1000e-004	0.1241	0.0327	8.4000e-004	0.0335		114.2625	114.2625	3.1500e-003		114.3411
Total	**0.0529**	**0.0286**	**0.4313**	**1.1500e-003**	**0.1232**	**9.1000e-004**	**0.1241**	**0.0327**	**8.4000e-004**	**0.0335**		**114.2625**	**114.2625**	**3.1500e-003**		**114.3411**

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	69.3748					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	**69.5457**	**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	0.1058	0.0573	0.8626	2.2900e-003	0.2464	1.8200e-003	0.2483	0.0654	1.6700e-003	0.0670		228.5250	228.5250	6.2900e-003		228.6823
Total	**0.1058**	**0.0573**	**0.8626**	**2.2900e-003**	**0.2464**	**1.8200e-003**	**0.2483**	**0.0654**	**1.6700e-003**	**0.0670**		**228.5250**	**228.5250**	**6.2900e-003**		**228.6823**

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	69.3748					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	**69.5457**	**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	0.1058	0.0573	0.8626	2.2900e-003	0.2464	1.8200e-003	0.2483	0.0654	1.6700e-003	0.0670		228.5250	228.5250	6.2900e-003		228.6823
Total	**0.1058**	**0.0573**	**0.8626**	**2.2900e-003**	**0.2464**	**1.8200e-003**	**0.2483**	**0.0654**	**1.6700e-003**	**0.0670**		**228.5250**	**228.5250**	**6.2900e-003**		**228.6823**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.0030	11.9901	32.1627	0.1181	9.7633	0.0786	9.8419	2.6131	0.0731	2.6862		11,976.5212	11,976.5212	0.4338		11,987.3657
Unmitigated	3.0030	11.9901	32.1627	0.1181	9.7633	0.0786	9.8419	2.6131	0.0731	2.6862		11,976.5212	11,976.5212	0.4338		11,987.3657

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,551.76	1,615.33	1405.06	4,373,456	4,373,456
Total	1,551.76	1,615.33	1,405.06	4,373,456	4,373,456

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
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.634670	0.034757	0.148672	0.092896	0.013276	0.004503	0.019040	0.038634	0.002318	0.001886	0.006862	0.001512	0.000973
Single Family Housing	0.634670	0.034757	0.148672	0.092896	0.013276	0.004503	0.019040	0.038634	0.002318	0.001886	0.006862	0.001512	0.000973

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	0.1323	1.1307	0.4812	7.2200e-003		0.0914	0.0914		0.0914	0.0914		1,443.4676	1,443.4676	0.0277	0.0265	1,452.0454
NaturalGas Unmitigated	0.1323	1.1307	0.4812	7.2200e-003		0.0914	0.0914		0.0914	0.0914		1,443.4676	1,443.4676	0.0277	0.0265	1,452.0454

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	12269.5	0.1323	1.1307	0.4812	7.2200e-003		0.0914	0.0914		0.0914	0.0914		1,443.4676	1,443.4676	0.0277	0.0265	1,452.0454
Total		**0.1323**	**1.1307**	**0.4812**	**7.2200e-003**		**0.0914**	**0.0914**		**0.0914**	**0.0914**		**1,443.4676**	**1,443.4676**	**0.0277**	**0.0265**	**1,452.0454**

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	12.2695	0.1323	1.1307	0.4812	7.2200e-003		0.0914	0.0914		0.0914	0.0914		1,443.4676	1,443.4676	0.0277	0.0265	1,452.0454
Total		**0.1323**	**1.1307**	**0.4812**	**7.2200e-003**		**0.0914**	**0.0914**		**0.0914**	**0.0914**		**1,443.4676**	**1,443.4676**	**0.0277**	**0.0265**	**1,452.0454**

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	8.3604	1.6419	14.0683	0.0102		0.1948	0.1948		0.1948	0.1948	0.0000	1,922.6857	1,922.6857	0.0596	0.0348	1,934.5472
Unmitigated	8.3604	1.6419	14.0683	0.0102		0.1948	0.1948		0.1948	0.1948	0.0000	1,922.6857	1,922.6857	0.0596	0.0348	1,934.5472

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	1.4255					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.3575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1740	1.4871	0.6328	9.4900e-003		0.1202	0.1202		0.1202	0.1202	0.0000	1,898.4706	1,898.4706	0.0364	0.0348	1,909.7523
Landscaping	0.4034	0.1548	13.4355	7.1000e-004		0.0746	0.0746		0.0746	0.0746		24.2151	24.2151	0.0232		24.7949
Total	**8.3604**	**1.6419**	**14.0683**	**0.0102**		**0.1948**	**0.1948**		**0.1948**	**0.1948**	**0.0000**	**1,922.6857**	**1,922.6857**	**0.0596**	**0.0348**	**1,934.5472**

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	1.4255					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.3575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1740	1.4871	0.6328	9.4900e-003		0.1202	0.1202		0.1202	0.1202	0.0000	1,898.4706	1,898.4706	0.0364	0.0348	1,909.7523
Landscaping	0.4034	0.1548	13.4355	7.1000e-004		0.0746	0.0746		0.0746	0.0746		24.2151	24.2151	0.0232		24.7949
Total	**8.3604**	**1.6419**	**14.0683**	**0.0102**		**0.1948**	**0.1948**		**0.1948**	**0.1948**	**0.0000**	**1,922.6857**	**1,922.6857**	**0.0596**	**0.0348**	**1,934.5472**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

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

West Avenue I

Antelope Valley APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	163.00	Dwelling Unit	52.92	293,400.00	466
Other Asphalt Surfaces	5.10	Acre	5.10	222,156.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2025
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 163 SF, 5.1 acres of parking

Construction Phase - no demo or site prep, 3 years of construction

Off-road Equipment - water truck

Off-road Equipment - water truck and concrete pump

Off-road Equipment -

Off-road Equipment -

Architectural Coating - 100 g/L

Grading - grading- 55,00 cy import/55,000 cy export (balanced on-site)

Construction Off-road Equipment Mitigation -

Woodstoves - no woodstoves, no wood fireplace

Area Coating - 100 g/L

Off-road Equipment -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstructionPhase	NumDays	1,110.00	750.00
tblConstructionPhase	NumDays	70.00	0.00
tblConstructionPhase	NumDays	110.00	80.00
tblConstructionPhase	NumDays	40.00	0.00
tblConstructionPhase	PhaseEndDate	1/4/2027	10/17/2025
tblConstructionPhase	PhaseEndDate	6/8/2026	9/5/2025
tblConstructionPhase	PhaseEndDate	8/9/2021	5/3/2021
tblConstructionPhase	PhaseEndDate	3/7/2022	10/21/2022
tblConstructionPhase	PhaseEndDate	9/21/2026	10/17/2025

tblConstructionPhase	PhaseEndDate	10/4/2021	8/9/2021
tblConstructionPhase	PhaseStartDate	9/22/2026	7/7/2025
tblConstructionPhase	PhaseStartDate	3/8/2022	10/24/2022
tblConstructionPhase	PhaseStartDate	10/5/2021	7/4/2022
tblConstructionPhase	PhaseStartDate	6/9/2026	7/7/2025
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberWood	57.05	0.00
tblGrading	AcresOfGrading	200.00	275.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblWoodstoves	NumberCatalytic	8.15	0.00
tblWoodstoves	NumberNoncatalytic	8.15	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	3.5980	0.0000	0.0000	3.3241	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	4.7823	46.9576	36.5166	0.0938	9.8729	1.9292	11.8021	3.7583	1.7748	5.5332	0.0000	9,151.6472	9,151.6472	2.7796	0.0000	9,192.0327
2023	3.9221	31.6884	35.5372	0.0930	1.6142	1.2419	2.8562	0.4365	1.1790	1.6154	0.0000	9,072.5766	9,072.5766	1.5869	0.0000	9,112.2477
2024	3.7255	29.8243	34.9170	0.0924	1.6143	1.1016	2.7158	0.4365	1.0450	1.4815	0.0000	9,014.0950	9,014.0950	1.5775	0.0000	9,053.5312
2025	74.3009	37.3757	51.8178	0.1207	1.9839	1.4206	3.4045	0.5345	1.3383	1.8728	0.0000	11,754.6774	11,754.6774	2.3032	0.0000	11,812.2574
Maximum	**74.3009**	**46.9576**	**51.8178**	**0.1207**	**9.8729**	**3.5980**	**11.8021**	**3.7583**	**3.3241**	**5.5332**	**0.0000**	**11,754.6774**	**11,754.6774**	**2.7796**	**0.0000**	**11,812.2574**

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	0.0000	0.0000	0.0000	0.0000	0.0000	3.5980	0.0000	0.0000	3.3241	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	4.7823	46.9576	36.5166	0.0938	4.5558	1.9292	6.4849	1.7212	1.7748	3.4960	0.0000	9,151.6472	9,151.6472	2.7796	0.0000	9,192.0327
2023	3.9221	31.6884	35.5372	0.0930	1.6142	1.2419	2.8562	0.4365	1.1790	1.6154	0.0000	9,072.5766	9,072.5766	1.5869	0.0000	9,112.2477
2024	3.7255	29.8243	34.9170	0.0924	1.6143	1.1016	2.7158	0.4365	1.0450	1.4815	0.0000	9,014.0950	9,014.0950	1.5775	0.0000	9,053.5312
2025	74.3009	37.3757	51.8178	0.1207	1.9839	1.4206	3.4045	0.5345	1.3383	1.8728	0.0000	11,754.6774	11,754.6774	2.3032	0.0000	11,812.2574
Maximum	**74.3009**	**46.9576**	**51.8178**	**0.1207**	**4.5558**	**3.5980**	**6.4849**	**1.7212**	**3.3241**	**3.4960**	**0.0000**	**11,754.6774**	**11,754.6774**	**2.7796**	**0.0000**	**11,812.2574**

	ROG	NOx	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**	**35.25**	**0.00**	**25.59**	**39.44**	**0.00**	**19.40**	**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	8.3604	1.6419	14.0683	0.0102		0.1948	0.1948		0.1948	0.1948	0.0000	1,922.6857	1,922.6857	0.0596	0.0348	1,934.5472
Energy	0.1323	1.1307	0.4812	7.2200e-003		0.0914	0.0914		0.0914	0.0914		1,443.4676	1,443.4676	0.0277	0.0265	1,452.0454
Mobile	2.4442	12.0352	27.4832	0.1071	9.7633	0.0789	9.8422	2.6131	0.0733	2.6864		10,874.6787	10,874.6787	0.4254		10,885.3132
Total	**10.9369**	**14.8078**	**42.0327**	**0.1245**	**9.7633**	**0.3651**	**10.1284**	**2.6131**	**0.3595**	**2.9726**	**0.0000**	**14,240.8320**	**14,240.8320**	**0.5126**	**0.0613**	**14,271.9057**

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	8.3604	1.6419	14.0683	0.0102		0.1948	0.1948		0.1948	0.1948	0.0000	1,922.6857	1,922.6857	0.0596	0.0348	1,934.5472
Energy	0.1323	1.1307	0.4812	7.2200e-003		0.0914	0.0914		0.0914	0.0914		1,443.4676	1,443.4676	0.0277	0.0265	1,452.0454
Mobile	2.4442	12.0352	27.4832	0.1071	9.7633	0.0789	9.8422	2.6131	0.0733	2.6864		10,874.6787	10,874.6787	0.4254		10,885.3132
Total	**10.9369**	**14.8078**	**42.0327**	**0.1245**	**9.7633**	**0.3651**	**10.1284**	**2.6131**	**0.3595**	**2.9726**	**0.0000**	**14,240.8320**	**14,240.8320**	**0.5126**	**0.0613**	**14,271.9057**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/4/2021	5/3/2021	5	0	
2	Site Preparation	Site Preparation	8/10/2021	8/9/2021	5	0	
3	Grading	Grading	7/4/2022	10/21/2022	5	80	
4	Building Construction	Building Construction	10/24/2022	9/5/2025	5	750	
5	Paving	Paving	7/7/2025	10/17/2025	5	75	
6	Architectural Coating	Architectural Coating	7/7/2025	10/17/2025	5	75	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 5.1

Residential Indoor: 594,135; Residential Outdoor: 198,045; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,329 (Architectural Coating – sqft)

OffRoad Equipment

West Avenue I - Antelope Valley APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
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
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45
Grading	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Grading	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Off-Highway Trucks	1	8.00	402	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	152.00	54.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 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					
Fugitive Dust					9.6676	0.0000	9.6676	3.7039	0.0000	3.7039			0.0000			0.0000
Off-Road	4.6843	46.8910	35.7758	0.0886		1.9275	1.9275		1.7733	1.7733		8,575.7761	8,575.7761	2.7736		8,645.1156
Total	**4.6843**	**46.8910**	**35.7758**	**0.0886**	**9.6676**	**1.9275**	**11.5951**	**3.7039**	**1.7733**	**5.4772**		**8,575.7761**	**8,575.7761**	**2.7736**		**8,645.1156**

3.4 Grading - 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	0.0000	0.0000	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	0.0980	0.0666	0.7408	1.8900e-003	0.2054	1.6400e-003	0.2070	0.0545	1.5100e-003	0.0560		188.3411	188.3411	6.0600e-003		188.4927
Total	**0.0980**	**0.0666**	**0.7408**	**1.8900e-003**	**0.2054**	**1.6400e-003**	**0.2070**	**0.0545**	**1.5100e-003**	**0.0560**		**188.3411**	**188.3411**	**6.0600e-003**		**188.4927**

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					4.3504	0.0000	4.3504	1.6667	0.0000	1.6667			0.0000			0.0000
Off-Road	4.6843	46.8910	35.7758	0.0886		1.9275	1.9275		1.7733	1.7733	0.0000	8,575.7761	8,575.7761	2.7736		8,645.1155
Total	**4.6843**	**46.8910**	**35.7758**	**0.0886**	**4.3504**	**1.9275**	**6.2779**	**1.6667**	**1.7733**	**3.4401**	**0.0000**	**8,575.7761**	**8,575.7761**	**2.7736**		**8,645.1155**

3.4 Grading - 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	0.0000	0.0000	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	0.0980	0.0666	0.7408	1.8900e-003	0.2054	1.6400e-003	0.2070	0.0545	1.5100e-003	0.0560		188.3411	188.3411	6.0600e-003		188.4927
Total	**0.0980**	**0.0666**	**0.7408**	**1.8900e-003**	**0.2054**	**1.6400e-003**	**0.2070**	**0.0545**	**1.5100e-003**	**0.0560**		**188.3411**	**188.3411**	**6.0600e-003**		**188.4927**

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	3.4695	29.6008	30.5614	0.0666		1.4130	1.4130		1.3417	1.3417		6,364.7682	6,364.7682	1.5049		6,402.3907
Total	**3.4695**	**29.6008**	**30.5614**	**0.0666**		**1.4130**	**1.4130**		**1.3417**	**1.3417**		**6,364.7682**	**6,364.7682**	**1.5049**		**6,402.3907**

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	0.1570	5.3494	1.2569	0.0157	0.3656	7.7500e-003	0.3733	0.1053	7.4100e-003	0.1127		1,641.7649	1,641.7649	0.0737		1,643.6064
Worker	0.5959	0.4050	4.5042	0.0115	1.2486	9.9900e-003	1.2586	0.3312	9.2000e-003	0.3404		1,145.1141	1,145.1141	0.0369		1,146.0356
Total	**0.7529**	**5.7543**	**5.7611**	**0.0272**	**1.6142**	**0.0177**	**1.6320**	**0.4365**	**0.0166**	**0.4531**		**2,786.8790**	**2,786.8790**	**0.1105**		**2,789.6420**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4695	29.6008	30.5614	0.0666		1.4130	1.4130		1.3417	1.3417	0.0000	6,364.7682	6,364.7682	1.5049		6,402.3907
Total	**3.4695**	**29.6008**	**30.5614**	**0.0666**		**1.4130**	**1.4130**		**1.3417**	**1.3417**	**0.0000**	**6,364.7682**	**6,364.7682**	**1.5049**		**6,402.3907**

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	0.1570	5.3494	1.2569	0.0157	0.3656	7.7500e-003	0.3733	0.1053	7.4100e-003	0.1127		1,641.7649	1,641.7649	0.0737		1,643.6064
Worker	0.5959	0.4050	4.5042	0.0115	1.2486	9.9900e-003	1.2586	0.3312	9.2000e-003	0.3404		1,145.1141	1,145.1141	0.0369		1,146.0356
Total	**0.7529**	**5.7543**	**5.7611**	**0.0272**	**1.6142**	**0.0177**	**1.6320**	**0.4365**	**0.0166**	**0.4531**		**2,786.8790**	**2,786.8790**	**0.1105**		**2,789.6420**

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	3.2386	27.0442	30.2880	0.0666		1.2281	1.2281		1.1661	1.1661		6,367.4555	6,367.4555	1.4948		6,404.8257
Total	**3.2386**	**27.0442**	**30.2880**	**0.0666**		**1.2281**	**1.2281**		**1.1661**	**1.1661**		**6,367.4555**	**6,367.4555**	**1.4948**		**6,404.8257**

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	0.1227	4.2763	1.0940	0.0153	0.3656	4.1200e-003	0.3697	0.1053	3.9400e-003	0.1092		1,601.5934	1,601.5934	0.0586		1,603.0576
Worker	0.5608	0.3679	4.1552	0.0111	1.2486	9.7200e-003	1.2584	0.3312	8.9500e-003	0.3402		1,103.5277	1,103.5277	0.0335		1,104.3644
Total	**0.6835**	**4.6442**	**5.2492**	**0.0264**	**1.6142**	**0.0138**	**1.6281**	**0.4365**	**0.0129**	**0.4493**		**2,705.1211**	**2,705.1211**	**0.0920**		**2,707.4220**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2386	27.0442	30.2880	0.0666		1.2281	1.2281		1.1661	1.1661	0.0000	6,367.4555	6,367.4555	1.4948		6,404.8257
Total	**3.2386**	**27.0442**	**30.2880**	**0.0666**		**1.2281**	**1.2281**		**1.1661**	**1.1661**	**0.0000**	**6,367.4555**	**6,367.4555**	**1.4948**		**6,404.8257**

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	0.1227	4.2763	1.0940	0.0153	0.3656	4.1200e-003	0.3697	0.1053	3.9400e-003	0.1092		1,601.5934	1,601.5934	0.0586		1,603.0576
Worker	0.5608	0.3679	4.1552	0.0111	1.2486	9.7200e-003	1.2584	0.3312	8.9500e-003	0.3402		1,103.5277	1,103.5277	0.0335		1,104.3644
Total	**0.6835**	**4.6442**	**5.2492**	**0.0264**	**1.6142**	**0.0138**	**1.6281**	**0.4365**	**0.0129**	**0.4493**		**2,705.1211**	**2,705.1211**	**0.0920**		**2,707.4220**

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	3.0798	25.2732	30.1231	0.0666		1.0882	1.0882		1.0325	1.0325		6,368.8707	6,368.8707	1.4894		6,406.1061
Total	**3.0798**	**25.2732**	**30.1231**	**0.0666**		**1.0882**	**1.0882**		**1.0325**	**1.0325**		**6,368.8707**	**6,368.8707**	**1.4894**		**6,406.1061**

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	0.1173	4.2166	1.0271	0.0151	0.3656	4.0200e-003	0.3696	0.1053	3.8400e-003	0.1091		1,582.4685	1,582.4685	0.0579		1,583.9155
Worker	0.5284	0.3346	3.7668	0.0107	1.2486	9.4000e-003	1.2581	0.3312	8.6600e-003	0.3399		1,062.7559	1,062.7559	0.0302		1,063.5096
Total	**0.6457**	**4.5512**	**4.7939**	**0.0258**	**1.6143**	**0.0134**	**1.6277**	**0.4365**	**0.0125**	**0.4490**		**2,645.2244**	**2,645.2244**	**0.0880**		**2,647.4251**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.0798	25.2732	30.1231	0.0666		1.0882	1.0882		1.0325	1.0325	0.0000	6,368.8706	6,368.8706	1.4894		6,406.1061
Total	**3.0798**	**25.2732**	**30.1231**	**0.0666**		**1.0882**	**1.0882**		**1.0325**	**1.0325**	**0.0000**	**6,368.8706**	**6,368.8706**	**1.4894**		**6,406.1061**

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	0.1173	4.2166	1.0271	0.0151	0.3656	4.0200e-003	0.3696	0.1053	3.8400e-003	0.1091		1,582.4685	1,582.4685	0.0579		1,583.9155
Worker	0.5284	0.3346	3.7668	0.0107	1.2486	9.4000e-003	1.2581	0.3312	8.6600e-003	0.3399		1,062.7559	1,062.7559	0.0302		1,063.5096
Total	**0.6457**	**4.5512**	**4.7939**	**0.0258**	**1.6143**	**0.0134**	**1.6277**	**0.4365**	**0.0125**	**0.4490**		**2,645.2244**	**2,645.2244**	**0.0880**		**2,647.4251**

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	2.8972	23.0685	29.9024	0.0666		0.9347	0.9347		0.8869	0.8869		6,368.2927	6,368.2927	1.4812		6,405.3226
Total	**2.8972**	**23.0685**	**29.9024**	**0.0666**		**0.9347**	**0.9347**		**0.8869**	**0.8869**		**6,368.2927**	**6,368.2927**	**1.4812**		**6,405.3226**

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	0.1150	4.1827	0.9955	0.0150	0.3656	3.9700e-003	0.3696	0.1053	3.8000e-003	0.1091		1,574.0844	1,574.0844	0.0572		1,575.5137
Worker	0.5013	0.3066	3.4974	0.0103	1.2486	9.2100e-003	1.2579	0.3312	8.4800e-003	0.3397		1,021.6461	1,021.6461	0.0276		1,022.3362
Total	**0.6163**	**4.4893**	**4.4929**	**0.0253**	**1.6143**	**0.0132**	**1.6275**	**0.4365**	**0.0123**	**0.4487**		**2,595.7305**	**2,595.7305**	**0.0848**		**2,597.8499**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.8972	23.0685	29.9024	0.0666		0.9347	0.9347		0.8869	0.8869	0.0000	6,368.2927	6,368.2927	1.4812		6,405.3226
Total	**2.8972**	**23.0685**	**29.9024**	**0.0666**		**0.9347**	**0.9347**		**0.8869**	**0.8869**	**0.0000**	**6,368.2927**	**6,368.2927**	**1.4812**		**6,405.3226**

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	0.1150	4.1827	0.9955	0.0150	0.3656	3.9700e-003	0.3696	0.1053	3.8000e-003	0.1091		1,574.0844	1,574.0844	0.0572		1,575.5137
Worker	0.5013	0.3066	3.4974	0.0103	1.2486	9.2100e-003	1.2579	0.3312	8.4800e-003	0.3397		1,021.6461	1,021.6461	0.0276		1,022.3362
Total	**0.6163**	**4.4893**	**4.4929**	**0.0253**	**1.6143**	**0.0132**	**1.6275**	**0.4365**	**0.0123**	**0.4487**		**2,595.7305**	**2,595.7305**	**0.0848**		**2,597.8499**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1782					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0933**	**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 - 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	0.0495	0.0303	0.3451	1.0100e-003	0.1232	9.1000e-004	0.1241	0.0327	8.4000e-004	0.0335		100.8203	100.8203	2.7200e-003		100.8884
Total	**0.0495**	**0.0303**	**0.3451**	**1.0100e-003**	**0.1232**	**9.1000e-004**	**0.1241**	**0.0327**	**8.4000e-004**	**0.0335**		**100.8203**	**100.8203**	**2.7200e-003**		**100.8884**

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	0.1782					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0933**	**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 - 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	0.0495	0.0303	0.3451	1.0100e-003	0.1232	9.1000e-004	0.1241	0.0327	8.4000e-004	0.0335		100.8203	100.8203	2.7200e-003		100.8884
Total	**0.0495**	**0.0303**	**0.3451**	**1.0100e-003**	**0.1232**	**9.1000e-004**	**0.1241**	**0.0327**	**8.4000e-004**	**0.0335**		**100.8203**	**100.8203**	**2.7200e-003**		**100.8884**

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	69.3748					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	**69.5457**	**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	0.0990	0.0605	0.6903	2.0200e-003	0.2464	1.8200e-003	0.2483	0.0654	1.6700e-003	0.0670		201.6407	201.6407	5.4500e-003		201.7769
Total	**0.0990**	**0.0605**	**0.6903**	**2.0200e-003**	**0.2464**	**1.8200e-003**	**0.2483**	**0.0654**	**1.6700e-003**	**0.0670**		**201.6407**	**201.6407**	**5.4500e-003**		**201.7769**

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	69.3748					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	**69.5457**	**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	0.0990	0.0605	0.6903	2.0200e-003	0.2464	1.8200e-003	0.2483	0.0654	1.6700e-003	0.0670		201.6407	201.6407	5.4500e-003		201.7769
Total	**0.0990**	**0.0605**	**0.6903**	**2.0200e-003**	**0.2464**	**1.8200e-003**	**0.2483**	**0.0654**	**1.6700e-003**	**0.0670**		**201.6407**	**201.6407**	**5.4500e-003**		**201.7769**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4442	12.0352	27.4832	0.1071	9.7633	0.0789	9.8422	2.6131	0.0733	2.6864		10,874.6787	10,874.6787	0.4254		10,885.3132
Unmitigated	2.4442	12.0352	27.4832	0.1071	9.7633	0.0789	9.8422	2.6131	0.0733	2.6864		10,874.6787	10,874.6787	0.4254		10,885.3132

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,551.76	1,615.33	1405.06	4,373,456	4,373,456
Total	1,551.76	1,615.33	1,405.06	4,373,456	4,373,456

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
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.634670	0.034757	0.148672	0.092896	0.013276	0.004503	0.019040	0.038634	0.002318	0.001886	0.006862	0.001512	0.000973
Single Family Housing	0.634670	0.034757	0.148672	0.092896	0.013276	0.004503	0.019040	0.038634	0.002318	0.001886	0.006862	0.001512	0.000973

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	0.1323	1.1307	0.4812	7.2200e-003		0.0914	0.0914		0.0914	0.0914		1,443.4676	1,443.4676	0.0277	0.0265	1,452.0454
NaturalGas Unmitigated	0.1323	1.1307	0.4812	7.2200e-003		0.0914	0.0914		0.0914	0.0914		1,443.4676	1,443.4676	0.0277	0.0265	1,452.0454

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	12269.5	0.1323	1.1307	0.4812	7.2200e-003		0.0914	0.0914		0.0914	0.0914		1,443.4676	1,443.4676	0.0277	0.0265	1,452.0454
Total		**0.1323**	**1.1307**	**0.4812**	**7.2200e-003**		**0.0914**	**0.0914**		**0.0914**	**0.0914**		**1,443.4676**	**1,443.4676**	**0.0277**	**0.0265**	**1,452.0454**

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	12.2695	0.1323	1.1307	0.4812	7.2200e-003		0.0914	0.0914		0.0914	0.0914		1,443.4676	1,443.4676	0.0277	0.0265	1,452.0454
Total		**0.1323**	**1.1307**	**0.4812**	**7.2200e-003**		**0.0914**	**0.0914**		**0.0914**	**0.0914**		**1,443.4676**	**1,443.4676**	**0.0277**	**0.0265**	**1,452.0454**

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	8.3604	1.6419	14.0683	0.0102		0.1948	0.1948		0.1948	0.1948	0.0000	1,922.6857	1,922.6857	0.0596	0.0348	1,934.5472
Unmitigated	8.3604	1.6419	14.0683	0.0102		0.1948	0.1948		0.1948	0.1948	0.0000	1,922.6857	1,922.6857	0.0596	0.0348	1,934.5472

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	1.4255					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.3575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1740	1.4871	0.6328	9.4900e-003		0.1202	0.1202		0.1202	0.1202	0.0000	1,898.4706	1,898.4706	0.0364	0.0348	1,909.7523
Landscaping	0.4034	0.1548	13.4355	7.1000e-004		0.0746	0.0746		0.0746	0.0746		24.2151	24.2151	0.0232		24.7949
Total	**8.3604**	**1.6419**	**14.0683**	**0.0102**		**0.1948**	**0.1948**		**0.1948**	**0.1948**	**0.0000**	**1,922.6857**	**1,922.6857**	**0.0596**	**0.0348**	**1,934.5472**

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	1.4255					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.3575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1740	1.4871	0.6328	9.4900e-003		0.1202	0.1202		0.1202	0.1202	0.0000	1,898.4706	1,898.4706	0.0364	0.0348	1,909.7523
Landscaping	0.4034	0.1548	13.4355	7.1000e-004		0.0746	0.0746		0.0746	0.0746		24.2151	24.2151	0.0232		24.7949
Total	**8.3604**	**1.6419**	**14.0683**	**0.0102**		**0.1948**	**0.1948**		**0.1948**	**0.1948**	**0.0000**	**1,922.6857**	**1,922.6857**	**0.0596**	**0.0348**	**1,934.5472**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

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