

APPENDIX C
**Air Quality/
Greenhouse Gas Emissions Data**

Revised Air Quality and Greenhouse Gas Emissions Impact Analysis for Avanti South Housing Development



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ABBREVIATIONS AND ACRONYMS

AB	Assembly Bill
ARB	Air Resources Board
AVAPCD	Antelope Valley Air Pollution Control District
AVAQMD	Antelope Valley Air Quality Management District
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	The California Emissions Estimator Model®
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CH ₄	Methane
CO	carbon monoxide
CO ₂	carbon dioxide
CO _{2e}	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CTG	control techniques guidelines
DCP	Dust Control Plan
EJAC	Environmental Justice Advisory Committee
EO	Executive Order
EPA	United States Environmental Protection Agency
GHG	Greenhouse Gas
GWP	Global Warming Potential
H&SC	Health and Safety Code
HAP	Hazardous Air Pollutants
HFCs	Hydrofluorocarbons
HI	Hazard Index
HRA	health risk assessment
IPCC	Intergovernmental Panel on Climate Change
LDA	light duty automobile
LHD	light heavy duty trucks
MDAB	Mojave Desert Air Basin
MDR	medium density residences
MDV	medium duty vehicles
MCY	motorcycles
MPO	Metropolitan Planning Organization

MRR	Mandatory Reporting Regulation
MSHC	M. S. Hatch Consulting, LLC
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standard
NO _x	oxides of nitrogen
O ₃	ozone
Pb	Lead
PFCs	Perfluorocarbons
PM	particulate matter
PM ₁₀	particulate matter less than 10 microns in diameter
PM _{2.5}	particulate matter less than 2.5 microns in diameter
ppm	parts per million
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
RTAC	Regional Targets Advisory Committee
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SER	Significant Emission Rate
SF ₆	sulfur hexafluoride
SIP	State Implementation Plans
SLCPs	short-lived climate pollutants
SO _x	oxides of sulfur
TACs	toxic air contaminants
TOG	total organic gases
UB	urban buses
VOC	volatile organic compound

1.0 INTRODUCTION

This report presents the results of the air quality and Greenhouse Gas (GHG) emissions impact analysis prepared by M. S. Hatch Consulting, LLC (MSHC) for the Avanti South project (referred to as "Project"). The report evaluates and documents the potential impacts to air quality associated with construction and operation of the proposed Project, and recommend measures to mitigate impacts considered potentially significant in comparison to established regulatory thresholds.

1.1 SITE LOCATION

The Project is located in the City of Lancaster in the County of Los Angeles, California (see Figure 1, Regional Vicinity). The proposed development encompasses approximately 307.7 acres of vacant land situated in the southwestern portion of the city. The Specific Plan Area is approximately five miles west of the Antelope Valley Freeway (State Route 14).

The proposed Project is located to the west and east of 70th Street West and contains two separate subareas: the Avanti South parcel to the east of 70th Street West and the 73-acre Avanti West parcel, to the west of 70th Street West (see Figure 2, Local Vicinity).

The Avanti South parcel is generally bounded by Avenue L to the south, the proposed extension of West Avenue K-8 to the north, and 70th Street West on the west. The 73-acre Avanti West parcel is generally bounded by 70th Street West to the east, the proposed West Avenue K-8 extension to the south, and 75th Street West to the west.

1.2 PROJECT DESCRIPTION

As described in the Avanti South Specific Plan, finalized in May 2017, the proposed development is a master planned community on approximately 307.7 acres within the southwestern portion of the City of Lancaster. The plan includes the following primary elements:

-) 1,375 single family lots ranging from 2,800 to 7,500 square feet in size, including 431 age targeted and active adult units;
-) 325 multifamily units;
-) 14 acres of Commercial uses;
-) Over 31 acres of parks and open space;
-) Trail network;
-) 12.8 acre Elementary school;
-) 1.3 acre Fire station.

The vision for the proposed Project is to develop a sustainable and walkable community that is connected by an open space network of commercial uses that are strategically placed for easy accessibility. Emphasis is placed on pedestrian and bicycle mobility, including safe routes to school for the proposed elementary school and a trail system. The site layout is presented in Figure 3. Table 1 presents the land-use summary.

FIGURE 1. REGIONAL VICINITY

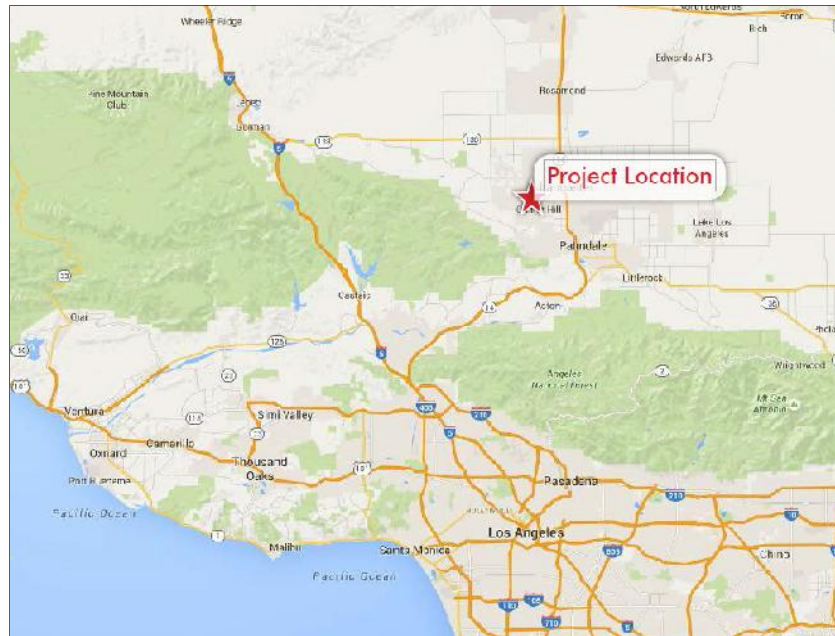


FIGURE 2. AVANTI SOUTH DEVELOPMENT LOCATION



FIGURE 3. AVANTI SOUTH SITE LAYOUT



TABLE 1. LAND USE SUMMARY

Land Use	Avanti West		Avanti South		Total	
	Units	Acreage	Units	Acreage	Units	Acreage
Low Density (2.1-6.5 du/ac)	340	57.4	226	35.6	566	93
Medium Density (6.6-15 du/ac)	--	--	809	102.4	809	102.4
High Density /Multifamily (15.1-30 du/ac)	--	--	325	14.3	325	14.3
Open Space/Parks	--	5.9	--	25.6	--	31.5
Commercial	--	--	--	14.0	--	14.0
School	--	--	--	12.8	--	12.8
Fire Station	--	1.3	--	--	--	1.3
Streets	--	8.8	--	29.6	--	38.4
Totals	340 du	73.4 ac	1,360 du	234.3 ac	1,700 du	307.7 ac

Reference: Avanti South Specific Plan, May 2017

1.3 PROJECT PHASES AND SCHEDULE

Construction of the proposed Project will be implemented in stages. Figure 4 presents the anticipated phasing of the project. Construction activities are expected to begin in 2017 and it is anticipated that the complete build out would occur over a 15-year period, depending on real estate market conditions and demand¹.

FIGURE 4. PROJECT PHASING PLAN



2.0 AIR QUALITY REGULATORY SETTING

In California, air quality is regulated by several agencies, including the United States Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and local air districts such as the Antelope Valley Air Quality Management District (AVAQMD). Each of these agencies develops rules and/or regulations to attain the goals or directives imposed upon them through legislation. Some state and local regulations may be more stringent than federal regulations.

2.1 FEDERAL CLEAN AIR ACT

In 1970, Congress created the EPA and passed the Clean Air Act (CAA), giving the federal government authority to clean up air pollution in this country. The CAA last amended in November 1990, requires the EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The CAA established two types of national air quality standards. Primary standards set limits to protect public health, including the health of “sensitive” populations such as

¹ Construction activities are expected to begin in 2017 and it is anticipated that the complete build out would occur over a 15-year period. The schedule may be condensed depending on the real estate market conditions. To analyze the worst-case emissions scenario, it was assumed that the entire Project will be completed in seven years after site preparation and grading. This schedule overestimates the emissions by spreading the activities over a shorter period than currently anticipated.

asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.

The EPA Office of Air Quality Planning and Standards set NAAQS for six principal pollutants, called “criteria” pollutants. The state of California also developed standards for criteria pollutants and are referred to as the California Ambient Air Quality Standards (CAAQS). Table 2 presents the Air Quality Standards.

Ambient air monitoring is conducted at specific measuring stations to determine whether a local air district meets the carbon monoxide (CO), particulate matter (PM), ozone (O₃), oxides of nitrogen (NO_x), oxides of sulfur (SO_x), and lead NAAQS. Based on the air monitoring findings, the Air Districts (or portions thereof) are classified as either “attainment,” “nonattainment,” or “unclassifiable,” as defined below:

- J Nonattainment means any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant;
- J Attainment means any area that meets the national primary or secondary ambient air quality standard for the pollutant; and
- J Unclassifiable means any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.

Air Districts are classified as a “maintenance” area for meeting and then maintaining attainment with the NAAQS, or assigned a nonattainment classification of marginal, basic, moderate, serious, severe, or extreme. California also assigns an attainment status based on the CAAQS.

On 26 October 2015, EPA revised the primary and secondary 8-hour ozone standard levels to 0.070 parts per million (ppm). By 1 October 2016, the states were required to recommend ozone designations for all areas of the state. EPA will respond to states’ initial recommendations by 1 June 2017 and identify where the agency intends to modify the recommendations. EPA will issue final area designations by 1 October 2017. The designations will likely be based on 2014-2016 air quality data.

TABLE 2. CALIFORNIA AND NATIONAL 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 (160 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 (PM ₁₀) 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 (PM _{2.5}) 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	0.16 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 Fluorescence; 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) ¹⁰	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹⁰	—	
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 13	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 ...

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact 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 PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ 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 SO₂ 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 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ 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.

When an area is classified as “Moderate” nonattainment or higher, the CAA requires that the local Air District(s) develop Attainment Plans or State Implementation Plans (SIPs) to address how they are going to reduce the emissions in the area to eventually achieve attainment. Ozone nonattainment areas must implement Reasonably Available Control Technology (RACT) for sources that are subject to EPA-developed control techniques guidelines (CTGs) or for major sources of ozone precursors. RACT is the lowest emission limitation that an air contaminant source is capable of meeting by the application of control technology that is reasonably available, considering technological and economic feasibility. To implement RACT, local air quality districts develop new rules or modify existing local rules to be included into the SIP.

2.1.1 State Implementation Plans

Section 110 of the CAA requires state and local air pollution control agencies to adopt federally approved control strategies to minimize air pollution. The resulting body of regulations is known as the SIP. A SIP is a collection of state and local regulations and plans promulgated to achieve healthy air quality under the CAA. State and local agencies must involve the public in the adoption process before SIP elements are submitted to EPA for federal approval or disapproval. EPA must also provide an opportunity for public comment before taking action on each SIP submittal. EPA then approves SIPs to be considered federally enforceable requirements.

SIPs also establish limits or work practice standards to minimize emissions of the criteria air pollutants or their precursors. SIPs also include special control strategies for nonattainment areas that are not meeting the NAAQS. These control strategies often include items such as vehicle inspection and maintenance, lower gasoline vapor pressures, gas pump vapor recovery, and other RACT requirements. Finally, SIPs include preconstruction permit requirements for projects that may result in emission increases.

2.2 STATE REQUIREMENTS

2.2.1 California Clean Air Act

This California Clean Air Act (CCAA), passed in 1988, provides the basis for California air quality planning and regulations. The CCAA is independent of federal regulations. A major element of the CCAA is the requirement that local air quality districts in violation of CAAQS must prepare attainment plans which identify air quality problems, causes, trends, and actions to be taken to attain and maintain the air quality standards by the earliest practicable date. As shown in Table 2, the CAAQS are more restrictive than the NAAQS and require local districts to continue to develop control measures to reduce air pollutants even if the district meets the federal attainment standards.

Sections 40912 through 40922 of the California Health and Safety Code (H&SC) specify overall requirements that apply to any clean air plan submitted to CARB to satisfy the CCAA requirements. Section 40924(b) of the H&SC requires the Air Districts to assess the air quality control program every three years. This assessment must address the expected and revised emission reductions scheduled for adoption during the previous three years. This triennial report must also include an assessment of progress based on monitored pollutant levels, modeled techniques and air quality indicators. These emission reduction measures are developed and promulgated as air quality rules and regulations.

2.3 CALIFORNIA AIR RESOURCES BOARD

CARB, also known as Air Resources Board (ARB), is California's "clean air agency". Established in 1967 when then-governor Ronald Reagan signed the Mulford-Carrell Act, combining the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board, CARB is a department within the cabinet-level California Environmental Protection Agency. CARB oversees air quality planning and control throughout California by administering the SIP.

CARB's goals include attaining and maintaining healthy air quality; protecting the public from exposure to toxic air contaminants; and providing innovative approaches for complying with air pollution rules and regulations. CARB has also been instrumental in driving innovation throughout the global automotive industry through programs such as its Zero Emission Vehicle mandate.

One of CARB's responsibilities is to define vehicle emissions standards. California is the only state permitted to issue emissions standards under the federal Clean Air Act, subject to a waiver from the United States Environmental Protection Agency. Other states may choose to follow CARB or federal standards but may not set their own.

CARB is also responsible for regulations pertaining to toxic air contaminants (TACs). The Air Toxics "Hot Spots" Information and Assessment Act (Assembly Bill [AB] 2588, 1987, Connelly) was enacted in 1987 to establish a formal air toxics emission inventory risk quantification program.

In 1998, the ARB identified diesel particulate matter as a toxic air contaminant, which means the compound is a known human carcinogen. This led to regulations for controlling PM and other criteria pollutant emissions from on- and off-road vehicles that would indirectly affect the proposed Project's emissions through the phasing in of cleaner on- and off-road engines.

2.4 LOCAL REQUIREMENTS

The EPA designated the desert portion of Los Angeles County as non-attainment of the 8-hour ozone NAAQS as part of the Southeast Desert Modified Air Quality Management Area on April 15, 2004 (40 CFR 81). This large "maintenance area" was classified moderate based on a 128-ppb ozone design value calculated from 2000 through 2002 8-hour ozone values within the Los Angeles County portion of the area. The desert portion of Los Angeles County was established as its own air district as of July 1, 1997, the Antelope Valley Air Pollution Control District (AVAPCD), pursuant to former H&SC §40106 (Statutes 1996 ch 542, Repealed Statutes 2001 ch. 163). This air district was replaced by the AVAQMD on January 1, 2002, pursuant to H&SC §41300 et seq (Statutes 2001 ch. 163). As a successor district to SCAQMD, the AVAQMD assumes the authorities and duties of the SCAQMD for the Antelope Valley.

The District lies within the northern part of Los Angeles County. The District boundaries start on the south just outside of Acton, north to the Kern County line, east to the San Bernardino County line, and west to the Quail Lake area. The AVAQMD's current guidelines, included in its California Environmental Quality Act and Federal Conformity Guidelines (August 2016), provided in Attachment 1, were adhered to in the assessment of air quality impacts for the proposed Project.

The AVAQMD has primary responsibility for regulating stationary sources of air pollution situated within its jurisdictional boundaries. To this end, the AVAQMD implements air quality programs required by state and federal mandates, enforces rules and regulations based on air pollution laws, and educates businesses and residents about their role in protecting air quality. The District maintains a set of Rules and Regulations to improve air quality and maintain good air quality (www.avaqmd.ca.gov), including the following rules:

- J Rule 401, Visible Emissions. This rule specifies that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:
 - (A) As dark or darker in shade as that designated No. 1 on the Ringelman Chart, as published by the United States Bureau of Mines; or
 - (B) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (b)(1)(A) of the rule.
- J Rule 403, Fugitive Dust. The purpose of this rule is to reduce the amount of Particulate Matter entrained in the ambient air as a result of man-made Fugitive Dust sources by requiring actions to prevent, reduce or mitigate Fugitive Dust emissions. The rule specifies requirements for active operation of construction, excavation, extraction and other earth-moving activities, demolition, and bulk storage or materials.
- J Rule 402, Nuisance. Rule 402 states that a person shall not discharge from any source whatsoever such quantities of contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or that endanger the comfort, repose, health, or safety of such persons or the public or that cause or have a natural tendency to cause injury or damage to business or property.

The proposed Project will comply with all applicable AVAQMD rules during both the operational and construction phases of the Project.

3.0 AIR QUALITY SETTING

3.1 REGIONAL AIR QUALITY

The proposed development is in the City of Lancaster, California, which is part of the Mojave Desert Air Basin (MDAB). An air basin is a geographical region to describe an area with a commonly shared air mass, since air pollution does not follow county, city, or political boundaries. The location is under the jurisdiction of the AVAQMD. The AVAQMD is the local agency with the primary responsibility for the control of non-vehicular sources of air pollution throughout the Antelope Valley.

3.1.1 Non-attainment Designations and Classification Status

The EPA and the CARB have designated portions of the AVAQMD non-attainment for a variety of pollutants, and some of those designations have an associated classification. Table 3 presents the AVAQMD designations and classifications.

TABLE 3. AVAQMD DESIGNATIONS AND CLASSIFICATIONS

Ambient Air Quality Standard	AVAQMD
One-hour Ozone (Federal) –standard has been revoked, this is historical information only	Non-attainment; classified Severe-17
Eight-hour Ozone (Federal 84 ppb)	Subpart 2 Non-attainment; classified Moderate
Eight-hour Ozone (Federal new standard, 75 ppb or lower)	Non-attainment (expected)
Ozone (State)	Nonattainment; classified Extreme
Particulate matter less than 10 microns in diameter (PM ₁₀) (Federal)	Unclassified
Particulate matter less than 2.5 microns in diameter (PM _{2.5}) (Federal)	Unclassified/attainment
PM _{2.5} (State)	Unclassified
PM ₁₀ (State)	Non-attainment
Carbon Monoxide (State and Federal)	Attainment
Nitrogen Dioxide (State and Federal)	Attainment/unclassified
Sulfur Dioxide (State and Federal)	Attainment/unclassified
Lead (State and Federal)	Attainment
Particulate Sulfate (State)	Unclassified
Hydrogen Sulfide (State)	Unclassified
Visibility Reducing Particles (State)	Unclassified

Table 4 presents the estimated annual average emissions for the AVAQMD since 2000.

TABLE 4. ANNUAL AVERAGE EMISSIONS FOR THE AVAQMD

Year	Source Type	Emissions (tons per day)						
		TOG	VOC	CO	NO _x	SO _x	PM ₁₀	PM _{2.5}
2015	Stationary	23.8	7.6	1.4	5.1	0.0	10.3	2.9
	Area	7.6	4.1	3.7	0.5	0.0	14.6	2.4
	Mobile	4.9	4.5	44.3	11.0	0.1	1.0	0.6
	Total	36.3	16.2	49.4	16.7	0.1	25.9	5.9
2012	Stationary	22.5	6.8	1.4	5.1	0.0	10.2	2.8
	Area	7.7	4.1	3.7	0.5	0.0	13.5	2.3
	Mobile	5.5	5.1	52.8	12.4	0.1	1.0	0.6
	Total	35.7	16.0	57.8	18.0	0.1	24.7	5.7
2010	Stationary	23.0	7.5	3.0	2.8	0.1	11.4	3.8
	Area	7.7	4.1	3.5	0.5	0.0	13.4	2.2
	Mobile	6.6	6.0	60.6	14.3	0.1	1.0	0.6
	Total	37.3	17.6	67.0	17.7	0.2	25.7	6.7
2005	Stationary	20.5	5.5	1.9	2.7	0.2	11.4	2.7
	Area	8.2	4.5	3.9	0.5	0.0	13.3	2.3
	Mobile	8.7	7.9	82.8	18.7	0.3	1.1	0.7
	Total	37.5	17.9	88.7	22.0	0.5	25.7	5.7
2000	Stationary	18.0	5.6	1.6	2.3	0.0	1.0	0.6
	Area	9.1	5.4	4.2	0.6	0.0	12.6	2.2
	Mobile	14.8	13.4	148.7	27.4	0.3	1.2	0.8
	Total	41.9	24.4	154.5	30.3	0.4	14.8	3.6

TOG: total organic gases
 VOC: volatile organic compounds
 CO: carbon monoxide
 NO_x: oxides of nitrogen
 SO_x: oxides of sulfur
 PM₁₀: particulate matter less than 10 microns in diameter
 PM_{2.5}: particulate matter less than 2.5 microns in diameter

3.1.2 Antelope Valley Air Quality Management Plans

In May 2008, the AVAQMD adopted an Attainment Plan for the 2008 ozone standard. The target date for attainment is 2019 (changed from original date of 2021). The AVAQMD has established rules and regulations and control measures for emission sources within its jurisdiction, including RACT requirements for the majority of sources and a New Source Review program with a 25 ton per year major source level and a 1.3:1 offset ratio requirement. In 2015, AVAQMD adopted the 2015, 8-Hour Ozone RACT State Implementation Plan Analysis and Federal Negative Declarations for 20 Control Technique Source Categories (2015 RACT SIP). ARB submitted the 2015 RACT SIP to the EPA as a revision to the California SIP.

3.2 LOCAL AIR QUALITY

Existing air quality is measured at established AVAQMD air quality monitoring stations. Air quality is monitored to determine whether pollutant concentrations meet state and national air quality standards. The Lancaster air monitoring station is in the vicinity of the Project area. Tables 5-7 show the emission trend

summaries for ozone, PM_{2.5} and PM₁₀, respectively, for 2011-2015 at the Lancaster-43301 Division Street monitoring station. Yellow indicates a California ambient air quality standard exceedance; orange indicates a national ambient air quality standard exceedance.

TABLE 5. OZONE TRENDS SUMMARY- LANCASTER 43301 DIVISION STREET

Year	Days > Standard				1-Hour Observations			8-Hour Averages				Year Coverage
	State		National		Max.	State	Nat'l	State		National		
	1-Hr	8-Hr	1-Hr	'08 8-Hr		D.V. ¹	D.V. ²	Max.	D.V. ¹	Max.	'08 D.V. ²	
2015	26	82	1	53	0.132	0.12	0.120	0.103	0.102	0.103	0.090	99
2014	3	36	0	17	0.101	0.11	0.106	0.088	0.096	0.087	0.086	100
2013	9	53	0	34	0.108	0.11	0.111	0.094	0.100	0.094	0.090	99
2012	13	72	0	39	0.112	0.11	0.111	0.096	0.098	0.095	0.089	99
2011	19	76	0	53	0.115	0.11	0.115	0.100	0.102	0.100	0.091	99

D.V. = Design Value

TABLE 6. PM_{2.5} TREND SUMMARY- LANCASTER 43301 DIVISION STREET

Year	Est. Days	Annual	Nat'l	State	Nat'l '06	Nat'l '06	High 24-Hour			Year Coverage
	> Nat'l	Average	Ann. Std.	Annual	Std. 98th	24-Hr Std.	Average			
	'06 Std.	Nat'l State	D.V. ¹	D.V. ²	Percentile	D.V. ¹	Nat'l	State		
2015	*	*	*	*	*	*	*	10.4	10.4	86
2014	6.9	7.2	*	*	27.9	*	42.0	42.0	93	
2013	0.0	5.8	*	*	10.5	*	11.9	11.9	97	
2012	*	*	*	*	*	*	14.0	14.0	61	
2011	*	*	*	8	50.0	*	50.0	50.0	55	

D.V. = Design Value

TABLE 7. PM₁₀ TREND SUMMARY- LANCASTER 43301 DIVISION STREET

Year	Est. Days > Std.	Annual Average		3-Year Average		High 24-Hr Average		Year Coverage	
	Nat'l	State	Nat'l	State	Nat'l	State	Nat'l		State
2015	0.0	*	19.3	*	23	*	112.8	*	0
2014	0.0	*	24.3	*	22	*	131.5	*	0
2013	*	*	21.8	*	20	19	47.9	173.4	76
2012	0.0	0.0	19.8	18.5	18	19	47.0	43.0	99
2011	0.0	*	19.6	*	20	*	81.9	49.0	0

D.V. = Design Value

3.3 SENSITIVE RECEPTORS

Sensitive receptors are those who are considered to be more sensitive than others to air pollutants. Sensitive receptors include hospitals, schools, daycare facilities, elderly housing and convalescent facilities. These are areas where the occupants are more susceptible to the adverse effects of exposure to toxic chemicals. Schools, hospitals, and convalescent homes are considered sensitive receptors, because children, elderly people, and the infirm are more susceptible to respiratory distress and other air-quality-related health

problems than the general public. Residential areas are considered sensitive to poor air quality because people usually are in the home for extended periods of time, with associated greater exposure to ambient air quality. Recreational uses are also considered sensitive due to greater exposure to ambient air quality conditions because vigorous exercise associated with recreation places a high demand on the human respiratory system. Several sensitive receptors surround the Avanti South project site. Table 8 summarizes these receptors and their respective distances from the Project site.

TABLE 8. SENSITIVE RECEPTORS IN THE PROJECT SITE VICINITY

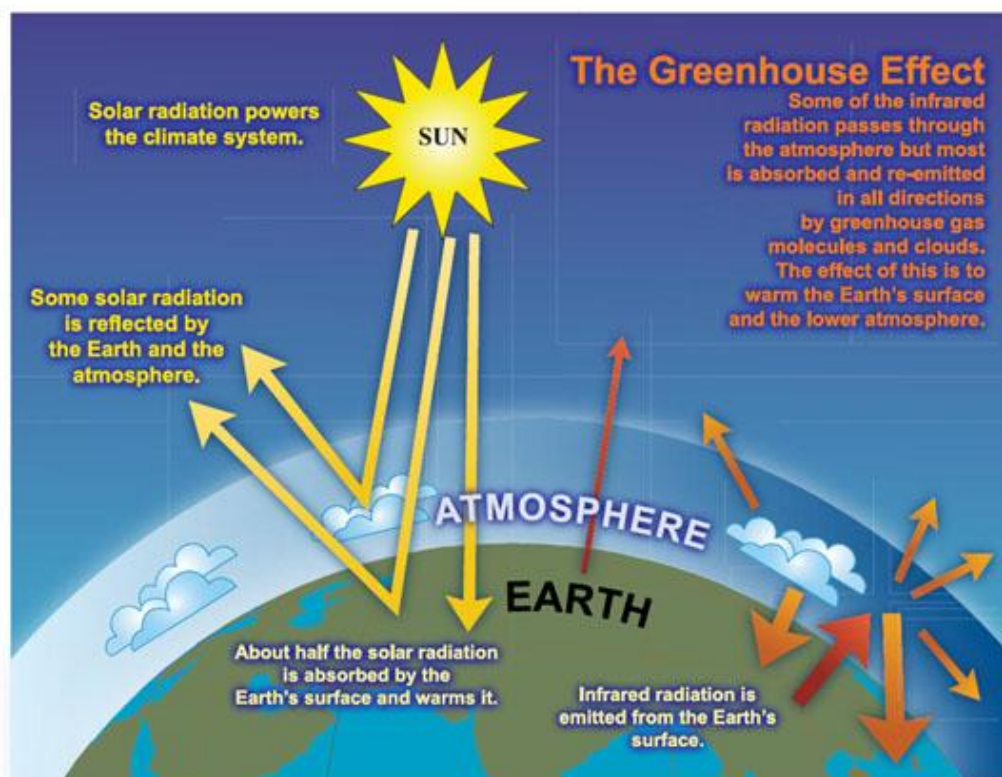
#	Receptor	Direction from Project Location	Distance (feet) [receptor to site]
1	Quartz Hill High School 6040 West Avenue L Quartz Hill, CA 93536	Southeast	75 [property line to property line]
2	Residence at 6510 W Avenue L, Lancaster, CA 93536	South	75 [property line to property line]
3	Residences bordered by Receptor #2 to the north, vacant property to the west, west Avenue L 8 to the south and 65 th Street W to the east	South	690 [northern most residence property boundary to property line]
4	Residences bordered by W Avenue L to the north, vacant property to the west, west Avenue L 8 to the south and 70 th Street W to the east	Southwest	160 [northern most residence property boundary to property line]
5	Residence at 5746 W Avenue L, Lancaster, CA 93536	Southeast	1,370 [property line to property line]
6	Residences bordered by Avenue K-8 to the north, 60 th Street W to the west, west Avenue L to the south and 57 th Street W to the east	East	1,365 [property line to property line]
7	Residences bordered by Avenue K to the north, 62 nd Street W to the west, west Avenue K 10 to the south and 60 th Street W to the east	East	<50 [property line to property line]

4.0 GREENHOUSE GAS EMISSIONS

Gases in the earth's atmosphere insulate the planet from space radiation originating beyond our atmosphere. The gases in the atmosphere that trap heat inside it are termed GHGs, because they cause a natural "greenhouse effect" (Figure 5). The sun radiates heat to the earth's surface, where some is absorbed by the earth, and some is reflected out to space. The GHGs in the earth's atmosphere both absorb some of this heat and reflect some of it back to the earth, causing a warming effect. While a natural balance of GHGs contributes to the maintenance of our atmosphere and climate, an excess of GHGs could lead to the phenomenon known as global warming.

Global warming, or more generally known as global climate change, refers to an increase in global temperatures that could be caused by an excess of GHGs in the atmosphere, leading to a destabilizing impact on climate and weather patterns. The continuous addition of the GHGs, the resultant increase in heat energy in the earth's atmosphere, and the associated changes contribute to potentially alarming consequences. Small changes in the average temperatures can be accompanied by an increase in severe weather events such as storms, droughts, ecosystem change, loss of plant and animal species, stresses to human health, and alterations in regional agricultural productivity.

FIGURE 5. ILLUSTRATION OF THE GREENHOUSE EFFECT



Source: U.S. Environmental Protection Agency Climate Change website

Carbon dioxide (CO₂) is the most common of the six targeted GHGs, caused anthropogenically by the burning of fossil fuels and deforestation. Methane (CH₄) is produced through the anaerobic decomposition of waste in landfills, animal digestion, decomposition of animal wastes, production and distribution of

natural gas and petroleum, coal production, and incomplete fossil fuel combustion. Nitrous oxide (N₂O) is generated as a result of soil cultivation practices, particularly the use of commercial and organic fertilizers, fossil fuel combustion, nitric acid production, and biomass burning. Hydrofluorocarbons (HFCs) are primarily used as refrigerants, consisting of gas molecules containing hydrogen, fluorine, and carbon atoms. Perfluorocarbons (PFCs) consist of a class of gases containing carbon and fluorine originally introduced as alternatives to ozone-depleting substances and typically emitted as by-products of industrial and manufacturing processes. SF₆ is primarily used in electrical transmission and distribution systems.

4.1 SOURCES OF GHG EMISSIONS

GHGs are emitted from a variety of activities, ranging from the combustion of fuels and other materials to leaking gases and chemical reactions. GHG emissions are grouped into three “Scopes” by the regulations:

-) Scope 1 –direct emissions:
 - o Stationary combustion (e.g., boilers),
 - o Mobile combustion (e.g., motor vehicles),
 - o Fugitive (e.g., landfill leakage and refrigerants),
 - o Process (e.g., wastewater treatment);
-) Scope 2 –indirect emissions (e.g., electricity and steam imports); and
-) Scope 3 – Emissions that do not fall into Scope 1 or 2, but are the result of the facility’s existence (e.g., employee commuting, deliveries).

4.2 GLOBAL WARMING POTENTIAL

The Global Warming Potential (GWP) is an important element when calculating the GHG emissions for an installation. Defined in the Kyoto Protocol, GWP measures how much each GHG is estimated to contribute towards global climate change in relationship to the effect of one unit mass of CO₂ over a period of time. The converted potential values of GHGs are referred to as the carbon dioxide equivalent (CO₂e). Table 9 presents the 100-year time horizon GWP. This table is adapted from the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report.

TABLE 9. GLOBAL WARMING POTENTIAL OF GREENHOUSE GASES

Industrial designation or common name	Chemical formula	GWP values for 100-year time horizon		
		Second Assessment Report	Fourth Assessment Report	Fifth Assessment Report
Carbon dioxide	CO ₂	1	1	1
Methane	CH ₄	21	25	28
Nitrous oxide	N ₂ O	310	298	265

4.3 GHG REGULATORY FRAMEWORK

4.3.1 Federal GHG Regulations

On April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency* (549 US 497), the Supreme Court found that GHGs are air pollutants covered by the Clean Air Act. The Court held that the EPA must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making such decisions, the EPA is required to follow the language of Section 202(a) of the Clean Air Act, which obligates it to prescribe (and from time to time revise) standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines. The Supreme Court decision resulted from a petition for rulemaking under Section 202(a) filed by more than a dozen environmental, renewable, energy and other organizations.

On April 17, 2009, the EPA Administrator signed proposed “endangerment” and “cause or contribute” findings for GHGs under Section 202(a) of the Clean Air Act. The EPA found that six GHGs, taken in combination, endanger both the public health and the public welfare of current and future generations. The EPA also found that the combined emissions of these GHGs from new motor vehicles and new motor vehicle engines contribute to the greenhouse effect as air pollution that endangers public health and welfare under Clean Air Act Section 202(a). In 2015, EPA acknowledged more recent scientific assessments that highlight the urgency of addressing the rising concentration of CO₂ in the atmosphere, finding that certain groups, including children, the elderly, and the poor are especially vulnerable to climate-related effects.

4.3.1.1 40 CFR Part 98, Mandatory Greenhouse Gas Reporting

In October of 2009, the EPA adopted mandatory reporting of GHG regulations for facilities that emit more than 25,000 metric tons of CO₂e emissions per year. Additionally, reporting of emissions is required for owners of sulfur hexafluoride- (SF₆) and PFC-insulated equipment when the total nameplate capacity of these insulating gases is above 17,280 pounds. The proposed project is not expected to trigger GHG reporting.

4.3.1.2 Clean Air Act Permitting for GHG – Tailoring Rule

In June 2010, the EPA published the Prevention of Significant Deterioration (PSD) and Title V GHG Tailoring Rule in the Federal Register (75 FR 31514) to limit the number and size of sources subject to these requirements, concluding that regulating GHG sources at the statutory thresholds of 100 or 250 tons per year would affect too many sources, creating an unmanageable program contrary to Congress’ intent. Under the Tailoring Rule, existing sources with GHG potential emissions of 100,000 tpy of CO₂e or more would be subject to Title V requirements, unless their actual CO₂e emissions were below certain thresholds. Sources that emitted more than those “tailored” thresholds were required to obtain permits, either from the State in which they were located, or from EPA if the State lacked permit-writing authority. Such sources

would then have to obtain the level of GHG emission reductions achievable by Best Available Control Technology (BACT).

4.3.1.3 U.S. Supreme Court Decision in Utility Air Regulatory Group v. EPA

On June 23, 2014, the Supreme Court of the United States in *Utility Air Regulatory Group v. EPA* held that the Clean Air Act neither compels nor permits the EPA to interpret the Clean Air Act to require a stationary source of pollution to obtain a “Prevention of Significant Deterioration” or Title V permit on the sole base of its potential GHG emissions. However, the EPA was reasonable in stating the CAA does require sources that would need permits based on their emission of conventional pollutants should comply with BACT standards for GHGs. The D.C. Circuit also directed EPA to consider whether any further revisions to its regulations are appropriate, and if so, to undertake to make such revisions.

On August 26, 2016, the EPA proposed a set of changes needed to bring EPA’s air permitting regulations in line with Supreme Court and D.C. Circuit decisions on GHG permitting. This rulemaking proposes revisions to existing PSD and title V regulations to ensure that neither the PSD nor title V rules require a source to obtain a permit solely because the source emits or has the potential to emit GHGs above the applicable thresholds. In addition, the EPA is proposing a 75,000 tpy CO_{2e} Significant Emission Rate (SER) for GHGs. The SER establishes a de minimis level below which BACT is not required for this pollutant. The proposed project would not be expected to exceed the CO_{2e} SER.

4.3.2 State and Regional GHG Regulations

California first addressed climate change in 1988 with the passage of AB 4420 (Sher, Chapter 1506, Statutes of 1988). This bill directed the California Energy Commission (CEC) to study global warming impacts to the state and develop an inventory of GHG emissions sources. In 2000, SB 1771 (Sher, Chapter 1018, Statutes of 2000) established the California Climate Action Registry to allow companies, cities and government agencies to voluntarily record their greenhouse gas emissions in anticipation of a possible program that would allow them to be credited for early reductions.

4.3.2.1 Assembly Bill 1493, Vehicular Emissions: Greenhouse Gases

In 2002, AB 1493 (Pavley, Chapter 200, Statutes of 2002) was signed into law, requiring CARB to develop regulations to reduce GHG emissions from passenger vehicles, light-duty trucks and non-commercial vehicles sold in California. To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California’s existing motor vehicle emission standards in 2004. These amendments require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. These emission limits reduce each model year through 2016. The U.S. EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks and sport utility vehicles on June 30, 2009. On September 24, 2009, the ARB adopted amendments to the Pavley regulations that reduce GHG emissions in new passenger vehicles from 2009 through 2016.

4.3.2.2 Executive Order S-3-05

In June 2005, Governor Schwarzenegger signed Executive Order (EO) S-3-05. The EO required the State to reduce GHG emissions to 1990 levels by 2020 and to reduce GHG emissions to 80 percent below 1990 levels by 2050. The EO established the Climate Action Team (CAT) for State Agencies and required the Secretary of Cal/EPA to report back to the Governor and Legislature biannually on progress toward meeting the GHG targets, GHG impacts to California, Mitigation and Adaptation Plans.

4.3.2.3 Senate Bill 1368, Electricity: Emissions of Greenhouse Gases.

In 2006, SB 1368 (Perata, Chapter 598, Statutes of 2006) created GHG performance standards for new long-term financial investments in base-load electricity generation serving California customers. SB 1368 directs the California Public Utilities Commission (CPUC) to adopt a GHG emission performance standard (EPS) for the future power purchases of California utilities. This law is designed to help spur the transition toward cleaner energy in California by placing restrictions on the ability of utilities to build new carbon-intensive plants or enter into new contracts with high carbon sources of electricity. Due to the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants.

4.3.2.4 California Global Warming Solutions Act (AB 32)

The California Global Warming Solutions Act required CARB to establish a statewide GHG emission cap for 2020. The legislature stated that “global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California.” AB 32 defines GHG emissions as all of the following gases: CO₂, PFC, CH₄, N₂O, HFC, SF₆, and nitrogen trifluoride. This agreement represents the first enforceable state-wide program in the United States to cap all GHG emissions from major industries. AB 32 laid out a program to reduce GHG emissions in California and from power-generation facilities located outside the state that serve California. AB 32 also requires CARB to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism that it adopts.

In addition to approving 37 GHG reduction strategies, CARB published the Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California Recommended for Board Consideration in October 2007 (CARB, 2007).

The Climate Change Scoping Plan, developed by CARB (2008), identifies a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health. The First Update to the Climate Change Scoping Plan was approved by the CARB on May 22, 2014, building upon the initial Scoping Plan with new strategies and recommendations. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. CARB is moving forward with a second update to the Scoping Plan to reflect the 2030 target established in EO B-30-15, which established a California GHG reduction target of 40% below 1990 levels by 2030. AB 32 required CARB to adopt regulations for the mandatory reporting of greenhouse gas emissions to monitor and enforce compliance with ARB’s GHG emissions reduction actions, including market based compliance mechanisms. The Regulation for the Mandatory Reporting

(MRR) GHG was originally approved in 2007 and revised in 2010, 2012, 2013, and 2014. The current Regulation became effective on January 1, 2015.

4.3.2.5 Senate Bill 375, Sustainable Communities

California's transportation system accounts for about 36% of California's GHG emissions. Passenger vehicles alone contribute 26 percent of California's total GHG emissions. The Sustainable Communities and Climate Protection Act of 2008 (SB 375; Steinberg, Chapter 728, Statutes of 2008) supports the State's climate action goals to reduce GHG emissions through coordinated transportation and land use planning. The purpose of SB 375 is to implement the state's GHG emissions reduction goals in the sector of cars and light trucks. This mandate requires CARB to determine per capita GHG emission reduction targets for each Metropolitan Planning Organization (MPO) in the state at two points in the future—2020 and 2035. The targets were developed through a collaborative process that involved input from the Regional Targets Advisory Committee (RTAC), the MPOs, and other stakeholders. Following input from the RTAC and in consultation with the MPOs, CARB provided each affected region with reduction targets for GHGs emitted by passenger cars and light trucks for 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets.

On April 4, 2012, the Regional Council of the Southern California Association of Governments (SCAG) adopted the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). This document applies to the Project area.

4.3.2.6 Executive Order B-30-15 and 2030 GHG Reduction Target

The First Update to the AB 32 Climate Change Scoping Plan (First Update) was adopted by the CARB in 2014 and defined the State's climate change priorities for the next five years and laid the groundwork to start the transition to the post-2020 goals set forth in EOs S-3-05 and B-16-2012. The First Update recommended the need for a 2030 mid-term GHG target to establish a continuum of action to reduce emissions.

In April 2015, Governor Edmund G. Brown issued EO B-30-15 to establish a California GHG reduction target of 40% below 1990 levels by 2030. To develop a clear plan of action to achieve the State's goals, the EO called on CARB to update the AB 32 Climate Change Scoping Plan to incorporate the 2030 target. In Summer 2016, the Legislature affirmed the importance of addressing climate change through passage of Senate Bill 32 (Pavley, Chapter 249, Statutes of 2016), which codified into statute the target of 40 % below 1990 levels by 2030 contained in the Governor's EO.

4.3.2.7 Senate Bill 32, California Global Warming Solutions Act of 2016: Emission Limits

In September 2016, the Legislature passed, and the Governor signed, SB 32 (Pavley, Chapter 249, Statutes of 2016) and AB 197 (Garcia, Chapter 250, Statutes of 2016). SB 32 codifies into statute the GHG emissions reductions target of at least 40% below 1990 levels by 2030 contained in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32 and keeps California on the path toward achieving the State's 2050 objective of reducing emissions to 80% below 1990 levels.

The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. AB 197 requires annual posting of GHG, criteria, and toxic air contaminant data throughout the State, organized by local and sub-county level for stationary sources and by at least a county level for mobile sources. It requires CARB to consider the social costs of the emissions of GHGs. When adopting rules and regulations to achieve emissions reductions to protect the State's most affected and disadvantaged communities. In the development of each scoping plan, AB 197 also directs CARB to identify for each emissions reduction measure, including each alternative compliance mechanism, a market-based compliance mechanism, and potential monetary and nonmonetary incentives, including the following information: the range of projected GHG emissions reductions that result from the measure, the range of projected air pollution reductions that result from the measure, and the cost-effectiveness, including avoided social costs, of the measure.

4.3.2.8 Senate Bill 1383: Short-lived climate pollutants

SB 1383 (Lara, Chapter 395, Statutes of 2016) requires the development, adoption, and implementation of a Short-Lived Climate Pollutant Strategy. Short-lived climate pollutants (SLCPs), such as black carbon, fluorinated gases, and methane, are powerful climate forcers that have a dramatic and detrimental effect on air quality, public health, and climate change. These pollutants create a warming influence on the climate that is many times more potent than that of CO₂. The State has issued a Proposed Short-Lived Climate Pollutant Reduction Strategy (Proposed SLCP Strategy), which establishes a path to decrease GHG emissions and displace fossil-based natural gas use. SB 1383 includes the following specific goals for 2030 from 2013 levels:

-) 40% reduction in methane,
-) 40% reduction in hydrofluorocarbon gases, and
-) 50% reduction in anthropogenic black carbon.

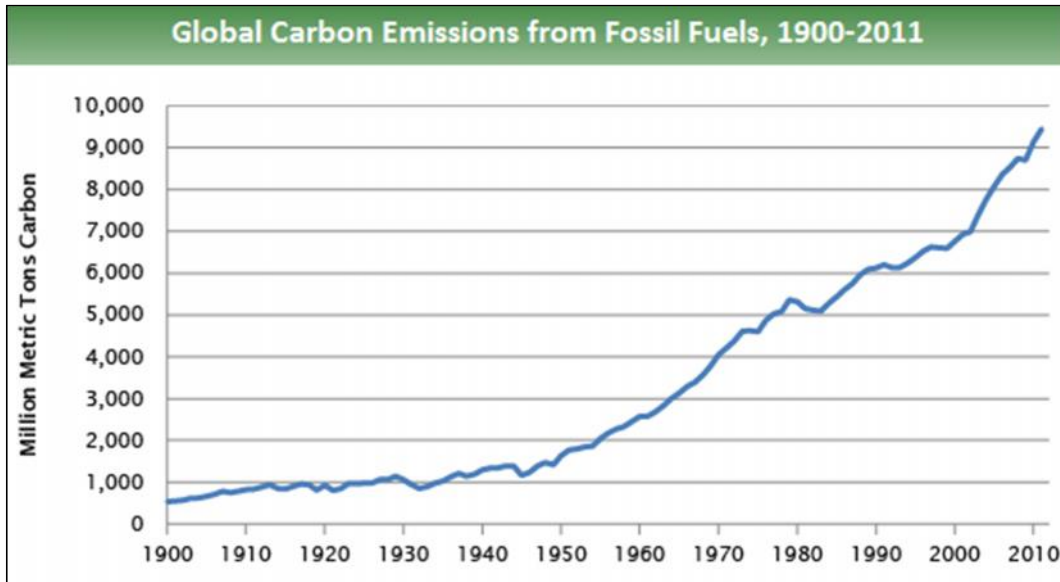
4.3.2.9 Scoping Plan Update

In January 2017, CARB issued the proposed 2017 Scoping Plan update to reflect the 2030 target set by EO B-30-15 and codified by SB 32. The draft Scoping Plan was developed with input by the Environmental Justice Advisory Committee (EJAC) and other stakeholders. The update to the AB 32 Climate Change Scoping Plan to reflect the 2030 target (2030 Target Scoping Plan) will serve as the framework to define the State's climate change priorities for the next 14 years and beyond.

4.4 GLOBAL, NATIONAL AND CALIFORNIA GHG EMISSIONS

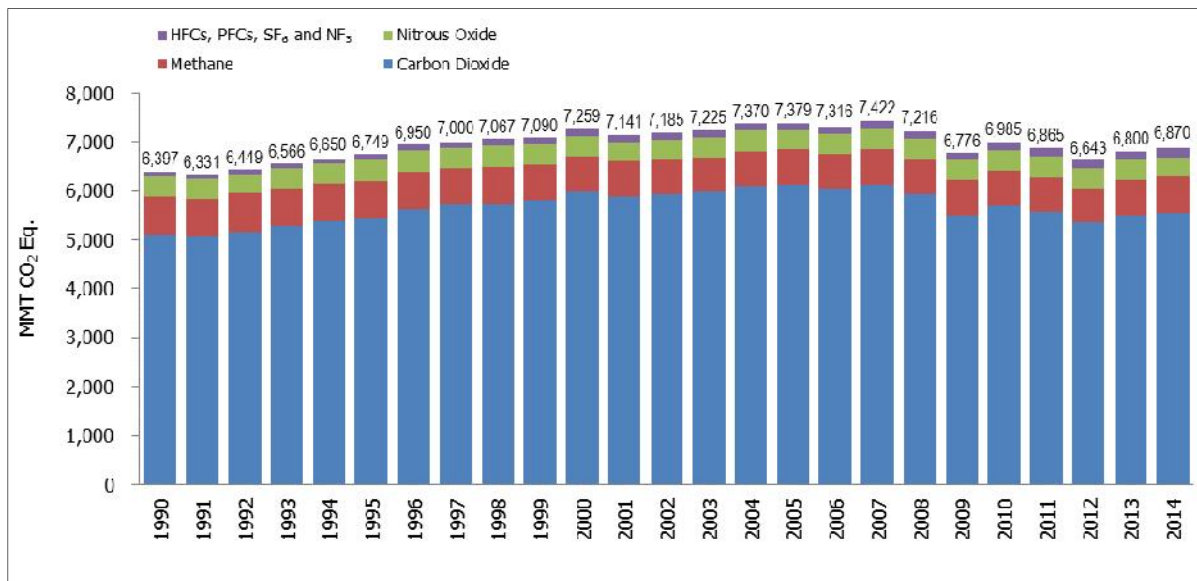
Global carbon emissions from fossil fuels have significantly increased since 1900. Since 1970, CO₂ emissions have increased by about 90%, with emissions from fossil fuel combustion and industrial processes contributing about 78% of the total greenhouse gas emissions increase from 1970 to 2011. Agriculture, deforestation, and other land-use changes have been the second-largest contributors. Emissions of non-CO₂ greenhouse gases have also increased significantly since 1900. Figure 6 shows the trend in global carbon emissions from fossil fuels (Boden, T.A., Marland, G., and Andres R.J., 2015).

FIGURE 6. TRENDS IN GLOBAL CARBON EMISSIONS



In 2014, total U.S. greenhouse gas emissions were 6,870.5 MMT or million metric tons CO₂e. Total U.S. emissions have increased by 7.4% from 1990 to 2014. Figure 7 illustrates the overall trends in total U.S. emissions by gas.

FIGURE 7. U.S. GREENHOUSE GAS EMISSIONS BY GAS (MMT CO₂E)



California has made progress toward achieving the 2020 statewide GHG target. As shown in Figure 8, in 2014, total GHG emissions decreased by 2.8 million metric tons of CO₂e to 2013, representing an overall decrease of 9.4% since peak levels in 2004. Carbon dioxide is the primary GHG emitted in California, accounting for 84% of total GHG emissions in 2014. Figure 9 illustrates that transportation is the single largest source of CO₂ in California, which is primarily comprised of on-road travel. Electricity production,

industrial and residential sources also make important contributions to CO₂ emissions. Methane is the second most important GHG in California, accounting for 9% of 2014 GHG emissions in CO₂e.

FIGURE 8. CALIFORNIA GHG INVENTORY TREND

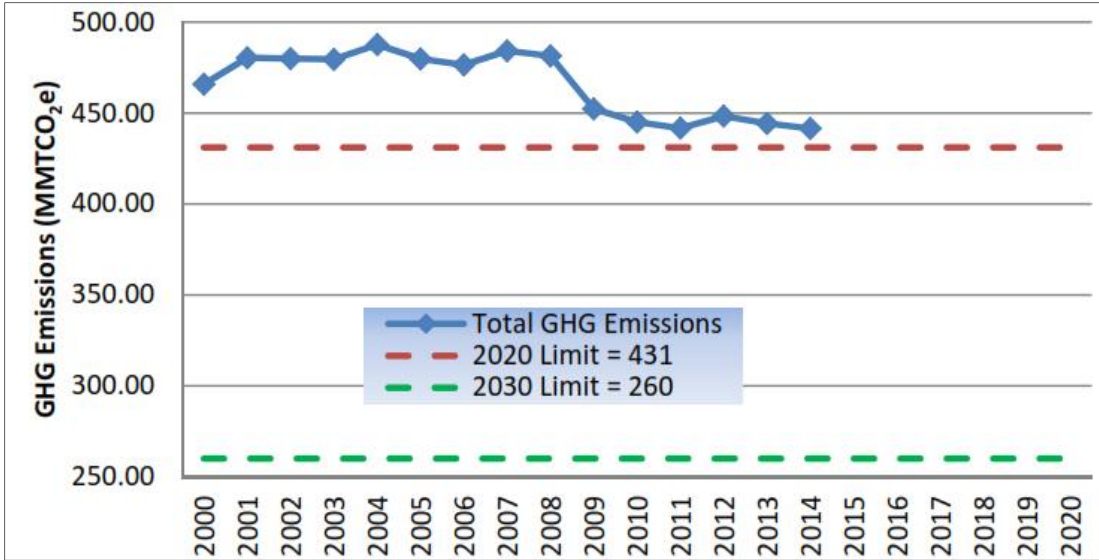
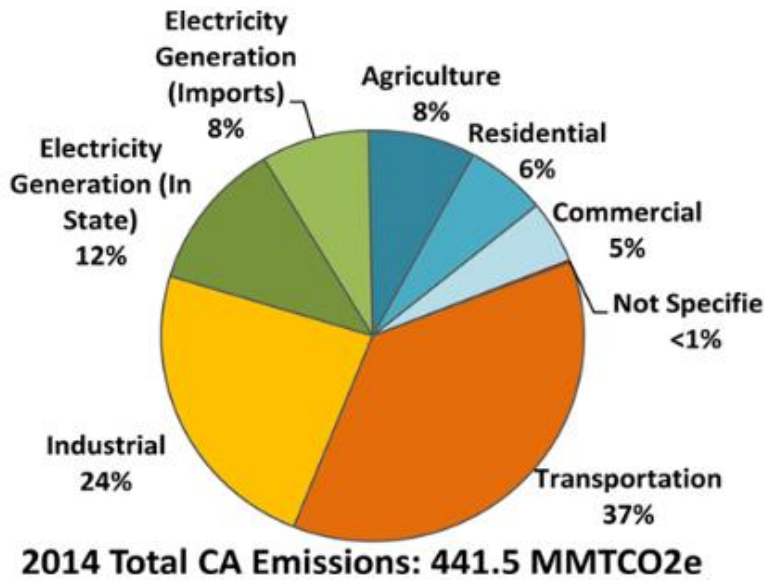


FIGURE 9. CALIFORNIA GHG EMISSIONS BY SECTOR



5.0 PROJECT AIR QUALITY AND GREENHOUSE GAS EMISSIONS IMPACT

This section compares the estimated annual and daily emissions summaries from the construction phase and operational phase of the proposed Avanti South Housing Development to the significant emission thresholds described in the AVAQMD CEQA and Federal Conformity Guidelines, dated August 2016 (Table 6), included in Attachment 1. The California Emissions Estimator Model® (CalEEMod) was used to estimate the emissions. The estimated emissions of criteria pollutants and greenhouse gases for each year of construction as well as annual operational emissions are below the applicable thresholds. GHG emissions are presented as CO₂e. Attachment 2 presents the detailed emissions results.

5.1 STANDARDS OF SIGNIFICANCE

AVAQMD CEQA Guidelines (2016) identify the following criteria, as established in Appendix G of the CEQA Guidelines, to determine if a project could potentially have a significant adverse effect to air quality.

A project could have a significant adverse effect on air quality if it:

- J Conflicts with or obstructs implementation of the applicable air quality plan.
- J Violates any air quality standard as adopted or as established by EPA or air district or contributes substantially to an existing or projected air quality violation.
- J Results in a cumulatively considerable net increase of any criteria pollutant for which the project region is considered nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).
- J Exposes sensitive receptors to substantial pollutant concentrations.
- J Creates objectionable odors affecting a substantial number of people.

The AVAQMD CEQA and Federal Conformity Guidelines, dated August 2016, states:

“Any project is significant if it triggers or exceeds the most appropriate evaluation criteria. The District will clarify upon request which threshold is most appropriate for a given project; in general, the emissions comparison (criteria number 1) is sufficient:

1. Generates total emissions (direct and indirect) in excess of the thresholds given in Table 10;
2. Generates a violation of any ambient air quality standard when added to the local background;
3. Does not conform with the applicable attainment or maintenance plan(s)
4. Exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1.”

Table 10 shows the AVAQMD Significant Emissions Thresholds.

TABLE 10. AVAQMD SIGNIFICANT EMISSIONS THRESHOLDS

Pollutant	Annual Threshold (tons)	Daily Threshold (pounds)
Greenhouse Gases (CO ₂ e)	100,000	548,000
Carbon Monoxide (CO)	100	548
Oxides of Nitrogen (NO _x)	25	137
Volatile Organic Compounds	25	137
Oxides of Sulfur (SO _x)	25	137
Particulate Matter (PM ₁₀)	15	82
Particulate Matter (PM _{2.5})	12	65
Hydrogen Sulfide (HS)	10	54
Lead (Pb)	0.6	3

5.1.1 Hazardous Air Pollutants Emissions

TACs, or in federal parlance under the Clean Air Act, Hazardous Air Pollutants (HAPs), are pollutants that may be expected to result in an increase in mortality or serious illness or that may pose a present or potential hazard to human health. Health effects of TACs include cancer, birth defects, neurological damage, damage to the body's natural defense system, and diseases that lead to death.

TACs can be separated into carcinogens and noncarcinogens based on the nature of the physiological degradation associated with exposure to the pollutant. For regulatory purposes, carcinogens are assumed to have no safe threshold below which health impacts will not occur. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

If the lead agency determines that the project will emit a TAC, the evaluation must assess the potential of those toxic emissions to adversely impact nearby populations. Impacts from TACs may be estimated by conducting a health risk assessment (HRA). The AVAQMD CEQA and Federal Conformity Guidelines (August 2016) the following project types to evaluate exposure of sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a HI (non-cancerous) greater than or equal to 1.

-) Any industrial project within 1000 feet;
-) A distribution center (40 or more trucks per day) within 1000 feet;
-) A major transportation project (50,000 or more vehicles per day) within 1000 feet;
-) A dry cleaner using perchloroethylene within 500 feet;
-) A gasoline dispensing facility within 300 feet.

The proposed Project is a planned community, which does not fall under any of the above project types. The commercial activities that are associated with the project are limited to small shopping centers with no industrial activities that would contribute to HAP/TAC emissions. As such, the proposed project is not considered to have a significant health impact to sensitive receptors. Therefore, HAP emissions were not

calculated and the project was not evaluated for potential health risks to sensitive receptors.

5.2 CONSTRUCTION EMISSIONS

Construction emissions associated with the Project include VOC, NO_x, CO, SO₂, PM₁₀ and PM_{2.5}. These emissions originate or are created primarily by mobile sources during the following phases of construction:

- J Site Preparation (e.g., dozers, tractors, loaders, backhoes)
- J Grading (e.g., excavators, graders, scrapers)
- J Building Construction (e.g., cranes, forklifts, generators sets, welders)
- J Architectural Coating (e.g., painting)
- J Paving (e.g., pavers, rollers)
- J Construction worker commuting (e.g., vehicle miles traveled)

As described in Section 1.3, Construction activities are expected to begin in 2017 and it is anticipated that the complete build out would occur over a 15-year period. The schedule may be condensed depending on the real estate market conditions. To analyze the worst-case emissions scenario, the construction schedule utilized in CalEEMod is conservative, assuming the entire Project will be completed in seven years after site preparation and grading. This schedule overestimates the emissions by spreading the activities over a shorter period than currently anticipated. Construction is expected to occur in five phases, excluding demolition, as the existing site is a clear vacant land. Phase 1, site preparation, is expected to begin in October 2017 and continue through March 2018. Phase 2, grading, is expected to begin in March 2018 and continue through September 2018. Phase 3, building construction, which will overlap with Phases 4 and 5, is expected to begin in September 2018 and come to completion in September 2025. Phase 4, architectural coating, is expected to begin in March 2018 and continue through September 2025. Phase 5, paving, is also expected to begin in September 2018 and be completed September 2025. Table 11 summarize the construction schedule.

TABLE 11. AVANTI SOUTH CONSERVATIVE CONSTRUCTION SCHEDULE (ESTIMATED)

Phase Number	Phase Name	Start Date	End Date	Number of Days per Week	Total Number of Days
1	Site Preparation	10/2/2017	3/2/2018	5	110
2	Grading	3/5/2018	9/3/2018	5	131
3	Building Construction	9/4/2018	9/1/2025	5	1825
4	Architectural Coating	9/4/2018	9/1/2025	5	1825
5	Paving	9/4/2018	9/1/2025	5	1825

The duration and phasing of construction utilized in the CalEEMod air quality analysis provides a “worst-case” scenario. Default construction equipment and vehicles are assigned by CalEEMod, including the numbers and operating hours per day. The actual fleet mix will vary at the time of construction, including the fleet mix (i.e., older vs. newer). Any delay in construction to outer years beyond 2023 will likely result in the use of newer, cleaner construction equipment. For this evaluation, the project developer was

consulted for the number of each type of construction equipment associated with each phase. The phase, types of equipment and numbers are summarized in Table 12.

TABLE 12. AVANTI SOUTH CONSTRUCTION EQUIPMENT BY PHASE

Phase Number	Phase Name	Offroad Equipment Type	Number of Equipment	Hours per Day
1	Site Preparation	Rubber Tired Dozers	3	8
		Tractors/Loaders/Backhoes	4	8
2	Grading	Excavators	3	8
		Graders	3	8
		Rubber Tired Dozers	3	8
		Scrapers	5	8
		Tractors/Loaders/Backhoes	3	8
3	Building Construction	Cranes	1	8
		Forklifts	3	8
		Generator Sets	3	8
		Tractors/Loaders/Backhoes	3	8
		Welders	3	8
4	Architectural Coating	Air Compressors	3	8
5	Paving	Pavers	3	8
		Paving Equipment	3	8
		Rollers	3	8

Dust, or PM₁₀, is a major concern in the Mojave Desert portions of the Antelope Valley. The area is susceptible to high wind events that can kick up large amounts of dust. In addition, any off-road activity, such as construction can add to the amount of dust, or fugitive emissions emitted. Fugitive dust emissions rates vary as a function of several parameters including soil content (i.e., silt, moisture), external acting forces (i.e., wind speed, number of vehicles, depth of disturbance or excavation) and finally the total area disturbed. By default, CalEEMod calculates and includes fugitive dust emissions resulting from the various construction phases. AVAQMD Rule 403 requires the minimization and control of fugitive dust, and due to the size of this Project a Dust Control Plan (DCP) will be required. The DCP will include all the areas to be disturbed and details of all fugitive dust controls, including suppressants. However, since the CalEEMod default emissions for PM₁₀ were not significant, the controls required by Rule 403 were not included in the modeling and are not reflected in the emission totals. As such, the PM₁₀ are overestimated; the actual emission will be lower due to compliance with AVAQMD Rule 403.

The final source of emissions generated by construction activities is the vehicle commutes of the construction workers to and from the Project site, as well as vendor and haul trips. The emissions associated with these activities were determined using CalEEMod defaults.

5.2.1 Overlap of Construction-Related Activities

The Project schedule used in the air quality analysis is anticipated to have an overlap in one of the construction years, which would affect the maximum peak daily construction emission levels for criteria pollutants.

- J The maximum peak daily construction emissions in 2018 for VOC, NO_x, CO, SO₂, PM₁₀ and PM_{2.5} would be a result of the potential overlap of Phase 3 Building Construction with Phase 4 Architectural Coating activities and Phase 5 Paving.

5.2.2 Construction Emissions Summary

Impacts Without Mitigation - Construction

Tables 13, 14 and 15 present the estimated annual and maximum daily construction emissions without implementation of mitigation measures. Table 16 presents the annual GHG emissions, by pollutant, estimated for the construction activities. The detailed emissions model outputs are presented in Attachment 2. As shown, the annual and daily emissions do not exceed any of the AVAQMD CEQA significance thresholds for criteria pollutants and GHGs, except for the maximum daily emissions of NO_x which do exceed the thresholds and will require mitigation.

TABLE 13. AVANTI SOUTH ANNUAL CONSTRUCTION EMISSIONS

Year	Total Construction Emissions (tons per year)						
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
2017	0.16	1.70	0.79	0.00	1.09	0.63	120
2018	2.44	17.18	13.42	0.03	3.29	1.99	2,716
2019	4.35	18.07	21.61	0.06	1.01	0.91	5,242
2020	4.13	16.59	20.24	0.06	0.94	0.84	5,171
2021	3.92	15.03	19.11	0.06	0.85	0.76	5,088
2022	3.74	13.77	18.11	0.05	0.79	0.70	4,981
2023	3.59	11.86	17.20	0.05	0.75	0.66	4,860
2024	3.51	11.44	16.44	0.05	0.72	0.63	4,801
2025	2.27	7.26	10.51	0.03	0.46	0.40	3,133
Maximum	4.35	18.07	21.61	0.06	3.29	1.99	5,242
CEQA Threshold	25	25	100	25	15	12	100,000
Exceeded?	No	No	No	No	No	No	No

TABLE 14. AVANTI SOUTH DAILY CONSTRUCTION EMISSIONS – SUMMER SCENARIO

Year	Total Construction Emissions (pounds per day)						
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
2017	5.08	52.35	24.54	0.04	21.01	12.60	4,102
2018	37.34	148.66	193.15	0.47	28.76	16.25	47,090
2019	35.04	136.52	179.19	0.46	13.91	6.99	46,447
2020	33.11	125.00	166.98	0.45	13.32	6.42	45,636
2021	31.51	113.88	158.19	0.45	12.71	5.84	45,052
2022	30.18	104.78	150.25	0.44	12.25	5.41	44,251
2023	28.91	90.34	142.66	0.43	11.91	5.08	43,146
2024	28.03	86.57	134.79	0.42	11.66	4.85	42,273
2025	27.24	82.72	129.43	0.41	11.41	4.61	41,500
Maximum	37.34	148.66	193.15	0.47	28.76	16.25	47,090
CEQA Threshold	137	137	548	137	82	65	548,000
Exceeded?	No	Yes	No	No	No	No	No

TABLE 15. AVANTI SOUTH DAILY CONSTRUCTION EMISSIONS – WINTER SCENARIO

Year	Total Construction Emissions (pounds per day)						
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
2017	5.07	52.36	24.34	0.04	21.01	12.60	4,081
2018	36.55	149.01	172.73	0.44	28.76	16.25	43,923
2019	34.30	136.73	160.64	0.43	13.92	7.00	43,330
2020	32.44	125.01	150.03	0.42	13.32	6.43	42,583
2021	30.88	113.72	142.31	0.42	12.71	5.84	42,057
2022	29.60	104.55	135.51	0.41	12.25	5.41	41,334
2023	28.37	90.17	128.65	0.40	11.91	5.09	40,336
2024	27.54	86.34	122.24	0.39	11.66	4.85	39,554
2025	26.79	82.47	117.77	0.39	11.41	4.61	38,868
Maximum	36.55	149.01	172.73	0.44	28.76	16.25	43,923
CEQA Threshold	137	137	548	137	82	65	548,000
Exceeded?	No	Yes	No	No	No	No	No

TABLE 16. AVANTI SOUTH ANNUAL CONSTRUCTION GREENHOUSE GAS EMISSIONS

Construction Year	Emissions (metric tons per year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
2017	119.57	0.04	0.00	120.46
2018	2,704.69	0.44	0.00	2,715.70
2019	5,231.20	0.42	0.00	5,241.70
2020	5,161.48	0.40	0.00	5,171.49
2021	5,078.37	0.38	0.00	5,087.98
2022	4,971.91	0.37	0.00	4,981.18
2023	4,850.95	0.35	0.00	4,859.63
2024	4,792.75	0.34	0.00	4,801.28
2025	3,127.21	0.22	0.00	3,132.75
Maximum CO₂e	5,241.70			
Threshold	100,000			
Exceed?	No			

Mitigation Measures - Construction

To further reduce the exhaust construction emissions associated with the proposed project, the project applicant will require in the construction specifications for the proposed project that all equipment utilized meet EPA Tier 3 non-road compression-ignition engine standards or better. The NO_x reduction achieved by utilizing construction equipment equipped with Tier 3 or newer non-road compression-ignition engines will bring the maximum daily emission rate below threshold values. Table 17 summarizes the type of construction equipment anticipated in this Project and model year engine required.

TABLE 17. AVANTI SOUTH CONSTRUCTION EQUIPMENT REQUIREMENTS

Offroad Equipment Type	Horsepower	Engine Model Year
Rubber Tired Dozers	247	2006+
Tractors/Loaders/Backhoes	97	2008+
Excavators	158	2007+
Graders	187	2006+
Scrapers	367	2006+
Cranes	231	2006+
Forklifts	89	2008+
Generator Sets	84	2008+
Welders	46	2008+
Pavers	130	2007+
Paving Equipment	132	2007+
Rollers	80	2008+
Air Compressors	78	2008+

Impacts with Mitigation - Construction

As discussed previously, without implementing mitigation measures, the maximum daily NO_x emissions generated during the construction of the proposed project would exceed the mass emission thresholds recommended by the AVAQMD. Tables 18, 19 and 20 present the estimated annual and maximum daily

construction emissions with implementation of mitigation measures. With implementation of the above Mitigation Measure, the mass daily construction emissions of NO_x would not exceed the thresholds set by the AVAQMD. Therefore, impacts from mass daily emissions of criteria pollutants during construction of the proposed project would be reduced to a less than significant level.

TABLE 18. AVANTI SOUTH MITIGATED ANNUAL CONSTRUCTION EMISSIONS

Year	Total Construction Emissions (tons per year)						
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
2017	0.03	0.62	0.78	0.00	1.03	0.58	120
2018	1.52	10.45	13.83	0.03	3.23	1.71	2,716
2019	3.68	15.89	22.24	0.06	1.68	0.81	5,242
2020	3.55	15.07	20.93	0.06	1.67	0.80	5,171
2021	3.42	14.17	19.87	0.06	1.64	0.77	5,088
2022	3.32	13.65	18.92	0.05	1.63	0.77	4,981
2023	3.22	12.22	18.03	0.05	1.62	0.76	4,860
2024	3.18	12.17	17.28	0.05	1.64	0.77	4,801
2025	2.08	8.01	11.08	0.03	1.09	0.51	3,133
Maximum	3.68	15.89	22.24	0.06	3.23	1.71	5,242
CEQA Threshold	25	25	100	25	15	12	100,000
Exceeded?	No	No	No	No	No	No	No

TABLE 19. AVANTI SOUTH MITIGATED DAILY CONSTRUCTION EMISSIONS – SUMMER SCENARIO

Year	Total Construction Emissions (pounds per day)						
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
2017	1.05	19.15	24.04	0.04	19.08	10.90	4,102
2018	31.21	124.51	197.07	0.47	25.33	13.33	47,090
2019	29.90	119.78	183.97	0.46	13.01	6.27	46,447
2020	28.65	113.39	172.28	0.45	12.87	6.13	45,636
2021	27.68	107.27	163.98	0.45	12.69	5.96	45,052
2022	26.95	103.89	156.45	0.44	12.67	5.94	44,251
2023	26.08	93.11	149.05	0.43	12.63	5.91	43,146
2024	25.49	92.11	141.25	0.42	12.62	5.90	42,273
2025	25.03	91.41	136.08	0.41	12.62	5.90	41,500
Maximum	31.21	124.51	197.07	0.47	25.33	13.33	47,090
CEQA Threshold	137	137	548	137	82	65	548,000
Exceeded?	No	No	No	No	No	No	No

TABLE 20. AVANTI SOUTH MITIGATED DAILY CONSTRUCTION EMISSIONS – WINTER SCENARIO

Year	Total Construction Emissions (pounds per day)						
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
2017	1.04	19.15	23.84	0.04	19.08	10.90	4,081
2018	30.42	124.86	176.65	0.44	25.33	13.33	43,923
2019	29.16	119.99	165.42	0.43	13.02	6.28	43,330
2020	27.97	113.41	155.33	0.42	12.87	6.14	42,583
2021	27.05	107.11	148.10	0.42	12.69	5.96	42,057
2022	26.37	103.66	141.72	0.41	12.67	5.95	41,334
2023	25.53	92.94	135.04	0.40	12.63	5.91	40,336
2024	25.00	91.88	128.69	0.39	12.63	5.90	39,554
2025	24.58	91.15	124.43	0.39	12.62	5.90	38,868
Maximum	30.42	124.86	176.65	0.44	25.33	13.33	43,923
CEQA Threshold	137	137	548	137	82	65	548,000
Exceeded?	No	No	No	No	No	No	No

5.3 OPERATIONAL EMISSIONS

Operational emissions associated with the Project include VOC, NO_x, CO, SO₂, PM₁₀ and PM_{2.5}. These emissions originate from area, energy, and mobile sources.

5.3.1 Area Source Emissions

Architectural Coatings

Due to normal wear and tear of the structures and their appurtenances as part of this Project, routine maintenance is required to prevent their deterioration. This maintenance usually requires the application or use of architectural coatings, such as paints, primers, solvents, and other surface coatings. Most of these other architectural coatings emit evaporative VOC emissions when they are applied or used. CalEEMod assumes a certain percentage of the square footage of these structures are coated per year, at a default rate of 10%, with all structures maintained. It was assumed that any paints used would meet the current AVAQMD Rule 1113 VOC limit of 50 grams per liter (g/L) for flats, 100 g/L for non-flat, and those used for traffic coating would meet the 100 g/L VOC limit.

Consumer Products

Consumer products include a wide variety of items such as household cleaning products, aerosols, personal cosmetics and hairsprays. Many of these products contain VOCs which are emitted during use. CARB approved the *Regulation for Reducing Emissions from Consumer Products* in 2015, with many products seeing a reduction in allowable VOCs beginning January 1, 2017. By the time this Project is fully operational, the availability of high VOC consumer products in California stores will be very limited. CalEEMod uses a default emission factor based on a 2008 emissions inventory.

Landscape Maintenance Equipment

Landscape maintenance includes fuel combustion equipment such as lawn mowers, shredders/grinders, trimmers, and hedge trimmers. The emissions are associated with both the commercial and residential landscape, and were estimated using default emission factors in CalEEMod.

Hearths

The emissions from hearths are associated with wood stoves and fireplaces. The AVAQMD currently has two rules on their rule making calendar, Wood Burning Fireplaces and Woodburning Fireplace/Heater, which will most likely lead to restrictions on the installation of fireplaces and wood burning stoves in new developments. In anticipation of these rules, the unmitigated emissions were adjusted to reflect that wood burning stoves and wood fireplaces would not be included in the proposed Project. Natural gas fireplaces would still be common place in single family residences, and potentially in condos and townhomes; however, the apartments would not have any fireplaces.

5.3.2 Energy Source Emissions

Combustion Emissions Associated with Natural Gas and Electricity

Combustions emissions from energy sources are based on the two largest utilities, electricity and natural gas consumption. These emissions are associated with the Project and were calculated by CalEEMod using default energy intensity rates.

5.3.3 Mobile Source Emissions

Vehicle Trips

The operational emissions from mobile sources in CalEEMod are based on daily vehicle trips of residences to work, shopping or other locations (i.e., H-W, H-S and H-O, respectively), and vehicle trips associated with the commercial portions of the project from customers, workers and non-workers (i.e., C-C, C-W, and C-NW, respectively). The trips are calculated using 3 main components, the trip rate on a daily basis, the trip length of each type, and finally the percentage of each type of trip. A Traffic Study was completed for the Project by Ruettgers & Schuler Civil Engineers in May 2016 and revised in May 2017. The trip rates for several of the land-use types were utilized from the traffic study, and for others default rates were used. Table 21 summarizes the trip rates used, and reason for those modified.

TABLE 21. SUMMARY OF VEHICLE TRIP RATES USED

Land Use SubType	CalEEMod default (/size/day)			Revised Rate (/size/day)			Reason for Change
	WkDy	Sat	Sun	WkDy	Sat	Sun	
Apartments Low Rise	6.59	7.16	6.07	6.65	6.39	5.86	Based on Traffic Study
City Park	1.89	22.75	16.74	0	0	0	All local, small city parks, including promenades, open spaces, drainage areas with trails on the perimeter and equestrian easement. Therefore, no outside travel to these sites.
Condo/Townhouse	5.81	5.67	4.84	5.81	5.67	4.84	Used default
Elementary School	1.29	0	0	1.29	0	0	Used default
Government Office Building	68.93	0	0	0	0	0	Local fire station, any vehicle travel is negligible
Medical Office Building	36.13	8.96	1.55	36.13	8.96	1.55	Used default
Other Asphalt Surfaces	0	0	0	0	0	0	These are streets and have no specific travel associated with them.
Retirement Community	2.4	2.03	1.95	3.44	2.61	2.84	Based on Traffic Study
Single Family Housing	9.52	9.91	8.62	9.52	9.91	8.62	Used default
Strip Mall	44.32	42.04	20.43	42.7	49.97	25.2 4	Based on Traffic Study

The trip lengths in CalEEMod are also default values based on average distances traveled for each defined mode in each locale defined in the model. The Project site is planned to be a mixed-use development, with the shops and medical facilities intended to cater to the community within the development. Therefore, many of the trip lengths were adjusted to take this locality into consideration.

Residential H-S

The average distance residents of the Project will need to drive for shopping access should not exceed five miles. Currently major grocery stores (e.g., Ralphps, Albertsons) range from 2.5 to 4.5 miles from the Project, and a major warehouse store (e.g., Costco) is approximately 5.0 miles away. In addition, the parcel directly east of the Project site is being developed into a large retailer (i.e., Wal-Mart) which will have both

groceries and household goods. Therefore, the average distance for H-S travel for residences (i.e., apartments, condos/townhouse, retirement community, and single family housing) was reduced to 2.5 miles.

Residential H-W

The CalEEMod default for average distance residents of the Project would commute to work is 10.8 miles. However, this default value does not representatively take into consideration residents that commute as far as away as Los Angeles, and even to large local employers such as Edwards Air Force Base and Lockheed Martin. To arrive at a more representative distance, the U.S. Census data were used², which show that mean travel time to work (in minutes), for workers age 16 years+, in 2011-2015, for Lancaster was 31.1 minutes. Assuming an average travel rate of 55 miles per hour, a distance of 30.34 was calculated. However, for the retirement community, this distance would not be representative. For the Project, it was assumed that the H-W trip length for the retirement community would be zero. In addition, one subset of the condo/townhouses that are defined as “Age-targeted” in the Avanti South Specific Plan, intend to have a mix-use of retirees and single families. Since CalEEMod does not have a separate land use subtype for “Age-targeted” the dwelling numbers were combined with the medium density residences (MDR) into one set of condo/townhouses. The following equation was used to modify the H-W trip length for the condo/townhouse land use subtype.

$$TL_{Adj} = \frac{\frac{D_{Age}}{2} \times 30.34 \text{ miles} + \frac{D_{Age}}{2} \times 0 \text{ miles} + D_{MDR} \times 30.34 \text{ miles}}{D_{Age} + D_{MDR}} = \frac{\frac{175}{2} \times 30.34 + \frac{175}{2} \times 0 + 378 \times 30.34}{175 + 378} = 25.54$$

Where:

D_{Age} = 175 (# of dwelling in “Age-targeted” development)

D_{MDR} = 378 (# of dwellings in MDR)

Commercial C-C

The default average customer to commercial trip in CalEEMod is 7.3 miles. The Project includes three areas, (i.e., elementary school, medical offices, and strip mall) that were defaulted to 7.3 miles. However, the design of Project intends to create a more localized use of these three areas.

For the elementary school, the Project design is intended to create walkability and allow residences to walk their children to school, or provide the freedom and security of local school for kids to walk to on their own. With most school children attending the elementary school living within the boundaries of the Project, and existing elementary schools of Nancy Cory Elementary and West Wind Elementary, approximately 3 miles away, an adjusted trip length of 2.5 miles was used in the operational settings.

For the medical offices, the intended use in the Project plan are services such as health care offices and clinics, laboratories (medical and dental), medical supplies, optometrists, physical therapy, specialty out patient clinics, medical offices, and urgent care. These services would target primarily those residents in

² <https://www.census.gov/quickfacts/table/LFE305215/0640130.00>
<http://www.towncharts.com/California/Economy/Lancaster-city-CA-Economy-data.html#Figure37>

the retirement community, hence the proposal to use the large commercial development (PA-29) directly to the west of the retirement community. Many of the services will also be utilized by the residents from the other developments within the Project as well. Finally, beyond and around three miles are several larger medical centers, including hospitals that surrounding existing residences currently travel to and those from the Project might travel to for more severe medical needs. The average distance travel length was modified to 2.5 miles to account for the intended portion of the customers that will be walking from the Project to those that may drive from the surrounding areas.

For the strip mall, the Project plan will generally include retail, restaurants, and office uses. The plan intends for these small shops to be possibly a small coffee shop, bakery, etc., that would target the residents of the Project, and with the walkability would encourage walking to these shops and eateries. It is not expected that many customers would travel from beyond east of Highway 14, as similar small shops exist along that route. Therefore, an average middle distance from the Project to Highway 14 of 2.5 miles was used as the C-C trip length. Table 22 summarizes the trip length modifications.

TABLE 22. AVANTI SOUTH DAILY TRIP LENGTH MODIFICATION

Land Use SubType	CalEEMod Trip Length (miles)			Revised Trip Length (miles)		
	H-W/ C-C	H-S/ C-W	H-O/ C-NW	H-W/ C-C	H-S/ C-W	H-O/ C-NW
Apartments Low Rise	10.8	7.3	7.5	30.34	2.5	7.5
City Park	7.3	9.5	7.3	7.3	9.5	7.3
Condo/Townhouse	10.8	7.3	7.5	25.54	2.5	7.5
Elementary School	7.3	9.5	7.3	2.5	9.5	7.3
Government Office Building	7.3	9.5	7.3	7.3	9.5	7.3
Medical Office Building	7.3	9.5	7.3	2.5	9.5	7.3
Other Asphalt Surfaces	7.3	9.5	7.3	7.3	9.5	7.3
Retirement Community	10.8	7.3	7.5	0	2.5	7.5
Single Family Housing	10.8	7.3	7.5	30.34	2.5	7.5
Strip Mall	7.3	9.5	7.3	2.5	9.5	7.3

Fleet Mix

The fleet mix within CalEEMod provides the fraction of vehicle types that would be associated with the vehicle miles traveled in each of the trip scenarios (e.g., H-W). This would include residents use of light duty automobiles (LDA) such as compact cars and sedans, to medium duty vehicles (MDV) such a large work pick-up trucks. Also captured are other smaller fractions of travel methods like urban buses (UB) and motorcycles (MCY). Similarly, these fractions are also applied to travel trips associated with the commercial land use subtypes with those having a more diverse fleet mix due to deliveries of goods and services. The default fleet mix rate is applied to all land use subtypes and must sum to 1, and is summarized in Table 23.

The fleet mixes were modified to best reflect the design of the Project and intended land uses. Types of vehicle classes that are not expected to travel to and from the various land use subtypes were zeroed out. The associated percentages with those zeroed out were distributed to the remaining vehicle classes using the same ratio. Table 24 summarizes how changes to the fleet mix were completed.

For the land use subtypes of apartments, condo/townhouse and retirement community, the MHD, HHD, OBUS and MH vehicle type percentages were zeroed out as it is not anticipated that these vehicles would be traveling to and from the areas due to the limited accessibility and size of residential parking. For the elementary school, the vehicle types of OBUS and MH were zeroed out, as there are no other buses beyond school buses and city buses that are anticipated traveling to and from the school, nor any motor homes that would be used to drop children off at school. The medical offices do not anticipate HHD, OBUS, SBUS and MH to be used in traveling to and from the site. The largest vehicles expected would be deliveries by box trucks (i.e., MHD). For the single family housing the MHD, HHD and OBUS were zeroed out. Table 25 summarizes the fleet mixes used in the unmitigated operational emissions.

Fugitive Dust Related to Vehicular Travel

Fugitive road dust caused by vehicles traveling on roads is based on statewide averages, which are comprised of material silt content, material moisture content and mean vehicle speed. The silt loading default factor in CalEEMod is 0.1 grams per square meter. Due to the high average daily traffic (greater than 10,000 within and around the project, a value of 0.032 grams per square meter was used. The value is based on the ARB average mean silt loading factor for collector streets³.

³ ARB, Miscellaneous Process Methodology 7.9, Entrained Road Travel, Paved Road Dust, (Revised April 2014)

TABLE 23. CALEEMOD DEFAULT FLEET MIX RATE

Land Use Subtype	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
DEFAULT	64.87	3.20	14.80	8.38	0.97	0.40	2.02	4.10	0.24	0.19	0.63	0.14	0.06

LDA – passenger cars

LDT1/LDT2 – light duty trucks (e.g., pickup truck)

MDV – medium duty trucks (e.g., minivan)

LHD1 – light heavy duty trucks (e.g., full-size pickup truck)

LHD2 – light heavy duty trucks (e.g., heavy duty pickup truck)

MHD – medium heavy duty (e.g., box truck)

HHD – heavy duty (e.g., truck tractor)

OBUS – other bus

UBUS – urban bus (e.g., Antelope Valley Transit Authority buses)

MCY – motorcycle

SBUS – school buses

MH – motor homes

TABLE 24. FLEET MIX RATE PERCENTAGE REVISION STEP

Type	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	Total
Default	64.87	3.20	14.80	8.38	0.97	0.40	2.02	4.10	0.24	0.19	0.63	0.14	0.06	100
Excluded	64.87	3.20	14.80	8.38	0.97	0.40	0.00	0.00	0.00	0.19	0.63	0.14	0.00	93.98
Revised	64.87/ .9398	3.20/ .9398	14.80/ .9398	8.38/ .9398	0.97/ .9398	0.40/ .9398	0.00	0.00	0.00	0.19/ .9398	0.63/ .9398	0.14/ .9398	0.00	100
	69.32	3.42	15.82	8.95	1.03	0.42	0.00	0.00	0.00	0.20	0.67	0.15	0.00	

TABLE 25. REVISED FLEET MIX RATES

Land Use SubType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	67.86	3.35	15.49	8.76	1.01	0.42	2.11	0.00	0.00	0.19	0.66	0.15	0.00
City Park	64.87	3.20	14.80	8.38	0.97	0.40	2.02	4.10	0.24	0.19	0.63	0.14	0.06
Condo/Townhouse	67.86	3.35	15.49	8.76	1.01	0.42	2.11	0.00	0.00	0.19	0.66	0.15	0.00
Condo/Townhouse	67.86	3.35	15.49	8.76	1.01	0.42	2.11	0.00	0.00	0.19	0.66	0.15	0.00
Elementary School	65.07	3.21	14.85	8.40	0.97	0.40	2.02	4.12	0.00	0.19	0.63	0.15	0.00
Government Office Building	64.87	3.20	14.80	8.38	0.97	0.40	2.02	4.10	0.24	0.19	0.63	0.14	0.06
Medical Office Building	67.96	3.35	15.51	8.78	1.01	0.42	2.11	0.00	0.00	0.19	0.66	0.00	0.00
Other Asphalt Surfaces	64.87	3.20	14.80	8.38	0.97	0.40	2.02	4.10	0.24	0.19	0.63	0.14	0.06
Retirement Community	67.96	3.35	15.51	8.78	1.01	0.42	2.11	0.00	0.00	0.19	0.66	0.00	0.00
Single Family Housing	67.82	3.34	15.48	8.76	1.01	0.42	2.11	0.00	0.00	0.19	0.66	0.15	0.07
Strip Mall	65.16	3.21	14.87	8.41	0.97	0.40	2.03	4.12	0.00	0.19	0.63	0.00	0.00

Traffic Emission Enhancement

For this project, various traffic enhancements are planned. The following section describes various designs that will be used in the project to alleviate traffic and increase walkability.

This project will be designed as a mixed-use in a way that increases the density without increasing the amount of land used. The project will include multiple land use types including residential, commercial, office, and institutional. This mixed-use development will have a coherent physical design that encourages walking and other non-automobile modes of transportation to and from residential to commercial locations.

The project site will include a bus turn out on Avenue L at 65th Street West. This location is part of the development per the Avanti South Specific Plan (May 2017). Having a bus stop as part of the development will facilitate the use of transit by people traveling to and from the project site.

This project will improve the Pedestrian Network within the project site. The project will incorporate a network of on- and off-street non-motorized circulation elements to promote walkability and reduce vehicle miles traveled within the site (Avanti South Specific Plan, May 2017). In addition, multi-use trails and bicycle lanes are integrated throughout the project to encourage less automobile traffic and improve the Pedestrian Network.

This project will provide various traffic calming measures that encourage people to walk or bike instead of using a vehicle (described above). In addition, the roads will be designed to reduce motor vehicle speed and encourage pedestrian and bicycle trips with traffic calming features. This project will provide the various traffic calming measures:

- J Provide residential streets with adequate Fire Department access and curb extensions (“bulb-outs”) to reduce vehicle speeds, and reduce pavement, and increase visibility of pedestrians;
- J Provide a connected pattern of interconnected streets and a mix of street types. In the residential subdivisions, the local streets will provide connections to the trails on adjacent collectors wherever possible;
- J Provide street trees and on-street parking and front yard setbacks to create the feeling of a more enclosed street space, or “outdoor room”;
- J Provide connected streets with short blocks to disperse traffic and provide multiple routes for vehicles and pedestrians;
- J Provide intersections with smaller turning radii to reduce vehicle speeds in residential subdivisions;
- J Design on street parking to slow traffic and shield pedestrians;
- J Design planting strips and trees in planted medians (where provided) and in curbside buffer areas to slow traffic;
- J Design well-marked crosswalks, and raised crosswalks, with medians on wider streets; and
- J Design for emergency vehicles with multiple access routes, with interconnected streets and alleys.

Area Emissions Enhancements

Based on Landscaping Guidelines in the Avanti South Specific Plan (May 2017), this project will use a planting and irrigation program that employs water conservation measures through the use of drought tolerant plant material, water conserving irrigation systems and practices, and the use of reclaimed water if and when it becomes available. For residential lots and other landscaped areas, use of turf shall be limited to an aggregate area of no greater than 25% of the total planted area within each lot or parcel. The plant materials for the project will incorporate desert-adapted and native plant materials. With the drought tolerant landscaping and turf area limited to less than 25% of the total area, it is expected that there will be minimal landscaping equipment usage. With incentives from programs like the AVAQMD's Lawn Mower Exchange Program⁴, it is expected the vast majority of landscaping equipment (lawn mower, leaf blower, chainsaw) will be electric by the operational year of 2032.

5.3.4 Energy Usage

Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for this project are located either outside the region (state), criteria pollutant emissions from offsite generation of electricity is generally excluded from the evaluation of significance.

Table 26 provide the amount of natural gas and electricity usage for each land use type. The energy source emissions were calculated using CalEEMod default values. The criteria pollutant and GHG emissions from electricity and natural gas usage can be found in Section 5 of Attachment 2.

⁴ Lawn Mower Exchange Program. <http://avaqmd.ca.gov/mobile-emission-reduction-programs>

TABLE 26. AVANTI SOUTH NATURAL GAS AND ELECTRICITY USE BY LAND USE

Land Use	Natural Gas Use (kBtu/yr)	Electricity Use (kWh/yr)
Apartments Low Rise	6,743,810	1,472,940
City Park	0	0
Condo/Townhouse	3,507,960	2,036,220
Condo/Townhouse (Age Targeted)	7,577,190	942,695
Elementary School	742,607	432,062
Government Office Building	104,600	133,200
Medical Office Building	830,838	1,058,010
Other Asphalt Surfaces	0	0
Retirement Community	5,312,050	1,209,050
Single Family Housing	18,723,800	4,975,980
Strip Mall	221,364	1,859,460
Total	43,764,219	14,119,617

kBtu/yr – Thousand British Thermal Units per year
kWh/yr – kilowatt hour per year

Rooftop solar is another aspect of this project that will reduce emissions. Most single-family houses will include solar, or be required to purchase solar directly from the City of Lancaster’s solar fields. The emissions reductions associated with the use of solar were not quantified as part of this study.

5.3.5 Water Supply, Treatment, and Distribution

Indirect GHG emissions result from the production of electricity used to supply, treat, and distribute water and wastewater. The amount of electricity required to supply, treat, and distribute water depends on the volume of water as well as the sources of the water. Table 27 provides amount of indoor and outdoor water expected to be used for each land use type based on CalEEMod default values. Note that the amount of indoor water is used to estimate the amount of wastewater and the amount of GHG emissions associated with the wastewater treatment but CalEEMod does not provide a separate wastewater table in the output files. The emissions associated with water and wastewater can be found in Section 7 of Attachment 2.

TABLE 27. AVANTI SOUTH INDOOR AND OUTDOOR WATER USE BY LAND USE

Land Use	Indoor Water Use (Mgal/yr)	Outdoor Water Use (Mgal/yr)
Apartments Low Rise	21.18	13.35
City Park	0.00	37.41
Condo/Townhouse	36.03	22.71
Elementary School	2.06	5.30
Government Office Building	1.99	1.22
Medical Office Building	9.97	1.90
Other Asphalt Surfaces	0.00	0.00
Retirement Community	16.68	10.52
Single Family Housing	36.88	23.25
Strip Mall	9.94	6.09
Total	134.71	121.75

Mgal/yr – Millions of Gallons of Water per year

5.3.6 Solid Waste

This project will result in the generation and disposal of solid waste. A large percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste were calculated using CalEEMod default values and can be found in Section 8 of Attachment 2. Table 23 provides the amount of waste disposed by each land use type.

TABLE 28. AVANTI SOUTH WASTE BY LAND USE

Land Use	Waste Disposed (ton/yr)
Apartments Low Rise	149.50
City Park	2.70
Condo/Townhouse	254.38
Elementary School	155.13
Government Office Building	9.30
Medical Office Building	857.84
Other Asphalt Surfaces	0.00
Retirement Community	117.76
Single Family Housing	663.79
Strip Mall	140.87
Total	2,351.27

Operational Emissions Summary

Impacts Without Mitigation

Tables 29, 30 and 31 present the estimated annual and maximum daily operational emissions without implementation of mitigation measures. Table 32 presents the operational GHG emissions, by pollutant. The detailed emissions model outputs are in Attachment 2. The annual operational emissions do not exceed any of the AVAQMD CEQA significance thresholds; therefore, mitigation measures are not required.

TABLE 29. AVANTI SOUTH ANNUAL OPERATIONAL EMISSIONS

Operational Emissions	Total Operational Emissions (tons per year)						
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
Area Sources	15.99	0.87	12.91	0.01	0.13	0.13	861
Energy	0.24	2.02	0.90	0.01	0.16	0.16	6,864
Mobile Sources	4.56	14.45	58.57	0.23	11.42	3.54	21,115
Waste	0.00	0.00	0.00	0.00	0.00	0.00	1,182
Water	0.00	0.00	0.00	0.00	0.00	0.00	1,177
Total	20.79	17.34	72.38	0.25	11.71	3.83	31,200
Threshold	25	25	100	25	15	12	100,000
Exceed?	No	No	No	No	No	No	No

TABLE 30. AVANTI SOUTH DAILY OPERATIONAL EMISSIONS – SUMMER SCENARIO

Operational Emissions	Total Operational Emissions (pounds per day)						
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
Area Sources	91.36	19.20	147.48	0.12	2.20	2.20	22,848
Energy	1.29	11.08	4.93	0.07	0.89	0.89	14,190
Mobile Sources	34.34	86.77	390.79	1.48	68.21	21.07	149,088
Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	126.99	117.05	543.20	1.67	71.30	24.16	186,126
Threshold	137	137	548	137	82	65	548,000
Exceed?	No	No	No	No	No	No	No

TABLE 31. AVANTI SOUTH DAILY OPERATIONAL EMISSIONS – WINTER SCENARIO

Operational Emissions	Total Operational Emissions (pounds per day)						
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
Area Sources	91.36	19.20	147.48	0.12	2.20	2.20	22,848
Energy	1.29	11.08	4.93	0.07	0.89	0.89	14,190
Mobile Sources	27.67	87.79	326.93	1.32	68.21	21.07	133,928
Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	120.33	118.08	479.34	1.52	71.30	24.16	170,966
Threshold	137	137	548	137	82	65	548,000
Exceed?	No	No	No	No	No	No	No

TABLE 32. AVANTI SOUTH UNMITIGATED OPERATIONAL GREENHOUSE GAS EMISSIONS

Emission Source	Emissions (metric tons per year)			
	CO ₂	CH ₄	N ₂ O	CO _{2e}
Area	855.86	0.04	0.02	861.32
Energy	6,834.24	0.23	0.08	6,864.21
Mobile Sources	21,097.16	0.73	0.00	21,115.34
Waste	477.29	28.21	0.00	1,182.46
Water	1,032.60	4.43	0.11	1,176.77
Total CO_{2e} (All Sources)	31,200.10			
Threshold	100,000			
Exceed?	No			

5.4 CUMULATIVE IMPACTS

This section addresses cumulative impacts associated with implementation of the proposed Project. A cumulative project list was developed for this evaluation and is presented in Table 33. CEQA Guidelines Section 15355 defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Section 15355 further states that cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. The following elements are necessary to an adequate discussion of significant cumulative impacts:

“(1) Either:

(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or

(B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.”

The AVAQMD relies on South Coast Air Quality Management District (SCAQMD) to determine cumulative impacts. As Lead Agency, the SCAQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or Environmental Impact Report. The only case where the significance thresholds for project specific and cumulative impacts differ is the HI significance threshold for TAC emissions. The project specific (project increment) significance threshold is $HI > 1.0$ while the cumulative (facility-wide) is $HI > 3.0$. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk and the cancer burden, both of which use the same significance thresholds (10 in 1 million and 0.5, respectively) for project specific and cumulative impacts.

Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

As shown in Sections 5.3 and 5.4, the Proposed Project with mitigation will not exceed the applicable AVAQMD regional threshold for construction and operational-source emissions. As such, the Project will result in a cumulatively less than significant impact.

TABLE 33. CUMULATIVE PROJECT LIST

Case No.	Related Cases	Project Description	Acreage	Location	Status
CUP 06-08	GPA 06-03, ZC 06-03, TPM 72535	395,355 sf commercial shopping center with off-site alcohol sales for Target and drug store	40.26 acres	Southeast corner of Avenue L and 60th Street West	Expires 5/19/16
CUP 06-09	GPA 06-04, ZC 06-04, TPM 68150, TAPM 73924	366,376 sf commercial shopping center, including a 217,652 sf Walmart with incidental off-site alcohol sales	40 acres	Northwest corner of Avenue L and 60th Street West	Expires 9/11/2016
CUP 14-13		Expansion of Blessed Junipero Serra Parish (church and associated facilities totally 62,612 sf)	17 acres	Northwest corner of 60th Street West and Avenue M	Expires 5/18/17
SPR 14-05		11,200 sf commercial building	1.94 acres	East side of 60th Street West, north of Ave L-8	Expires 2/8/18
TTM 60034		106 single family residences on 7,000 sf lots	27 acres	Southeast corner of 60th Street West and Avenue J-8	38 homes constructed, 68 remaining
TTM 61542		22 single family residences on 7,000 sf lots	4.3 acres	296 feet west of 56th Street West, south side of Avenue J-12	8 homes constructed, 14 remaining
TTM 44439		23 single family residences on 10,000 sf lots	8 acres	Southwest corner of Avenue L-12 and 70th Street West	23 homes remaining
TTM 53642 rev		161 single family residences on 7,000 sf lots	40 acres	Northeast corner of Avenue K-8 and 60th Street West	Expires 4/19/16
TTM 60057		302 single family residences on 10,000 sf lots	120 acres	Southeast corner of Avenue L-8 and 80th Street West	Expires 6/21/16
TTM 60885		49 single family residences on 7,000 sf lots	12.51 acres	West side of 60th Street West, approximately 290 feet south of Ave J-8	Expires 7/18/16, 1 ext remaining

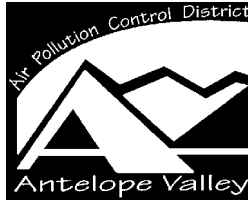
TABLE 33. CUMULATIVE PROJECT LIST

Case No.	Related Cases	Project Description	Acreage	Location	Status
TTM 61040		58 single family residences on 7,000 sf lots	15.1 acres	Northeast corner of future 55th Street West and future Ave K-14	Expires 6/20/16
TTM 61041		40 single family residences on 10,000 sf lots	15.1 acres	Northeast corner of 55th Street West and Avenue L	Expires 6/20/16
TTM 61600		33 single family residences on 7,000 sf lots	7.5 acres	640 feet east of 60th Street West, south side of Avenue K-12	Expires 6/20/16
TTM 61677		58 single family residences on 7,000 sf lots	15 acres	Southwest corner of 57th Street West and Avenue K	Expires 8/15/16, 1 ext remaining
TTM 61678		58 single family residences on 7,000 sf lots	15.14 acres	Southeast corner of Avenue K and future 57th Street West	Expires 9/18/16, 1 ext remaining
TTM 61734		19 single family residences on 7,000 sf lots	5 acres	663 feet north of Avenue J-12, 658 west of 60th Street West	Expires 7/18/16, 1 ext remaining
TTM 61920		108 single family residences on 10,000 and 15,000 sf lots	40 acres	Northeast corner of future 55th Street West and Avenue K	Expires 7/18/16
TTM 61989		56 single family residences on 10,000 sf lots	20.25 acres	Southwest corner of 67th Street West and Avenue I	Expires 12/19/16, 1 ext remaining
TTM 62403		204 single family residences on 10,000 sf lots	64.22 acres	Southeast corner of 80th Street West and Avenue L	Expires 12/19/15
TTM 62409		37 single family residences on 7,000 sf lots	10 acres	Northeast corner of Avenue K and 65th Street West	Expires 12/19/16, 1 ext remaining
TTM 66062		111 single family residences on 10,000 sf lots	56.4 acres	Southeast corner of future 85th Street West and future Ave L-8	Expires 1/17/16
TTM 66680		238 single family residences on 7,000, 10,000, and 15,000 sf lots	72.9 acres	Southwest corner of 52nd Street West and Avenue K-8	Expires 8/18/16

TABLE 33. CUMULATIVE PROJECT LIST

Case No.	Related Cases	Project Description	Acreage	Location	Status
TTM 66802		110 single family residences on 10,000 sf lots	40.3 acres	Northeast corner of 70th Street West and Avenue L-8	Expires 4/16/16
TTM 67494		19 single family residences on 15,000 sf lots	9.55 acres	Northeast corner of Avenue L and 52nd Street West	Expires 4/21/17
TTM 72565		36 single family residences on 7,000 sf lots	10 acres	Southwest corner of 65th Street West and Avenue J-8	Expires 5/19/16
TTM 72534	CUP 15-08	Residential Planned Development for 118 lots and a park		Southeast corner of 67th Street West and Avenue J-8	Under Review
TTM 71210	CUP 15-19	Residential Planned Development for 171 lots and two park sites		Southeast corner of 55th Street West and Avenue K	Under Review
TPM 69747		2 single family residential lots		Vicinity of Avenue K-8 and 55th Street West	Expires 8/18/16
TPM 70303		2 single family residential lots		Vicinity of Avenue K-8 and 55th Street West	Expires 8/18/16
SP 15-01	TTM 73507	Specific Plan for a residential planned development of 751 lots with park and trail amenities		Bounded by 62nd Street West, 70th Street West, Avenue K, and Avenue K-8	Under Review
CUP 14-10	GPA 14-01, ZC 14-01	150 MW Photovoltaic Facility	1,191 acres	Generally Bounded by Avenue K, the California Aqueduct, 80th Street West, and 107th Street West	135 MW of the 150 MW under construction

Attachment 1.
Antelope Valley AQMD California Environmental Quality Act
(CEQA) and Federal Conformity Guidelines, August 2016



Antelope Valley AQMD

California Environmental Quality Act
(CEQA)

and

Federal Conformity

Guidelines

August 2016

AVAQMD Planning, Rule-making and Grants Section
AVAQMD Air Monitoring Section

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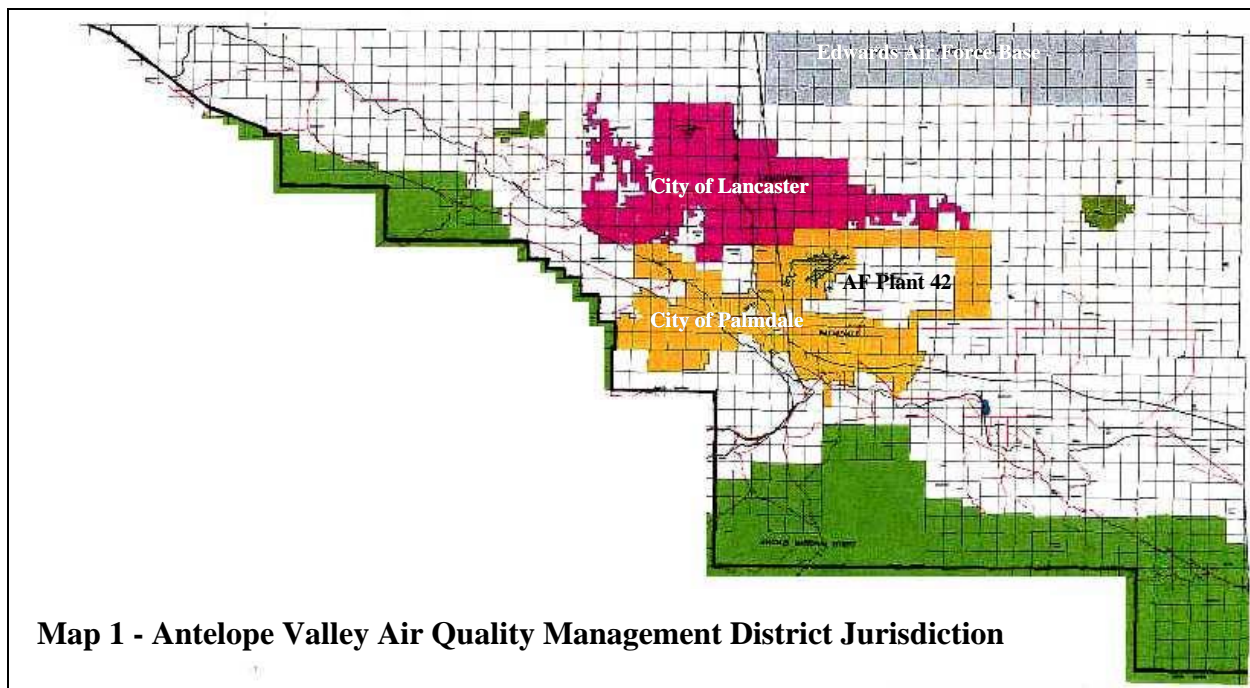
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Background

Under the California Environmental Quality Act (CEQA), the AVAQMD (District) is an expert commenting agency on air quality and related matters within its jurisdiction (or impacting on its jurisdiction). The District has dedicated resources to reviewing projects to ensure that they will not: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any federal attainment plan. The District has adopted a federal attainment plan for ozone pursuant to the Federal Clean Air Act.

Purpose

These Guidelines are intended to assist persons preparing environmental analysis or review documents for any project within the jurisdiction of the District by providing background information and guidance on the preferred analysis approach.



Jurisdiction

The District has jurisdiction over the northern, desert portion of Los Angeles County (please refer to Map 1). This region includes the incorporated cities of Lancaster and Palmdale, Air Force Plant 42, and the southern portion of Edwards Air Force Base. The Kern County-Los Angeles County boundary forms the northern boundary of the District; the San Bernardino-Los Angeles County boundary forms the eastern boundary of the District.

Non-attainment Designations and Classification Status

The United States Environmental Protection Agency and the California Air Resources Board have designated portions of the District non-attainment for a variety of pollutants, and some of those designations have an associated classification. Please refer to Table 1 for a chart of these designations and classifications.

Table 1 – AVAQMD Designations and Classifications

Ambient Air Quality Standard	AVAQMD
One-hour Ozone (Federal) – standard has been revoked, this is historical information only	Proposed attainment in 2014; historical classification Severe-17
Eight-hour Ozone (Federal 84 ppb (1997))	Subpart 2 Nonattainment; classified Severe-15
Eight-hour Ozone (Federal 75 ppb (2008))	Nonattainment, classified Severe-15
Eight-hour Ozone (Federal 70 ppb (2015))	Expected nonattainment; classification to be determined
Ozone (State)	Nonattainment; classified Extreme
PM ₁₀ 24-hour (Federal)	Unclassifiable/attainment
PM _{2.5} Annual (Federal)	Unclassified/attainment
PM _{2.5} 24-hour (Federal)	Unclassified/attainment
PM _{2.5} (State)	Unclassified
PM ₁₀ (State)	Nonattainment
Carbon Monoxide (State and Federal)	Attainment
Nitrogen Dioxide (State and Federal)	Attainment/unclassified
Sulfur Dioxide (State and Federal)	Attainment/unclassified
Lead (State and Federal)	Attainment
Particulate Sulfate (State)	Unclassified
Hydrogen Sulfide (State)	Unclassified
Visibility Reducing Particles (State)	Unclassified

Attainment Plans

The District has adopted a single attainment plan for ozone. Please refer to Table 2 for information regarding this attainment plan.

Table 2 – AVAQMD Attainment Plans

Name of Plan	Date of Adoption	Standard(s) Targeted	Applicable Area	Pollutant(s) Targeted	Attainment Date*
AVAQMD 2004 Ozone Attainment Plan (State and Federal)	4/2004	Federal one hour ozone	Entire District	NO _x and VOC	2007
AVAQMD Federal 8-Hour Ozone Attainment Plan	5/20/2008	Federal eight hour ozone (84 ppb)	Entire District	NO _x and VOC	2019 (revised from 2021)

*Note: A historical attainment date given in an attainment plan does not necessarily mean that the affected area has been re-designated to attainment; please refer to Table 1.

Rules and Regulations

The District maintains a set of Rules and Regulations to improve air quality and maintain good air quality. Please contact the District to obtain a copy of the District rulebook, or visit www.avaqmd.ca.gov.

Recommended Environmental Setting Elements

Air Quality Data

The District gathers a variety of air quality data at the Lancaster monitoring site. Table 3 details the data available from the District for this site.

Table 3 - Available Air Quality Data

Site	Address	Pollutants	Dates
Lancaster	W. Ponderosa	O ₃ , NO _x , CO, PM ₁₀ (Hi-Vol and TEOM)	7/1/97 to 11/01
Lancaster	W. Ponderosa	PM _{2.5}	1/1/99 to 11/01
Lancaster	43301 Division St.	O ₃ , NO _x , CO, PM ₁₀ (hourly), PM _{2.5}	11/01 to present

Meteorological Data

A variety of meteorological data is available from the District for the Lancaster site. Table 4 contains a list of the data available for the Lancaster site.

Table 4 - Available Meteorological Data

Site	Address	Data	Dates
Lancaster	W. Ponderosa	Wind speed/direction, pressure, temperature, humidity	7/1/97 to 11/01
Lancaster	43301 Division St.	Wind speed/direction, pressure, temperature, humidity	11/01 to present

Topography and Climate Discussion

The District covers a western portion of the Mojave Desert Air Basin (MDAB). The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains which dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada mountains to the north; air masses pushed onshore in southern California by differential heating are channeled through the MDAB. The MDAB is separated from the southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet), whose passes form the main channels for these air masses. The Antelope Valley is bordered in the northwest by the Tehachapi Mountains, separated from the Sierra Nevadas in the north by the Tehachapi Pass (3,800 ft elevation). The Antelope Valley is bordered in the south by the San Gabriel Mountains, bisected by Soledad Canyon (3,300 ft).

During the summer the MDAB is generally influenced by a Pacific Subtropical High cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist and unstable air masses from the south. MDAB annual average precipitation is presented in Table 5; the data displayed is 1981-2010 averages from the NOAA National Climate Data Center. The MDAB is classified as a dry-hot desert climate (BWh), with portions classified as dry-very hot desert (BWwh), to indicate at least three months have maximum average temperatures over 100.4° F.

Table 5 - MDAB Average Annual Precipitation

Site	County	District	Precipitation (inches)
Baker	San Bernardino	MDAQMD	4.48
Barstow Daggett Airport	San Bernardino	MDAQMD	4.06
Barstow	San Bernardino	MDAQMD	5.30
Blythe Airport	Riverside	MDAQMD	3.77
Desert Center 2 NNE	Riverside	SCAQMD	3.92
Eagle Mountain	Riverside	SCAQMD	4.10
Goldstone Echo Number 2	San Bernardino	MDAQMD	5.88
Joshua Tree	San Bernardino	MDAQMD	5.11
Lancaster Wm J Fox Field	Los Angeles	AVAQMD	7.38
Mitchell Caverns	San Bernardino	MDAQMD	11.50
Mojave	Kern	EKAPCD	6.67
Mountain Pass 1 SE	San Bernardino	MDAQMD	9.94
Needles Airport	San Bernardino	MDAQMD	4.62
Palmdale Airport	Los Angeles	AVAQMD	8.30
Palmdale	Los Angeles	AVAQMD	7.40

Site	County	District	Precipitation (inches)
Parker Reservoir	San Bernardino	MDAQMD	6.16
Pearblossom	Los Angeles	AVAQMD	6.73
Randsburg	Kern	EKAPCD	7.26
Trona	San Bernardino	MDAQMD	3.88
Twentynine Palms	San Bernardino	MDAQMD	4.46
Victorville Pump Plant	San Bernardino	MDAQMD	6.15
Wrightwood	Los Angeles	AVAQMD	22.61

Recommended Impacts Discussion Elements

Direct Impacts

Direct impacts are the result of the project itself (from its construction and operation), in the form of project activity and trips generated by the project. For example, in the case of a subdivision project, construction emissions (equipment exhaust, wind erosion, vehicle exhaust), housing use activity (natural gas consumption) and trips to and from the housing (vehicle exhaust, tire wear) represent direct impacts. In the case of a new mine project, construction emissions (equipment exhaust, wind erosion, vehicle exhaust), material handling (drilling, blasting, transfers, crushing, screening, bagging), operational emissions (wind erosion, vehicle travel, vehicle exhaust, tire wear), and employee/customer/delivery travel (vehicle exhaust, tire wear) represent direct impacts.

Indirect Impacts

Indirect impacts are the result of changes that would not occur without the project. In the case of a subdivision project, indirect impacts on the surrounding community can be generated in many ways: nearby construction of roadways (or roadway modifications) and other infrastructure to support the subdivision, construction and operation of new commercial/retail establishments, changes in traffic/circulation patterns that result in increased congestion/delays, etc. In the case of a new mine project, indirect impacts can be generated by nearby construction of infrastructure to support the mine, housing constructed and/or occupied by mine employees, changes in traffic/circulation patterns that result in increased congestion/delays, etc.

Cumulative Impacts

Cumulative impacts are similar to direct and indirect impacts of the project, which the project contributes to. In the case of a subdivision project, a given project has a cumulative impact with all other subdivision projects, from the standpoint of each type of impact (cumulative construction emissions, residential natural gas consumption, solvent use, transportation emissions, congestion, etc.). Similarly, a new mine project has a cumulative impact with all other mining projects, from the standpoint of each type of impact (cumulative construction emissions, diesel equipment emissions, blasting emissions, fugitive emissions, transportation, congestion, etc.).

Conformity Impacts

A project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable District rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Conformity with growth forecasts can be established by demonstrating that the project is consistent with the land use plan that was used to generate the growth forecast. An example of a non-conforming project would be one that increases the gross number of dwelling units, increases the number of trips, and/or increases the overall vehicle miles traveled in an affected area (relative to the applicable land use plan).

Sensitive Receptor Land Uses

Residences, schools, daycare centers, playgrounds and medical facilities are considered sensitive receptor land uses. The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated using significance threshold criteria number 4 (refer to the significance threshold discussion):

- Any industrial project within 1000 feet;
- A distribution center (40 or more trucks per day) within 1000 feet;
- A major transportation project (50,000 or more vehicles per day) within 1000 feet;
- A dry cleaner using perchloroethylene within 500 feet;
- A gasoline dispensing facility within 300 feet.

Recommended Substantiation Discussion Elements

For projects applying the emissions-based significance thresholds, project emissions quantification is required. In addition the environmental documentation must include support for the quantification methodology used, including emission factors, emission factors source, assumptions, and sample calculations where necessary. For projects using a calculation tool such as CalEEMod or URBEMIS, the support section must specify the inputs and settings used for the evaluation.

Significance Thresholds

Any project is significant if it triggers or exceeds the most appropriate evaluation criteria. The District will clarify upon request which threshold is most appropriate for a given project; in general, the emissions comparison (criteria number 1) is sufficient:

1. Generates total emissions (direct and indirect) in excess of the thresholds given in Table 6;
2. Generates a violation of any ambient air quality standard when added to the local background;
3. Does not conform with the applicable attainment or maintenance plan(s)¹;

¹ A project is deemed to not exceed this threshold, and hence not be significant, if it is consistent with the existing land use plan. Zoning changes, specific plans, general plan amendments and similar land use plan changes which do not increase dwelling unit density, do not increase vehicle trips, and do not increase vehicle miles traveled are also deemed to not exceed this threshold.

4. Exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1.*

**Refer to the Sensitive Receptor Land Use discussion above*

A significant project must incorporate mitigation sufficient to reduce its impact to a level that is not significant. A project that cannot be mitigated to a level that is not significant must incorporate all feasible mitigation. Note that the emission thresholds are given as a daily value and an annual value, so that a multi-phased project (such as a project with a construction phase and a separate operational phase) with phases shorter than one year can be compared to the daily value.

Table 6 – Significant Emissions Thresholds

Criteria Pollutant	Annual Threshold (tons)	Daily Threshold (pounds)
Greenhouse Gases (CO ₂ e)	100,000	548,000
Carbon Monoxide (CO)	100	548
Oxides of Nitrogen (NO _x)	25	137
Volatile Organic Compounds (VOC)	25	137
Oxides of Sulfur (SO _x)	25	137
Particulate Matter (PM ₁₀)	15	82
Particulate Matter (PM _{2.5})	12	65
Hydrogen Sulfide (H ₂ S)	10	54
Lead (Pb)	0.6	3

District Contacts

If an address is not listed, please use the general address, to the attention of the listed individual.

AVAQMD General and Rulebook	Crystal Goree (661) 723-8070 x1 Mailing and Physical Address: 43301 Division St., Suite 206 Lancaster, CA 93535-4649
Planning and Rules	Tracy Walters (760) 245-1661 x6122
Air Quality and Meteorological Data	Orlando Salinas (760) 245-1661 x1810
CEQA and Conformity	Alan De Salvio (760) 245-1661 x6726
Permitting	Bret Banks (661) 723-8070 x2

Appendix A – Basic Definitions of Major Air Pollutants

Technical and/or legal definitions exist for many of these pollutants, depending on context. The following definitions are for general, introductory purposes only:

Carbon Dioxide (CO₂) – Common product of combustion. Not a criteria pollutant, but considered an important “greenhouse gas.” Important on a national or global scale.

Carbon Monoxide (CO) – Common product of incomplete combustion. A criteria pollutant with state and federal standards. Not a primary photochemical reaction compound, but involved in photochemical reactions. Dissipates rapidly, and is therefore only important on a local scale near sources.

Criteria Pollutants – Those air pollutants specifically identified for control under the Federal Clean Air Act (currently six: carbon monoxide, nitrogen oxides, lead, sulfur oxides, ozone and particulates).

Lead (Pb) – A heavy metal, present in the environment mainly due to historical use in motor vehicle fuel. Primarily associated with lead smelting operations. A criteria pollutant with state and federal standards. Primarily of concern near sources.

Oxides of Nitrogen (NO_x) – Common product of combustion in the presence of nitrogen. Includes NO₂, which is a criteria pollutant with state and federal standards. Locally and regionally important due to its involvement in the photochemical formation of ozone.

Oxides of Sulfur (SO_x) – Common product of combustion in the presence of sulfur. Associated primarily with diesel and coal burning. Includes SO₂, a criteria pollutant with state and federal standards. Primarily of concern near sources.

Ozone (O₃) – A gas mainly produced by a photochemical reaction between reactive organic gases and oxides of nitrogen in the presence of sunlight (also produced by molecular oxygen in the presence of ultraviolet light or electrical discharge). A strong oxidant that is damaging at ground level but necessary at high altitude (in the stratosphere, where it absorbs dangerous ultraviolet light). Also considered an important greenhouse gas. A criteria pollutant with state and federal standards.

Particulate Matter (TSP or PM₃₀) – Solid or liquid matter suspended in the atmosphere, excluding water. Includes aerosols and droplets that form in the atmosphere. Locally and regionally important.

Reactive/Volatile Organic Compounds/Gases (ROG, VOC, NMOG, NMOC) – A portion of total organic compounds or gases, excludes methane, ethane and acetone (due to low photochemical reactivity). “ROG” is generally used by the California Air Resources Board, “VOC” is generally used by the United States Environmental Protection Agency, but all four terms are interchangeable for most uses. Regionally important due to its involvement in the photochemical reaction that produces ozone.

Respirable Particulate Matter (coarse or PM₁₀, and fine or PM_{2.5}) – That portion of particulate matter that tends to penetrate into the human lung. The subscript refers to aerodynamic diameter. Criteria pollutants with state and federal standards. Locally and regionally important.

Total Organic Compounds/Gases (TOC or TOG) – Compounds containing at least one atom of carbon, except carbon monoxide, carbon dioxide, carbonic acid, metallic carbides and metallic carbonates. Primarily methane in the atmosphere, a “greenhouse gas.”

Attachment 2.
Detailed Emission Results

Avanti South Project - Antelope Valley APCD Air District, Annual

Avanti South Project
Antelope Valley APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	10.00	1000sqft	1.30	10,000.00	0
Medical Office Building	79.43	1000sqft	5.20	79,430.00	0
Elementary School	850.00	Student	12.80	71,062.86	0
Other Asphalt Surfaces	38.40	Acre	38.40	1,672,704.00	0
City Park	31.50	Acre	31.50	50,000.00	0
Apartments Low Rise	325.00	Dwelling Unit	14.30	325,000.00	930
Condo/Townhouse	378.00	Dwelling Unit	48.30	756,000.00	1081
Condo/Townhouse	175.00	Dwelling Unit	22.80	350,000.00	501
Retirement Community	256.00	Dwelling Unit	31.30	486,400.00	732
Single Family Housing	566.00	Dwelling Unit	93.00	1,415,000.00	1619
Strip Mall	134.16	1000sqft	8.80	134,160.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2032
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Avanti South Project - Antelope Valley APCD Air District, Annual

Project Characteristics - All default values.

Land Use - Dimensions and acreage per Avanti South Specific Plan Tables 2-2 and 2-3 (May 2017) and Royal Investors Group, LLC

Construction Phase - Construction Schedule per Royal Investors Group

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Trips and VMT -

On-road Fugitive Dust - Based on California Statewide Silt Lading Values for Collector Streets in ARB's Miscellaneous Process Methodology 7.9 Entrained Road Travel, Paved Road Dust (April 2014).

Grading - Based on Avanti South Specific Plan (December 2016), net material exported 1352 cubic yards (714 cubic yards for Avanti South and 638 cubic yards for Avanti West)1352.

Architectural Coating - AVAQMD Rule 1113. Assume 90% flat paints (50 g/L) and 10% non-flat paints at 100 g/L. Parking VOC content assumed to be compliant with AVAMD Rule 1113s Traffic Marking Coating VOC content.

Vehicle Trips - Adjustments based on Traffic Study completed for Avanti South plan; 3 mile C-C adjustment based on nearby medical, small strip mall locations in vicinity

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust - Based on California Statewide Silt Lading Values for Collector Streets in ARB's Miscellaneous Process Methodology 7.9 Entrained Road Travel, Paved Road Dust (November 2016).

Woodstoves - No wood burning stoves or fireplaces

Area Coating - AVAMD Rule 1113. Assume 90% flat paints (50 g/L) and 10% non-flat paints at 100 g/L. Parking VOC content assumed to be compliant with AVAMD Rule 1113's Traffic Marking Coating VOC content.

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Use of no less than Tier 3 engines in all equipment to reduce NOx impact.

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
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tblFireplaces	NumberWood	193.55	0.00
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tblFleetMix	FleetMixLandUseSubType	Medical Office Building	City Park
tblFleetMix	FleetMixLandUseSubType	Elementary School	Condo/Townhouse
tblFleetMix	FleetMixLandUseSubType	Other Asphalt Surfaces	Condo/Townhouse
tblFleetMix	FleetMixLandUseSubType	City Park	Elementary School
tblFleetMix	FleetMixLandUseSubType	Apartments Low Rise	Government Office Building
tblFleetMix	FleetMixLandUseSubType	Condo/Townhouse	Medical Office Building
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tblFleetMix	HHD	0.04	0.04
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tblFleetMix	LDA	0.65	0.68
tblFleetMix	LDA	0.65	0.68
tblFleetMix	LDA	0.65	0.68
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tblLandUse	BuildingSpaceSquareFeet	1,018,800.00	1,415,000.00
tblLandUse	GreenSpaceSquareFeet	1,372,140.00	50,000.00
tblLandUse	LandUseSquareFeet	1,372,140.00	50,000.00
tblLandUse	LandUseSquareFeet	175,000.00	350,000.00
tblLandUse	LandUseSquareFeet	378,000.00	756,000.00
tblLandUse	LandUseSquareFeet	256,000.00	486,400.00
tblLandUse	LandUseSquareFeet	1,018,800.00	1,415,000.00
tblLandUse	LotAcreage	0.23	1.30
tblLandUse	LotAcreage	1.82	5.20
tblLandUse	LotAcreage	1.63	12.80
tblLandUse	LotAcreage	20.31	14.30
tblLandUse	LotAcreage	10.94	22.80
tblLandUse	LotAcreage	23.63	48.30
tblLandUse	LotAcreage	51.20	31.30
tblLandUse	LotAcreage	183.77	93.00

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tblLandUse	LotAcreage	3.08	8.80
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOnRoadDust	RoadSiltLoading	0.10	0.03
tblOnRoadDust	RoadSiltLoading	0.10	0.03
tblOnRoadDust	RoadSiltLoading	0.10	0.03
tblOnRoadDust	RoadSiltLoading	0.10	0.03
tblOnRoadDust	RoadSiltLoading	0.10	0.03
tblProjectCharacteristics	OperationalYear	2018	2032
tblSolidWaste	SolidWasteGenerationRate	2.71	2.70
tblTripsAndVMT	WorkerTripNumber	43.00	30.00
tblVehicleTrips	CC_TL	7.30	2.50
tblVehicleTrips	CC_TL	7.30	2.50
tblVehicleTrips	CC_TL	7.30	2.50
tblVehicleTrips	HS_TL	7.30	2.50

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tblVehicleTrips	HS_TL	7.30	2.50
tblVehicleTrips	HS_TL	7.30	2.50
tblVehicleTrips	HS_TL	7.30	2.50
tblVehicleTrips	HW_TL	10.80	30.34
tblVehicleTrips	HW_TL	10.80	25.54
tblVehicleTrips	HW_TL	10.80	0.00
tblVehicleTrips	HW_TL	10.80	30.34
tblVehicleTrips	ST_TR	7.16	6.39
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.03	2.61
tblVehicleTrips	ST_TR	42.04	49.97
tblVehicleTrips	SU_TR	6.07	5.86
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.95	2.84
tblVehicleTrips	SU_TR	20.43	25.24
tblVehicleTrips	WD_TR	6.59	6.65
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	2.40	3.44
tblVehicleTrips	WD_TR	44.32	42.70
tblWater	OutdoorWaterUseRate	37,531,662.51	37,412,514.38
tblWoodstoves	NumberCatalytic	16.25	0.00
tblWoodstoves	NumberCatalytic	27.65	0.00
tblWoodstoves	NumberCatalytic	12.80	0.00
tblWoodstoves	NumberCatalytic	28.30	0.00
tblWoodstoves	NumberNoncatalytic	16.25	0.00
tblWoodstoves	NumberNoncatalytic	27.65	0.00

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tblWoodstoves	NumberNoncatalytic	12.80	0.00
tblWoodstoves	NumberNoncatalytic	28.30	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

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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					
2017	0.1645	1.7019	0.7930	1.2900e-003	0.9943	0.0936	1.0879	0.5468	0.0861	0.6329	0.0000	119.5722	119.5722	0.0354	0.0000	120.4575
2018	2.4413	17.1755	13.4170	0.0296	2.6024	0.6872	3.2896	1.3493	0.6389	1.9882	0.0000	2,704.6909	2,704.6909	0.4404	0.0000	2,715.7018
2019	4.3532	18.0731	21.6125	0.0573	0.4438	0.5675	1.0114	0.3686	0.5397	0.9083	0.0000	5,231.2014	5,231.2014	0.4199	0.0000	5,241.6983
2020	4.1332	16.5855	20.2395	0.0567	0.4456	0.4915	0.9371	0.3700	0.4670	0.8371	0.0000	5,161.4750	5,161.4750	0.4007	0.0000	5,171.4913
2021	3.9202	15.0291	19.1117	0.0558	0.4439	0.4097	0.8536	0.3686	0.3889	0.7575	0.0000	5,078.3729	5,078.3729	0.3844	0.0000	5,087.9819
2022	3.7443	13.7667	18.1087	0.0546	0.4422	0.3489	0.7911	0.3672	0.3314	0.6986	0.0000	4,971.9060	4,971.9060	0.3711	0.0000	4,981.1839
2023	3.5897	11.8559	17.2008	0.0533	0.4422	0.3048	0.7470	0.3672	0.2893	0.6565	0.0000	4,850.9522	4,850.9522	0.3470	0.0000	4,859.6263
2024	3.5129	11.4401	16.4385	0.0526	0.4456	0.2745	0.7201	0.3701	0.2602	0.6303	0.0000	4,792.7528	4,792.7528	0.3410	0.0000	4,801.2779
2025	2.2699	7.2577	10.5056	0.0343	0.2959	0.1604	0.4563	0.2458	0.1520	0.3977	0.0000	3,127.2074	3,127.2074	0.2218	0.0000	3,132.7533
Maximum	4.3532	18.0731	21.6125	0.0573	2.6024	0.6872	3.2896	1.3493	0.6389	1.9882	0.0000	5,231.2014	5,231.2014	0.4404	0.0000	5,241.6983

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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					
2017	0.0335	0.6225	0.7769	1.2900e-003	0.9956	0.0308	1.0264	0.5468	0.0308	0.5776	0.0000	119.5720	119.5720	0.0354	0.0000	120.4574
2018	1.5181	10.4475	13.8346	0.0296	2.8644	0.3617	3.2261	1.3493	0.3602	1.7095	0.0000	2,704.6893	2,704.6893	0.4404	0.0000	2,715.7002
2019	3.6821	15.8886	22.2361	0.0573	1.2303	0.4499	1.6802	0.3686	0.4460	0.8146	0.0000	5,231.2002	5,231.2002	0.4199	0.0000	5,241.6970
2020	3.5480	15.0653	20.9336	0.0567	1.2350	0.4323	1.6673	0.3700	0.4292	0.7993	0.0000	5,161.4737	5,161.4737	0.4007	0.0000	5,171.4900
2021	3.4207	14.1668	19.8670	0.0558	1.2303	0.4071	1.6374	0.3686	0.4051	0.7737	0.0000	5,078.3716	5,078.3716	0.3844	0.0000	5,087.9807
2022	3.3249	13.6507	18.9157	0.0546	1.2256	0.4032	1.6287	0.3672	0.4012	0.7685	0.0000	4,971.9048	4,971.9048	0.3711	0.0000	4,981.1827
2023	3.2210	12.2158	18.0315	0.0533	1.2256	0.3982	1.6238	0.3672	0.3965	0.7638	0.0000	4,850.9509	4,850.9509	0.3470	0.0000	4,859.6251
2024	3.1802	12.1659	17.2840	0.0526	1.2350	0.4006	1.6356	0.3701	0.3989	0.7690	0.0000	4,792.7515	4,792.7515	0.3410	0.0000	4,801.2767
2025	2.0776	8.0131	11.0843	0.0343	0.8202	0.2658	1.0860	0.2458	0.2647	0.5104	0.0000	3,127.2066	3,127.2066	0.2218	0.0000	3,132.7525
Maximum	3.6821	15.8886	22.2361	0.0573	2.8644	0.4499	3.2261	1.3493	0.4460	1.7095	0.0000	5,231.2002	5,231.2002	0.4404	0.0000	5,241.6970

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	14.66	9.43	-4.03	0.00	-83.99	5.65	-53.75	0.00	0.66	0.28	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)
4	10-2-2017	1-1-2018	1.8853	0.6633

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5	1-2-2018	4-1-2018	2.7376	1.1763
6	4-2-2018	7-1-2018	5.2109	2.4187
7	7-2-2018	10-1-2018	5.5246	3.2581
8	10-2-2018	1-1-2019	6.0917	5.0999
9	1-2-2019	4-1-2019	5.4977	4.7943
10	4-2-2019	7-1-2019	5.5757	4.8645
11	7-2-2019	10-1-2019	5.6368	4.9178
12	10-2-2019	1-1-2020	5.6148	4.8979
13	1-2-2020	4-1-2020	5.1174	4.5950
14	4-2-2020	7-1-2020	5.1386	4.6163
15	7-2-2020	10-1-2020	5.1948	4.6668
16	10-2-2020	1-1-2021	5.1688	4.6427
17	1-2-2021	4-1-2021	4.6481	4.3127
18	4-2-2021	7-1-2021	4.7250	4.3859
19	7-2-2021	10-1-2021	4.7766	4.4338
20	10-2-2021	1-1-2022	4.7473	4.4067
21	1-2-2022	4-1-2022	4.3123	4.1799
22	4-2-2022	7-1-2022	4.3863	4.2524
23	7-2-2022	10-1-2022	4.4342	4.2989
24	10-2-2022	1-1-2023	4.4022	4.2684
25	1-2-2023	4-1-2023	3.8104	3.8082
26	4-2-2023	7-1-2023	3.8758	3.8737
27	7-2-2023	10-1-2023	3.9182	3.9160
28	10-2-2023	1-1-2024	3.8931	3.8920
29	1-2-2024	4-1-2024	3.7015	3.7990
30	4-2-2024	7-1-2024	3.7245	3.8220
31	7-2-2024	10-1-2024	3.7652	3.8638

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32	10-2-2024	1-1-2025	3.7403	3.8401
33	1-2-2025	4-1-2025	3.5122	3.7202
34	4-2-2025	7-1-2025	3.5740	3.7843
35	7-2-2025	9-30-2025	2.4350	2.5783
		Highest	6.0917	5.0999

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	15.9939	0.8664	12.9067	5.2700e-003		0.1284	0.1284		0.1284	0.1284	0.0000	855.8632	855.8632	0.0357	0.0153	861.3190
Energy	0.2360	2.0222	0.8991	0.0129		0.1630	0.1630		0.1630	0.1630	0.0000	6,834.2373	6,834.2373	0.2305	0.0812	6,864.2102
Mobile	4.5620	14.4531	58.5739	0.2302	11.2703	0.1506	11.4209	3.4017	0.1394	3.5411	0.0000	21,097.1602	21,097.1602	0.7273	0.0000	21,115.3418
Waste						0.0000	0.0000		0.0000	0.0000	477.2866	0.0000	477.2866	28.2068	0.0000	1,182.4573
Water						0.0000	0.0000		0.0000	0.0000	42.7384	989.8627	1,032.6011	4.4305	0.1121	1,176.7708
Total	20.7919	17.3417	72.3797	0.2483	11.2703	0.4420	11.7123	3.4017	0.4308	3.8325	520.0250	29,777.1234	30,297.1483	33.6308	0.2087	31,200.0990

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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	15.9939	0.8664	12.9067	5.2700e-003		0.1284	0.1284		0.1284	0.1284	0.0000	855.8632	855.8632	0.0357	0.0153	861.3190
Energy	0.2360	2.0222	0.8991	0.0129		0.1630	0.1630		0.1630	0.1630	0.0000	6,834.2373	6,834.2373	0.2305	0.0812	6,864.2102
Mobile	4.5620	14.4531	58.5739	0.2302	11.2703	0.1506	11.4209	3.4017	0.1394	3.5411	0.0000	21,097.1602	21,097.1602	0.7273	0.0000	21,115.3418
Waste						0.0000	0.0000		0.0000	0.0000	477.2866	0.0000	477.2866	28.2068	0.0000	1,182.4573
Water						0.0000	0.0000		0.0000	0.0000	42.7384	989.8627	1,032.6011	4.4305	0.1121	1,176.7708
Total	20.7919	17.3417	72.3797	0.2483	11.2703	0.4420	11.7123	3.4017	0.4308	3.8325	520.0250	29,777.1234	30,297.1483	33.6308	0.2087	31,200.0990

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/2/2017	3/2/2018	5	110	
2	Grading	Grading	3/5/2018	9/3/2018	5	131	
3	Building Construction	Building Construction	9/4/2018	9/1/2025	5	1825	
4	Paving	Paving	9/4/2018	9/1/2025	5	1825	
5	Architectural Coating	Architectural Coating	9/4/2018	9/1/2025	5	1825	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 524

Acres of Paving: 38.4

Residential Indoor: 6,748,110; Residential Outdoor: 2,249,370; Non-Residential Indoor: 516,979; Non-Residential Outdoor: 172,326; Striped Parking Area: 100,362 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	3	8.00	158	0.38
Grading	Graders	3	8.00	187	0.41
Grading	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	5	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	3	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Pavers	3	8.00	130	0.42
Paving	Paving Equipment	3	8.00	132	0.36
Paving	Rollers	3	8.00	80	0.38
Architectural Coating	Air Compressors	3	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	17	30.00	0.00	169.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	1,845.00	512.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	369.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Cleaner Engines for Construction Equipment

Clean Paved Roads

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.9936	0.0000	0.9936	0.5462	0.0000	0.5462	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1612	1.6990	0.7623	1.2400e-003		0.0936	0.0936		0.0861	0.0861	0.0000	114.8368	114.8368	0.0352	0.0000	115.7164
Total	0.1612	1.6990	0.7623	1.2400e-003	0.9936	0.0936	1.0872	0.5462	0.0861	0.6323	0.0000	114.8368	114.8368	0.0352	0.0000	115.7164

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3.2 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2400e-003	2.9000e-003	0.0307	5.0000e-005	6.3000e-004	5.0000e-005	6.7000e-004	5.8000e-004	4.0000e-005	6.3000e-004	0.0000	4.7354	4.7354	2.3000e-004	0.0000	4.7411
Total	3.2400e-003	2.9000e-003	0.0307	5.0000e-005	6.3000e-004	5.0000e-005	6.7000e-004	5.8000e-004	4.0000e-005	6.3000e-004	0.0000	4.7354	4.7354	2.3000e-004	0.0000	4.7411

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					0.9936	0.0000	0.9936	0.5462	0.0000	0.5462	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0303	0.6196	0.7462	1.2400e-003		0.0308	0.0308		0.0308	0.0308	0.0000	114.8366	114.8366	0.0352	0.0000	115.7163
Total	0.0303	0.6196	0.7462	1.2400e-003	0.9936	0.0308	1.0244	0.5462	0.0308	0.5769	0.0000	114.8366	114.8366	0.0352	0.0000	115.7163

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3.2 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2400e-003	2.9000e-003	0.0307	5.0000e-005	1.9900e-003	5.0000e-005	2.0400e-003	5.8000e-004	4.0000e-005	6.3000e-004	0.0000	4.7354	4.7354	2.3000e-004	0.0000	4.7411
Total	3.2400e-003	2.9000e-003	0.0307	5.0000e-005	1.9900e-003	5.0000e-005	2.0400e-003	5.8000e-004	4.0000e-005	6.3000e-004	0.0000	4.7354	4.7354	2.3000e-004	0.0000	4.7411

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.9936	0.0000	0.9936	0.5462	0.0000	0.5462	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1027	1.0845	0.5057	8.6000e-004		0.0580	0.0580		0.0533	0.0533	0.0000	78.2098	78.2098	0.0244	0.0000	78.8185
Total	0.1027	1.0845	0.5057	8.6000e-004	0.9936	0.0580	1.0516	0.5462	0.0533	0.5995	0.0000	78.2098	78.2098	0.0244	0.0000	78.8185

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3.2 Site Preparation - 2018

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	1.9800e-003	1.7500e-003	0.0185	4.0000e-005	4.4000e-004	3.0000e-005	4.7000e-004	4.0000e-004	3.0000e-005	4.3000e-004	0.0000	3.1954	3.1954	1.4000e-004	0.0000	3.1988
Total	1.9800e-003	1.7500e-003	0.0185	4.0000e-005	4.4000e-004	3.0000e-005	4.7000e-004	4.0000e-004	3.0000e-005	4.3000e-004	0.0000	3.1954	3.1954	1.4000e-004	0.0000	3.1988

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					0.9936	0.0000	0.9936	0.5462	0.0000	0.5462	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0210	0.4290	0.5166	8.6000e-004		0.0213	0.0213		0.0213	0.0213	0.0000	78.2097	78.2097	0.0244	0.0000	78.8184
Total	0.0210	0.4290	0.5166	8.6000e-004	0.9936	0.0213	1.0149	0.5462	0.0213	0.5675	0.0000	78.2097	78.2097	0.0244	0.0000	78.8184

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3.2 Site Preparation - 2018

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	1.9800e-003	1.7500e-003	0.0185	4.0000e-005	1.3800e-003	3.0000e-005	1.4100e-003	4.0000e-004	3.0000e-005	4.3000e-004	0.0000	3.1954	3.1954	1.4000e-004	0.0000	3.1988
Total	1.9800e-003	1.7500e-003	0.0185	4.0000e-005	1.3800e-003	3.0000e-005	1.4100e-003	4.0000e-004	3.0000e-005	4.3000e-004	0.0000	3.1954	3.1954	1.4000e-004	0.0000	3.1988

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4613	0.0000	1.4613	0.6805	0.0000	0.6805	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.8160	9.6414	5.2167	9.5700e-003		0.4148	0.4148		0.3816	0.3816	0.0000	874.1604	874.1604	0.2721	0.0000	880.9639
Total	0.8160	9.6414	5.2167	9.5700e-003	1.4613	0.4148	1.8761	0.6805	0.3816	1.0621	0.0000	874.1604	874.1604	0.2721	0.0000	880.9639

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3.3 Grading - 2018

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	7.7000e-004	0.0258	5.2700e-003	7.0000e-005	3.6000e-004	8.0000e-005	4.4000e-004	2.2000e-004	8.0000e-005	3.0000e-004	0.0000	6.8610	6.8610	2.7000e-004	0.0000	6.8678
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.5800e-003	8.4900e-003	0.0897	1.7000e-004	2.1100e-003	1.4000e-004	2.2600e-003	1.9600e-003	1.3000e-004	2.1000e-003	0.0000	15.5034	15.5034	6.7000e-004	0.0000	15.5201
Total	0.0104	0.0342	0.0950	2.4000e-004	2.4700e-003	2.2000e-004	2.7000e-003	2.1800e-003	2.1000e-004	2.4000e-003	0.0000	22.3643	22.3643	9.4000e-004	0.0000	22.3878

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4613	0.0000	1.4613	0.6805	0.0000	0.6805	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2350	4.5950	5.4568	9.5700e-003		0.1902	0.1902		0.1902	0.1902	0.0000	874.1594	874.1594	0.2721	0.0000	880.9628
Total	0.2350	4.5950	5.4568	9.5700e-003	1.4613	0.1902	1.6515	0.6805	0.1902	0.8707	0.0000	874.1594	874.1594	0.2721	0.0000	880.9628

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3.3 Grading - 2018

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	7.7000e-004	0.0258	5.2700e-003	7.0000e-005	7.2000e-004	8.0000e-005	8.1000e-004	2.2000e-004	8.0000e-005	3.0000e-004	0.0000	6.8610	6.8610	2.7000e-004	0.0000	6.8678
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.5800e-003	8.4900e-003	0.0897	1.7000e-004	6.7000e-003	1.4000e-004	6.8400e-003	1.9600e-003	1.3000e-004	2.1000e-003	0.0000	15.5034	15.5034	6.7000e-004	0.0000	15.5201
Total	0.0104	0.0342	0.0950	2.4000e-004	7.4200e-003	2.2000e-004	7.6500e-003	2.1800e-003	2.1000e-004	2.4000e-003	0.0000	22.3643	22.3643	9.4000e-004	0.0000	22.3878

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2017	1.5648	1.2743	2.0000e-003		0.1002	0.1002		0.0960	0.0960	0.0000	172.4128	172.4128	0.0336	0.0000	173.2521
Total	0.2017	1.5648	1.2743	2.0000e-003		0.1002	0.1002		0.0960	0.0960	0.0000	172.4128	172.4128	0.0336	0.0000	173.2521

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3.4 Building Construction - 2018

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	0.1012	2.9801	0.7086	6.6100e-003	0.0423	0.0205	0.0628	0.0251	0.0196	0.0446	0.0000	628.1706	628.1706	0.0315	0.0000	628.9582
Worker	0.3825	0.3388	3.5793	6.8700e-003	0.0843	5.7400e-003	0.0901	0.0784	5.2900e-003	0.0836	0.0000	618.6549	618.6549	0.0267	0.0000	619.3224
Total	0.4837	3.3189	4.2879	0.0135	0.1266	0.0262	0.1528	0.1034	0.0249	0.1283	0.0000	1,246.8255	1,246.8255	0.0582	0.0000	1,248.2806

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	0.0508	1.0458	1.2853	2.0000e-003		0.0675	0.0675		0.0675	0.0675	0.0000	172.4126	172.4126	0.0336	0.0000	173.2519
Total	0.0508	1.0458	1.2853	2.0000e-003		0.0675	0.0675		0.0675	0.0675	0.0000	172.4126	172.4126	0.0336	0.0000	173.2519

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3.4 Building Construction - 2018

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	0.1012	2.9801	0.7086	6.6100e-003	0.0766	0.0205	0.0971	0.0251	0.0196	0.0446	0.0000	628.1706	628.1706	0.0315	0.0000	628.9582
Worker	0.3825	0.3388	3.5793	6.8700e-003	0.2673	5.7400e-003	0.2730	0.0784	5.2900e-003	0.0836	0.0000	618.6549	618.6549	0.0267	0.0000	619.3224
Total	0.4837	3.3189	4.2879	0.0135	0.3439	0.0262	0.3701	0.1034	0.0249	0.1283	0.0000	1,246.8255	1,246.8255	0.0582	0.0000	1,248.2806

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.5442	4.3731	3.8334	6.1400e-003		0.2651	0.2651		0.2541	0.2541	0.0000	525.5622	525.5622	0.0993	0.0000	528.0445
Total	0.5442	4.3731	3.8334	6.1400e-003		0.2651	0.2651		0.2541	0.2541	0.0000	525.5622	525.5622	0.0993	0.0000	528.0445

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3.4 Building Construction - 2019

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	0.2842	8.6380	1.9919	0.0202	0.1299	0.0530	0.1829	0.0769	0.0507	0.1276	0.0000	1,920.9364	1,920.9364	0.0927	0.0000	1,923.2549
Worker	1.0680	0.9237	9.8605	0.0206	0.2589	0.0172	0.2761	0.2406	0.0159	0.2564	0.0000	1,856.2344	1,856.2344	0.0740	0.0000	1,858.0855
Total	1.3521	9.5617	11.8523	0.0408	0.3888	0.0702	0.4590	0.3175	0.0665	0.3840	0.0000	3,777.1708	3,777.1708	0.1668	0.0000	3,781.3404

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	0.1559	3.2113	3.9466	6.1400e-003		0.2072	0.2072		0.2072	0.2072	0.0000	525.5615	525.5615	0.0993	0.0000	528.0439
Total	0.1559	3.2113	3.9466	6.1400e-003		0.2072	0.2072		0.2072	0.2072	0.0000	525.5615	525.5615	0.0993	0.0000	528.0439

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3.4 Building Construction - 2019

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	0.2842	8.6380	1.9919	0.0202	0.2353	0.0530	0.2882	0.0769	0.0507	0.1276	0.0000	1,920.9364	1,920.9364	0.0927	0.0000	1,923.2549
Worker	1.0680	0.9237	9.8605	0.0206	0.8206	0.0172	0.8379	0.2406	0.0159	0.2564	0.0000	1,856.2344	1,856.2344	0.0740	0.0000	1,858.0855
Total	1.3521	9.5617	11.8523	0.0408	1.0559	0.0702	1.1261	0.3175	0.0665	0.3840	0.0000	3,777.1708	3,777.1708	0.1668	0.0000	3,781.3404

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4896	4.0282	3.7876	6.1700e-003		0.2307	0.2307		0.2211	0.2211	0.0000	522.5120	522.5120	0.0967	0.0000	524.9287
Total	0.4896	4.0282	3.7876	6.1700e-003		0.2307	0.2307		0.2211	0.2211	0.0000	522.5120	522.5120	0.0967	0.0000	524.9287

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3.4 Building Construction - 2020

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	0.2397	7.9063	1.7642	0.0202	0.1304	0.0345	0.1649	0.0772	0.0330	0.1102	0.0000	1,918.6524	1,918.6524	0.0865	0.0000	1,920.8152
Worker	0.9874	0.8288	8.9478	0.0201	0.2599	0.0167	0.2766	0.2415	0.0154	0.2569	0.0000	1,808.6819	1,808.6819	0.0658	0.0000	1,810.3279
Total	1.2272	8.7350	10.7120	0.0402	0.3903	0.0512	0.4416	0.3187	0.0484	0.3671	0.0000	3,727.3343	3,727.3343	0.1524	0.0000	3,731.1431

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	0.1565	3.2236	3.9618	6.1700e-003		0.2080	0.2080		0.2080	0.2080	0.0000	522.5114	522.5114	0.0967	0.0000	524.9281
Total	0.1565	3.2236	3.9618	6.1700e-003		0.2080	0.2080		0.2080	0.2080	0.0000	522.5114	522.5114	0.0967	0.0000	524.9281

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3.4 Building Construction - 2020

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	0.2397	7.9063	1.7642	0.0202	0.2362	0.0345	0.2707	0.0772	0.0330	0.1102	0.0000	1,918.6524	1,918.6524	0.0865	0.0000	1,920.8152
Worker	0.9874	0.8288	8.9478	0.0201	0.8238	0.0167	0.8405	0.2415	0.0154	0.2569	0.0000	1,808.6819	1,808.6819	0.0658	0.0000	1,810.3279
Total	1.2272	8.7350	10.7120	0.0402	1.0600	0.0512	1.1112	0.3187	0.0484	0.3671	0.0000	3,727.3343	3,727.3343	0.1524	0.0000	3,731.1431

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4363	3.6670	3.7163	6.1400e-003		0.1969	0.1969		0.1887	0.1887	0.0000	520.5584	520.5584	0.0939	0.0000	522.9046
Total	0.4363	3.6670	3.7163	6.1400e-003		0.1969	0.1969		0.1887	0.1887	0.0000	520.5584	520.5584	0.0939	0.0000	522.9046

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3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.2007	7.1274	1.5573	0.0200	0.1299	0.0112	0.1412	0.0769	0.0107	0.0877	0.0000	1,902.2580	1,902.2580	0.0814	0.0000	1,904.2924
Worker	0.9212	0.7496	8.2649	0.0195	0.2589	0.0163	0.2753	0.2406	0.0150	0.2556	0.0000	1,757.0116	1,757.0116	0.0604	0.0000	1,758.5213
Total	1.1219	7.8769	9.8222	0.0395	0.3889	0.0276	0.4164	0.3175	0.0258	0.3433	0.0000	3,659.2696	3,659.2696	0.1418	0.0000	3,662.8138

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	0.1559	3.2113	3.9466	6.1400e-003		0.2072	0.2072		0.2072	0.2072	0.0000	520.5578	520.5578	0.0939	0.0000	522.9040
Total	0.1559	3.2113	3.9466	6.1400e-003		0.2072	0.2072		0.2072	0.2072	0.0000	520.5578	520.5578	0.0939	0.0000	522.9040

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3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.2007	7.1274	1.5573	0.0200	0.2353	0.0112	0.2465	0.0769	0.0107	0.0877	0.0000	1,902.2580	1,902.2580	0.0814	0.0000	1,904.2924
Worker	0.9212	0.7496	8.2649	0.0195	0.8206	0.0163	0.8370	0.2406	0.0150	0.2556	0.0000	1,757.0116	1,757.0116	0.0604	0.0000	1,758.5213
Total	1.1219	7.8769	9.8222	0.0395	1.0559	0.0276	1.0835	0.3175	0.0258	0.3433	0.0000	3,659.2696	3,659.2696	0.1418	0.0000	3,662.8138

3.4 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	0.3937	3.3214	3.6638	6.1200e-003		0.1672	0.1672		0.1604	0.1604	0.0000	518.6946	518.6946	0.0920	0.0000	520.9941
Total	0.3937	3.3214	3.6638	6.1200e-003		0.1672	0.1672		0.1604	0.1604	0.0000	518.6946	518.6946	0.0920	0.0000	520.9941

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3.4 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	0.1873	6.7225	1.4507	0.0198	0.1294	9.4000e-003	0.1388	0.0767	8.9900e-003	0.0856	0.0000	1,881.1399	1,881.1399	0.0780	0.0000	1,883.0888
Worker	0.8599	0.6772	7.5944	0.0187	0.2579	0.0158	0.2737	0.2397	0.0145	0.2542	0.0000	1,689.7502	1,689.7502	0.0546	0.0000	1,691.1158
Total	1.0472	7.3997	9.0452	0.0385	0.3874	0.0252	0.4125	0.3163	0.0235	0.3398	0.0000	3,570.8901	3,570.8901	0.1326	0.0000	3,574.2046

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	0.1554	3.1990	3.9315	6.1200e-003		0.2064	0.2064		0.2064	0.2064	0.0000	518.6940	518.6940	0.0920	0.0000	520.9935
Total	0.1554	3.1990	3.9315	6.1200e-003		0.2064	0.2064		0.2064	0.2064	0.0000	518.6940	518.6940	0.0920	0.0000	520.9935

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3.4 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	0.1873	6.7225	1.4507	0.0198	0.2344	9.4000e-003	0.2438	0.0767	8.9900e-003	0.0856	0.0000	1,881.1399	1,881.1399	0.0780	0.0000	1,883.0888
Worker	0.8599	0.6772	7.5944	0.0187	0.8175	0.0158	0.8333	0.2397	0.0145	0.2542	0.0000	1,689.7502	1,689.7502	0.0546	0.0000	1,691.1158
Total	1.0472	7.3997	9.0452	0.0385	1.0519	0.0252	1.0771	0.3163	0.0235	0.3398	0.0000	3,570.8901	3,570.8901	0.1326	0.0000	3,574.2046

3.4 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	0.3632	3.0823	3.6406	6.1200e-003		0.1449	0.1449		0.1391	0.1391	0.0000	518.8127	518.8127	0.0905	0.0000	521.0744
Total	0.3632	3.0823	3.6406	6.1200e-003		0.1449	0.1449		0.1391	0.1391	0.0000	518.8127	518.8127	0.0905	0.0000	521.0744

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3.4 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	0.1466	5.3626	1.2800	0.0193	0.1294	4.9900e-003	0.1344	0.0767	4.7700e-003	0.0814	0.0000	1,834.5049	1,834.5049	0.0622	0.0000	1,836.0588
Worker	0.8078	0.6153	7.0059	0.0180	0.2579	0.0153	0.2733	0.2397	0.0141	0.2538	0.0000	1,628.3684	1,628.3684	0.0496	0.0000	1,629.6075
Total	0.9544	5.9779	8.2859	0.0373	0.3874	0.0203	0.4077	0.3163	0.0189	0.3352	0.0000	3,462.8732	3,462.8732	0.1117	0.0000	3,465.6663

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	0.1554	3.1990	3.9315	6.1200e-003		0.2064	0.2064		0.2064	0.2064	0.0000	518.8121	518.8121	0.0905	0.0000	521.0738
Total	0.1554	3.1990	3.9315	6.1200e-003		0.2064	0.2064		0.2064	0.2064	0.0000	518.8121	518.8121	0.0905	0.0000	521.0738

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3.4 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	0.1466	5.3626	1.2800	0.0193	0.2344	4.9900e-003	0.2394	0.0767	4.7700e-003	0.0814	0.0000	1,834.5049	1,834.5049	0.0622	0.0000	1,836.0588
Worker	0.8078	0.6153	7.0059	0.0180	0.8175	0.0153	0.8328	0.2397	0.0141	0.2538	0.0000	1,628.3684	1,628.3684	0.0496	0.0000	1,629.6075
Total	0.9544	5.9779	8.2859	0.0373	1.0519	0.0203	1.0722	0.3163	0.0189	0.3352	0.0000	3,462.8732	3,462.8732	0.1117	0.0000	3,465.6663

3.4 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	0.3418	2.9181	3.6526	6.1700e-003		0.1274	0.1274		0.1222	0.1222	0.0000	522.8700	522.8700	0.0899	0.0000	525.1171
Total	0.3418	2.9181	3.6526	6.1700e-003		0.1274	0.1274		0.1222	0.1222	0.0000	522.8700	522.8700	0.0899	0.0000	525.1171

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3.4 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	0.1410	5.3280	1.2064	0.0192	0.1304	4.9100e-003	0.1354	0.0773	4.7000e-003	0.0819	0.0000	1,826.7335	1,826.7335	0.0618	0.0000	1,828.2790
Worker	0.7655	0.5640	6.3977	0.0175	0.2599	0.0150	0.2749	0.2415	0.0138	0.2553	0.0000	1,580.1162	1,580.1162	0.0450	0.0000	1,581.2399
Total	0.9065	5.8919	7.6041	0.0367	0.3904	0.0199	0.4102	0.3188	0.0185	0.3372	0.0000	3,406.8497	3,406.8497	0.1068	0.0000	3,409.5189

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	0.1565	3.2236	3.9618	6.1700e-003		0.2080	0.2080		0.2080	0.2080	0.0000	522.8694	522.8694	0.0899	0.0000	525.1165
Total	0.1565	3.2236	3.9618	6.1700e-003		0.2080	0.2080		0.2080	0.2080	0.0000	522.8694	522.8694	0.0899	0.0000	525.1165

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3.4 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	0.1410	5.3280	1.2064	0.0192	0.2362	4.9100e-003	0.2411	0.0773	4.7000e-003	0.0819	0.0000	1,826.7335	1,826.7335	0.0618	0.0000	1,828.2790
Worker	0.7655	0.5640	6.3977	0.0175	0.8238	0.0150	0.8387	0.2415	0.0138	0.2553	0.0000	1,580.1162	1,580.1162	0.0450	0.0000	1,581.2399
Total	0.9065	5.8919	7.6041	0.0367	1.0600	0.0199	1.0799	0.3188	0.0185	0.3372	0.0000	3,406.8497	3,406.8497	0.1068	0.0000	3,409.5189

3.4 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	0.2113	1.8132	2.4151	4.1000e-003		0.0728	0.0728		0.0699	0.0699	0.0000	347.3195	347.3195	0.0589	0.0000	348.7908
Total	0.2113	1.8132	2.4151	4.1000e-003		0.0728	0.0728		0.0699	0.0699	0.0000	347.3195	347.3195	0.0589	0.0000	348.7908

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3.4 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	0.0918	3.5098	0.7751	0.0127	0.0866	3.2300e-003	0.0899	0.0513	3.0900e-003	0.0544	0.0000	1,206.6683	1,206.6683	0.0405	0.0000	1,207.6812
Worker	0.4815	0.3433	3.9452	0.0112	0.1726	9.7300e-003	0.1823	0.1604	8.9600e-003	0.1693	0.0000	1,008.7829	1,008.7829	0.0273	0.0000	1,009.4660
Total	0.5733	3.8531	4.7202	0.0239	0.2592	0.0130	0.2722	0.2117	0.0121	0.2237	0.0000	2,215.4512	2,215.4512	0.0678	0.0000	2,217.1472

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	0.1040	2.1409	2.6311	4.1000e-003		0.1381	0.1381		0.1381	0.1381	0.0000	347.3191	347.3191	0.0589	0.0000	348.7904
Total	0.1040	2.1409	2.6311	4.1000e-003		0.1381	0.1381		0.1381	0.1381	0.0000	347.3191	347.3191	0.0589	0.0000	348.7904

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3.4 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	0.0918	3.5098	0.7751	0.0127	0.1569	3.2300e-003	0.1601	0.0513	3.0900e-003	0.0544	0.0000	1,206.6683	1,206.6683	0.0405	0.0000	1,207.6812
Worker	0.4815	0.3433	3.9452	0.0112	0.5471	9.7300e-003	0.5568	0.1604	8.9600e-003	0.1693	0.0000	1,008.7829	1,008.7829	0.0273	0.0000	1,009.4660
Total	0.5733	3.8531	4.7202	0.0239	0.7040	0.0130	0.7169	0.2117	0.0121	0.2237	0.0000	2,215.4512	2,215.4512	0.0678	0.0000	2,217.1472

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1048	1.1170	0.9433	1.4500e-003		0.0610	0.0610		0.0561	0.0561	0.0000	132.6741	132.6741	0.0413	0.0000	133.7067
Paving	2.3400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1071	1.1170	0.9433	1.4500e-003		0.0610	0.0610		0.0561	0.0561	0.0000	132.6741	132.6741	0.0413	0.0000	133.7067

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3.5 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7700e-003	4.2200e-003	0.0446	9.0000e-005	1.0500e-003	7.0000e-005	1.1200e-003	9.8000e-004	7.0000e-005	1.0400e-003	0.0000	7.7122	7.7122	3.3000e-004	0.0000	7.7206
Total	4.7700e-003	4.2200e-003	0.0446	9.0000e-005	1.0500e-003	7.0000e-005	1.1200e-003	9.8000e-004	7.0000e-005	1.0400e-003	0.0000	7.7122	7.7122	3.3000e-004	0.0000	7.7206

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	0.0358	0.7201	1.1026	1.4500e-003		0.0388	0.0388		0.0388	0.0388	0.0000	132.6739	132.6739	0.0413	0.0000	133.7065
Paving	2.3400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0381	0.7201	1.1026	1.4500e-003		0.0388	0.0388		0.0388	0.0388	0.0000	132.6739	132.6739	0.0413	0.0000	133.7065

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3.5 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7700e-003	4.2200e-003	0.0446	9.0000e-005	3.3300e-003	7.0000e-005	3.4000e-003	9.8000e-004	7.0000e-005	1.0400e-003	0.0000	7.7122	7.7122	3.3000e-004	0.0000	7.7206
Total	4.7700e-003	4.2200e-003	0.0446	9.0000e-005	3.3300e-003	7.0000e-005	3.4000e-003	9.8000e-004	7.0000e-005	1.0400e-003	0.0000	7.7122	7.7122	3.3000e-004	0.0000	7.7206

3.5 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2847	2.9840	2.8706	4.4600e-003		0.1614	0.1614		0.1485	0.1485	0.0000	400.8017	400.8017	0.1268	0.0000	403.9719
Paving	7.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.2919	2.9840	2.8706	4.4600e-003		0.1614	0.1614		0.1485	0.1485	0.0000	400.8017	400.8017	0.1268	0.0000	403.9719

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3.5 Paving - 2019

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	0.0133	0.0115	0.1229	2.6000e-004	3.2300e-003	2.1000e-004	3.4400e-003	3.0000e-003	2.0000e-004	3.2000e-003	0.0000	23.1401	23.1401	9.2000e-004	0.0000	23.1631
Total	0.0133	0.0115	0.1229	2.6000e-004	3.2300e-003	2.1000e-004	3.4400e-003	3.0000e-003	2.0000e-004	3.2000e-003	0.0000	23.1401	23.1401	9.2000e-004	0.0000	23.1631

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	0.1098	2.2110	3.3856	4.4600e-003		0.1193	0.1193		0.1193	0.1193	0.0000	400.8012	400.8012	0.1268	0.0000	403.9714
Paving	7.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1170	2.2110	3.3856	4.4600e-003		0.1193	0.1193		0.1193	0.1193	0.0000	400.8012	400.8012	0.1268	0.0000	403.9714

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3.5 Paving - 2019

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	0.0133	0.0115	0.1229	2.6000e-004	0.0102	2.1000e-004	0.0104	3.0000e-003	2.0000e-004	3.2000e-003	0.0000	23.1401	23.1401	9.2000e-004	0.0000	23.1631
Total	0.0133	0.0115	0.1229	2.6000e-004	0.0102	2.1000e-004	0.0104	3.0000e-003	2.0000e-004	3.2000e-003	0.0000	23.1401	23.1401	9.2000e-004	0.0000	23.1631

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2666	2.7639	2.8791	4.4800e-003		0.1479	0.1479		0.1361	0.1361	0.0000	393.5545	393.5545	0.1273	0.0000	396.7366
Paving	7.2200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.2738	2.7639	2.8791	4.4800e-003		0.1479	0.1479		0.1361	0.1361	0.0000	393.5545	393.5545	0.1273	0.0000	396.7366

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3.5 Paving - 2020

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	0.0123	0.0103	0.1115	2.5000e-004	3.2400e-003	2.1000e-004	3.4500e-003	3.0100e-003	1.9000e-004	3.2000e-003	0.0000	22.5473	22.5473	8.2000e-004	0.0000	22.5678
Total	0.0123	0.0103	0.1115	2.5000e-004	3.2400e-003	2.1000e-004	3.4500e-003	3.0100e-003	1.9000e-004	3.2000e-003	0.0000	22.5473	22.5473	8.2000e-004	0.0000	22.5678

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	0.1102	2.2195	3.3986	4.4800e-003		0.1197	0.1197		0.1197	0.1197	0.0000	393.5541	393.5541	0.1273	0.0000	396.7362
Paving	7.2200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1174	2.2195	3.3986	4.4800e-003		0.1197	0.1197		0.1197	0.1197	0.0000	393.5541	393.5541	0.1273	0.0000	396.7362

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3.5 Paving - 2020

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	0.0123	0.0103	0.1115	2.5000e-004	0.0103	2.1000e-004	0.0105	3.0100e-003	1.9000e-004	3.2000e-003	0.0000	22.5473	22.5473	8.2000e-004	0.0000	22.5678
Total	0.0123	0.0103	0.1115	2.5000e-004	0.0103	2.1000e-004	0.0105	3.0100e-003	1.9000e-004	3.2000e-003	0.0000	22.5473	22.5473	8.2000e-004	0.0000	22.5678

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2458	2.5289	2.8684	4.4600e-003		0.1327	0.1327		0.1221	0.1221	0.0000	391.9596	391.9596	0.1268	0.0000	395.1288
Paving	7.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.2530	2.5289	2.8684	4.4600e-003		0.1327	0.1327		0.1221	0.1221	0.0000	391.9596	391.9596	0.1268	0.0000	395.1288

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3.5 Paving - 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	0.0115	9.3400e-003	0.1030	2.4000e-004	3.2300e-003	2.0000e-004	3.4300e-003	3.0000e-003	1.9000e-004	3.1900e-003	0.0000	21.9031	21.9031	7.5000e-004	0.0000	21.9220
Total	0.0115	9.3400e-003	0.1030	2.4000e-004	3.2300e-003	2.0000e-004	3.4300e-003	3.0000e-003	1.9000e-004	3.1900e-003	0.0000	21.9031	21.9031	7.5000e-004	0.0000	21.9220

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	0.1098	2.2110	3.3856	4.4600e-003		0.1193	0.1193		0.1193	0.1193	0.0000	391.9592	391.9592	0.1268	0.0000	395.1284
Paving	7.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1170	2.2110	3.3856	4.4600e-003		0.1193	0.1193		0.1193	0.1193	0.0000	391.9592	391.9592	0.1268	0.0000	395.1284

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3.5 Paving - 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	0.0115	9.3400e-003	0.1030	2.4000e-004	0.0102	2.0000e-004	0.0104	3.0000e-003	1.9000e-004	3.1900e-003	0.0000	21.9031	21.9031	7.5000e-004	0.0000	21.9220
Total	0.0115	9.3400e-003	0.1030	2.4000e-004	0.0102	2.0000e-004	0.0104	3.0000e-003	1.9000e-004	3.1900e-003	0.0000	21.9031	21.9031	7.5000e-004	0.0000	21.9220

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2151	2.1694	2.8432	4.4500e-003		0.1107	0.1107		0.1019	0.1019	0.0000	390.5374	390.5374	0.1263	0.0000	393.6951
Paving	7.1700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.2222	2.1694	2.8432	4.4500e-003		0.1107	0.1107		0.1019	0.1019	0.0000	390.5374	390.5374	0.1263	0.0000	393.6951

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3.5 Paving - 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	0.0107	8.4400e-003	0.0947	2.3000e-004	3.2200e-003	2.0000e-004	3.4100e-003	2.9900e-003	1.8000e-004	3.1700e-003	0.0000	21.0646	21.0646	6.8000e-004	0.0000	21.0817
Total	0.0107	8.4400e-003	0.0947	2.3000e-004	3.2200e-003	2.0000e-004	3.4100e-003	2.9900e-003	1.8000e-004	3.1700e-003	0.0000	21.0646	21.0646	6.8000e-004	0.0000	21.0817

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	0.1094	2.2026	3.3727	4.4500e-003		0.1188	0.1188		0.1188	0.1188	0.0000	390.5369	390.5369	0.1263	0.0000	393.6946
Paving	7.1700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1166	2.2026	3.3727	4.4500e-003		0.1188	0.1188		0.1188	0.1188	0.0000	390.5369	390.5369	0.1263	0.0000	393.6946

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3.5 Paving - 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	0.0107	8.4400e-003	0.0947	2.3000e-004	0.0102	2.0000e-004	0.0104	2.9900e-003	1.8000e-004	3.1700e-003	0.0000	21.0646	21.0646	6.8000e-004	0.0000	21.0817
Total	0.0107	8.4400e-003	0.0947	2.3000e-004	0.0102	2.0000e-004	0.0104	2.9900e-003	1.8000e-004	3.1700e-003	0.0000	21.0646	21.0646	6.8000e-004	0.0000	21.0817

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2014	1.9874	2.8439	4.4500e-003		0.0995	0.0995		0.0915	0.0915	0.0000	390.5239	390.5239	0.1263	0.0000	393.6815
Paving	7.1700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.2086	1.9874	2.8439	4.4500e-003		0.0995	0.0995		0.0915	0.0915	0.0000	390.5239	390.5239	0.1263	0.0000	393.6815

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3.5 Paving - 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	7.6700e-003	0.0873	2.2000e-004	3.2200e-003	1.9000e-004	3.4100e-003	2.9900e-003	1.8000e-004	3.1600e-003	0.0000	20.2994	20.2994	6.2000e-004	0.0000	20.3149
Total	0.0101	7.6700e-003	0.0873	2.2000e-004	3.2200e-003	1.9000e-004	3.4100e-003	2.9900e-003	1.8000e-004	3.1600e-003	0.0000	20.2994	20.2994	6.2000e-004	0.0000	20.3149

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	0.1094	2.2026	3.3727	4.4500e-003		0.1188	0.1188		0.1188	0.1188	0.0000	390.5234	390.5234	0.1263	0.0000	393.6810
Paving	7.1700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1166	2.2026	3.3727	4.4500e-003		0.1188	0.1188		0.1188	0.1188	0.0000	390.5234	390.5234	0.1263	0.0000	393.6810

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3.5 Paving - 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	7.6700e-003	0.0873	2.2000e-004	0.0102	1.9000e-004	0.0104	2.9900e-003	1.8000e-004	3.1600e-003	0.0000	20.2994	20.2994	6.2000e-004	0.0000	20.3149
Total	0.0101	7.6700e-003	0.0873	2.2000e-004	0.0102	1.9000e-004	0.0104	2.9900e-003	1.8000e-004	3.1600e-003	0.0000	20.2994	20.2994	6.2000e-004	0.0000	20.3149

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.8716	2.8740	4.4800e-003		0.0921	0.0921		0.0847	0.0847	0.0000	393.5213	393.5213	0.1273	0.0000	396.7032
Paving	7.2200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.2014	1.8716	2.8740	4.4800e-003		0.0921	0.0921		0.0847	0.0847	0.0000	393.5213	393.5213	0.1273	0.0000	396.7032

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3.5 Paving - 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.5400e-003	7.0300e-003	0.0798	2.2000e-004	3.2400e-003	1.9000e-004	3.4300e-003	3.0100e-003	1.7000e-004	3.1800e-003	0.0000	19.6979	19.6979	5.6000e-004	0.0000	19.7119
Total	9.5400e-003	7.0300e-003	0.0798	2.2000e-004	3.2400e-003	1.9000e-004	3.4300e-003	3.0100e-003	1.7000e-004	3.1800e-003	0.0000	19.6979	19.6979	5.6000e-004	0.0000	19.7119

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	0.1102	2.2195	3.3986	4.4800e-003		0.1197	0.1197		0.1197	0.1197	0.0000	393.5209	393.5209	0.1273	0.0000	396.7027
Paving	7.2200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1174	2.2195	3.3986	4.4800e-003		0.1197	0.1197		0.1197	0.1197	0.0000	393.5209	393.5209	0.1273	0.0000	396.7027

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3.5 Paving - 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.5400e-003	7.0300e-003	0.0798	2.2000e-004	0.0103	1.9000e-004	0.0105	3.0100e-003	1.7000e-004	3.1800e-003	0.0000	19.6979	19.6979	5.6000e-004	0.0000	19.7119
Total	9.5400e-003	7.0300e-003	0.0798	2.2000e-004	0.0103	1.9000e-004	0.0105	3.0100e-003	1.7000e-004	3.1800e-003	0.0000	19.6979	19.6979	5.6000e-004	0.0000	19.7119

3.5 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	0.1194	1.1199	1.9024	2.9800e-003		0.0546	0.0546		0.0503	0.0503	0.0000	261.2513	261.2513	0.0845	0.0000	263.3636
Paving	4.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1242	1.1199	1.9024	2.9800e-003		0.0546	0.0546		0.0503	0.0503	0.0000	261.2513	261.2513	0.0845	0.0000	263.3636

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3.5 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	6.0000e-003	4.2800e-003	0.0492	1.4000e-004	2.1500e-003	1.2000e-004	2.2700e-003	2.0000e-003	1.1000e-004	2.1100e-003	0.0000	12.5756	12.5756	3.4000e-004	0.0000	12.5841
Total	6.0000e-003	4.2800e-003	0.0492	1.4000e-004	2.1500e-003	1.2000e-004	2.2700e-003	2.0000e-003	1.1000e-004	2.1100e-003	0.0000	12.5756	12.5756	3.4000e-004	0.0000	12.5841

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	0.0732	1.4740	2.2571	2.9800e-003		0.0795	0.0795		0.0795	0.0795	0.0000	261.2510	261.2510	0.0845	0.0000	263.3633
Paving	4.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0780	1.4740	2.2571	2.9800e-003		0.0795	0.0795		0.0795	0.0795	0.0000	261.2510	261.2510	0.0845	0.0000	263.3633

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3.5 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	6.0000e-003	4.2800e-003	0.0492	1.4000e-004	6.8200e-003	1.2000e-004	6.9400e-003	2.0000e-003	1.1000e-004	2.1100e-003	0.0000	12.5756	12.5756	3.4000e-004	0.0000	12.5841
Total	6.0000e-003	4.2800e-003	0.0492	1.4000e-004	6.8200e-003	1.2000e-004	6.9400e-003	2.0000e-003	1.1000e-004	2.1100e-003	0.0000	12.5756	12.5756	3.4000e-004	0.0000	12.5841

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5859					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0508	0.3410	0.3152	5.1000e-004		0.0256	0.0256		0.0256	0.0256	0.0000	43.4054	43.4054	4.1200e-003	0.0000	43.5085
Total	0.6367	0.3410	0.3152	5.1000e-004		0.0256	0.0256		0.0256	0.0256	0.0000	43.4054	43.4054	4.1200e-003	0.0000	43.5085

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3.6 Architectural Coating - 2018

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	0.0765	0.0678	0.7159	1.3700e-003	0.0169	1.1500e-003	0.0180	0.0157	1.0600e-003	0.0167	0.0000	123.7310	123.7310	5.3400e-003	0.0000	123.8645
Total	0.0765	0.0678	0.7159	1.3700e-003	0.0169	1.1500e-003	0.0180	0.0157	1.0600e-003	0.0167	0.0000	123.7310	123.7310	5.3400e-003	0.0000	123.8645

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5859					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0101	0.2307	0.3115	5.1000e-004		0.0162	0.0162		0.0162	0.0162	0.0000	43.4053	43.4053	4.1200e-003	0.0000	43.5085
Total	0.5960	0.2307	0.3115	5.1000e-004		0.0162	0.0162		0.0162	0.0162	0.0000	43.4053	43.4053	4.1200e-003	0.0000	43.5085

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3.6 Architectural Coating - 2018

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	0.0765	0.0678	0.7159	1.3700e-003	0.0535	1.1500e-003	0.0546	0.0157	1.0600e-003	0.0167	0.0000	123.7310	123.7310	5.3400e-003	0.0000	123.8645
Total	0.0765	0.0678	0.7159	1.3700e-003	0.0535	1.1500e-003	0.0546	0.0157	1.0600e-003	0.0167	0.0000	123.7310	123.7310	5.3400e-003	0.0000	123.8645

3.6 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7991					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1391	0.9581	0.9612	1.5500e-003		0.0672	0.0672		0.0672	0.0672	0.0000	133.2799	133.2799	0.0113	0.0000	133.5613
Total	1.9381	0.9581	0.9612	1.5500e-003		0.0672	0.0672		0.0672	0.0672	0.0000	133.2799	133.2799	0.0113	0.0000	133.5613

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3.6 Architectural Coating - 2019

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	0.2136	0.1847	1.9721	4.1200e-003	0.0518	3.4400e-003	0.0552	0.0481	3.1700e-003	0.0513	0.0000	371.2469	371.2469	0.0148	0.0000	371.6171
Total	0.2136	0.1847	1.9721	4.1200e-003	0.0518	3.4400e-003	0.0552	0.0481	3.1700e-003	0.0513	0.0000	371.2469	371.2469	0.0148	0.0000	371.6171

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7991					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0310	0.7083	0.9565	1.5500e-003		0.0496	0.0496		0.0496	0.0496	0.0000	133.2797	133.2797	0.0113	0.0000	133.5611
Total	1.8301	0.7083	0.9565	1.5500e-003		0.0496	0.0496		0.0496	0.0496	0.0000	133.2797	133.2797	0.0113	0.0000	133.5611

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3.6 Architectural Coating - 2019

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	0.2136	0.1847	1.9721	4.1200e-003	0.1641	3.4400e-003	0.1676	0.0481	3.1700e-003	0.0513	0.0000	371.2469	371.2469	0.0148	0.0000	371.6171
Total	0.2136	0.1847	1.9721	4.1200e-003	0.1641	3.4400e-003	0.1676	0.0481	3.1700e-003	0.0513	0.0000	371.2469	371.2469	0.0148	0.0000	371.6171

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.8060					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1269	0.8823	0.9597	1.5600e-003		0.0581	0.0581		0.0581	0.0581	0.0000	133.7905	133.7905	0.0104	0.0000	134.0495
Total	1.9329	0.8823	0.9597	1.5600e-003		0.0581	0.0581		0.0581	0.0581	0.0000	133.7905	133.7905	0.0104	0.0000	134.0495

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3.6 Architectural Coating - 2020

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	0.1975	0.1658	1.7896	4.0100e-003	0.0520	3.3400e-003	0.0553	0.0483	3.0800e-003	0.0514	0.0000	361.7364	361.7364	0.0132	0.0000	362.0656
Total	0.1975	0.1658	1.7896	4.0100e-003	0.0520	3.3400e-003	0.0553	0.0483	3.0800e-003	0.0514	0.0000	361.7364	361.7364	0.0132	0.0000	362.0656

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.8060					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0311	0.7111	0.9602	1.5600e-003		0.0498	0.0498		0.0498	0.0498	0.0000	133.7903	133.7903	0.0104	0.0000	134.0493
Total	1.8371	0.7111	0.9602	1.5600e-003		0.0498	0.0498		0.0498	0.0498	0.0000	133.7903	133.7903	0.0104	0.0000	134.0493

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3.6 Architectural Coating - 2020

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	0.1975	0.1658	1.7896	4.0100e-003	0.1648	3.3400e-003	0.1681	0.0483	3.0800e-003	0.0514	0.0000	361.7364	361.7364	0.0132	0.0000	362.0656
Total	0.1975	0.1658	1.7896	4.0100e-003	0.1648	3.3400e-003	0.1681	0.0483	3.0800e-003	0.0514	0.0000	361.7364	361.7364	0.0132	0.0000	362.0656

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7991					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1143	0.7970	0.9488	1.5500e-003		0.0491	0.0491		0.0491	0.0491	0.0000	133.2799	133.2799	9.1500e-003	0.0000	133.5085
Total	1.9133	0.7970	0.9488	1.5500e-003		0.0491	0.0491		0.0491	0.0491	0.0000	133.2799	133.2799	9.1500e-003	0.0000	133.5085

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3.6 Architectural Coating - 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	0.1843	0.1499	1.6530	3.8900e-003	0.0518	3.2700e-003	0.0551	0.0481	3.0100e-003	0.0511	0.0000	351.4023	351.4023	0.0121	0.0000	351.7043
Total	0.1843	0.1499	1.6530	3.8900e-003	0.0518	3.2700e-003	0.0551	0.0481	3.0100e-003	0.0511	0.0000	351.4023	351.4023	0.0121	0.0000	351.7043

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7991					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0310	0.7083	0.9565	1.5500e-003		0.0496	0.0496		0.0496	0.0496	0.0000	133.2797	133.2797	9.1500e-003	0.0000	133.5084
Total	1.8301	0.7083	0.9565	1.5500e-003		0.0496	0.0496		0.0496	0.0496	0.0000	133.2797	133.2797	9.1500e-003	0.0000	133.5084

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3.6 Architectural Coating - 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	0.1843	0.1499	1.6530	3.8900e-003	0.1641	3.2700e-003	0.1674	0.0481	3.0100e-003	0.0511	0.0000	351.4023	351.4023	0.0121	0.0000	351.7043
Total	0.1843	0.1499	1.6530	3.8900e-003	0.1641	3.2700e-003	0.1674	0.0481	3.0100e-003	0.0511	0.0000	351.4023	351.4023	0.0121	0.0000	351.7043

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7922					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1064	0.7324	0.9431	1.5500e-003		0.0425	0.0425		0.0425	0.0425	0.0000	132.7692	132.7692	8.6400e-003	0.0000	132.9853
Total	1.8985	0.7324	0.9431	1.5500e-003		0.0425	0.0425		0.0425	0.0425	0.0000	132.7692	132.7692	8.6400e-003	0.0000	132.9853

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3.6 Architectural Coating - 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	0.1720	0.1354	1.5189	3.7400e-003	0.0516	3.1500e-003	0.0547	0.0479	2.9000e-003	0.0508	0.0000	337.9500	337.9500	0.0109	0.0000	338.2232
Total	0.1720	0.1354	1.5189	3.7400e-003	0.0516	3.1500e-003	0.0547	0.0479	2.9000e-003	0.0508	0.0000	337.9500	337.9500	0.0109	0.0000	338.2232

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7922					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0309	0.7056	0.9529	1.5500e-003		0.0495	0.0495		0.0495	0.0495	0.0000	132.7690	132.7690	8.6400e-003	0.0000	132.9851
Total	1.8231	0.7056	0.9529	1.5500e-003		0.0495	0.0495		0.0495	0.0495	0.0000	132.7690	132.7690	8.6400e-003	0.0000	132.9851

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3.6 Architectural Coating - 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	0.1720	0.1354	1.5189	3.7400e-003	0.1635	3.1500e-003	0.1667	0.0479	2.9000e-003	0.0508	0.0000	337.9500	337.9500	0.0109	0.0000	338.2232
Total	0.1720	0.1354	1.5189	3.7400e-003	0.1635	3.1500e-003	0.1667	0.0479	2.9000e-003	0.0508	0.0000	337.9500	337.9500	0.0109	0.0000	338.2232

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7922					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0997	0.6776	0.9418	1.5500e-003		0.0368	0.0368		0.0368	0.0368	0.0000	132.7692	132.7692	7.9400e-003	0.0000	132.9678
Total	1.8918	0.6776	0.9418	1.5500e-003		0.0368	0.0368		0.0368	0.0368	0.0000	132.7692	132.7692	7.9400e-003	0.0000	132.9678

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3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1616	0.1231	1.4012	3.6100e-003	0.0516	3.0700e-003	0.0547	0.0479	2.8200e-003	0.0508	0.0000	325.6737	325.6737	9.9100e-003	0.0000	325.9215
Total	0.1616	0.1231	1.4012	3.6100e-003	0.0516	3.0700e-003	0.0547	0.0479	2.8200e-003	0.0508	0.0000	325.6737	325.6737	9.9100e-003	0.0000	325.9215

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7922					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0309	0.7056	0.9529	1.5500e-003		0.0495	0.0495		0.0495	0.0495	0.0000	132.7690	132.7690	7.9400e-003	0.0000	132.9676
Total	1.8231	0.7056	0.9529	1.5500e-003		0.0495	0.0495		0.0495	0.0495	0.0000	132.7690	132.7690	7.9400e-003	0.0000	132.9676

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3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1616	0.1231	1.4012	3.6100e-003	0.1635	3.0700e-003	0.1666	0.0479	2.8200e-003	0.0508	0.0000	325.6737	325.6737	9.9100e-003	0.0000	325.9215
Total	0.1616	0.1231	1.4012	3.6100e-003	0.1635	3.0700e-003	0.1666	0.0479	2.8200e-003	0.0508	0.0000	325.6737	325.6737	9.9100e-003	0.0000	325.9215

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.8060					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0947	0.6387	0.9485	1.5600e-003		0.0319	0.0319		0.0319	0.0319	0.0000	133.7905	133.7905	7.5300e-003	0.0000	133.9788
Total	1.9007	0.6387	0.9485	1.5600e-003		0.0319	0.0319		0.0319	0.0319	0.0000	133.7905	133.7905	7.5300e-003	0.0000	133.9788

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3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1531	0.1128	1.2795	3.5000e-003	0.0520	2.9900e-003	0.0550	0.0483	2.7500e-003	0.0511	0.0000	316.0232	316.0232	8.9900e-003	0.0000	316.2480
Total	0.1531	0.1128	1.2795	3.5000e-003	0.0520	2.9900e-003	0.0550	0.0483	2.7500e-003	0.0511	0.0000	316.0232	316.0232	8.9900e-003	0.0000	316.2480

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.8060					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0311	0.7111	0.9602	1.5600e-003		0.0498	0.0498		0.0498	0.0498	0.0000	133.7903	133.7903	7.5300e-003	0.0000	133.9787
Total	1.8371	0.7111	0.9602	1.5600e-003		0.0498	0.0498		0.0498	0.0498	0.0000	133.7903	133.7903	7.5300e-003	0.0000	133.9787

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3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1531	0.1128	1.2795	3.5000e-003	0.1648	2.9900e-003	0.1678	0.0483	2.7500e-003	0.0511	0.0000	316.0232	316.0232	8.9900e-003	0.0000	316.2480
Total	0.1531	0.1128	1.2795	3.5000e-003	0.1648	2.9900e-003	0.1678	0.0483	2.7500e-003	0.0511	0.0000	316.0232	316.0232	8.9900e-003	0.0000	316.2480

3.6 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	1.1994					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0595	0.3986	0.6296	1.0300e-003		0.0179	0.0179		0.0179	0.0179	0.0000	88.8532	88.8532	4.8500e-003	0.0000	88.9744
Total	1.2588	0.3986	0.6296	1.0300e-003		0.0179	0.0179		0.0179	0.0179	0.0000	88.8532	88.8532	4.8500e-003	0.0000	88.9744

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3.6 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	0.0963	0.0687	0.7890	2.2300e-003	0.0345	1.9500e-003	0.0365	0.0321	1.7900e-003	0.0339	0.0000	201.7566	201.7566	5.4600e-003	0.0000	201.8932
Total	0.0963	0.0687	0.7890	2.2300e-003	0.0345	1.9500e-003	0.0365	0.0321	1.7900e-003	0.0339	0.0000	201.7566	201.7566	5.4600e-003	0.0000	201.8932

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1994					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0207	0.4722	0.6377	1.0300e-003		0.0331	0.0331		0.0331	0.0331	0.0000	88.8531	88.8531	4.8500e-003	0.0000	88.9743
Total	1.2201	0.4722	0.6377	1.0300e-003		0.0331	0.0331		0.0331	0.0331	0.0000	88.8531	88.8531	4.8500e-003	0.0000	88.9743

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3.6 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	0.0963	0.0687	0.7890	2.2300e-003	0.1094	1.9500e-003	0.1114	0.0321	1.7900e-003	0.0339	0.0000	201.7566	201.7566	5.4600e-003	0.0000	201.8932
Total	0.0963	0.0687	0.7890	2.2300e-003	0.1094	1.9500e-003	0.1114	0.0321	1.7900e-003	0.0339	0.0000	201.7566	201.7566	5.4600e-003	0.0000	201.8932

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	4.5620	14.4531	58.5739	0.2302	11.2703	0.1506	11.4209	3.4017	0.1394	3.5411	0.0000	21,097.1602	21,097.1602	0.7273	0.0000	21,115.3418
Unmitigated	4.5620	14.4531	58.5739	0.2302	11.2703	0.1506	11.4209	3.4017	0.1394	3.5411	0.0000	21,097.1602	21,097.1602	0.7273	0.0000	21,115.3418

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	2,161.25	2,076.75	1904.50	10,731,459	10,731,459
City Park	0.00	0.00	0.00		
Condo/Townhouse	2,196.18	2,143.26	1829.52	9,520,417	9,520,417
Condo/Townhouse	1,016.75	992.25	847.00	4,407,601	4,407,601
Elementary School	1,096.50	0.00	0.00	1,442,648	1,442,648
Government Office Building	0.00	0.00	0.00		
Medical Office Building	2,869.81	711.69	123.12	2,930,608	2,930,608
Other Asphalt Surfaces	0.00	0.00	0.00		
Retirement Community	880.64	668.16	727.04	944,181	944,181
Single Family Housing	5,388.32	5,609.06	4878.92	27,163,078	27,163,078
Strip Mall	5,728.63	6,703.98	3386.20	5,097,167	5,097,167
Total	21,338.08	18,905.15	13,696.29	62,237,160	62,237,160

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	30.34	2.50	7.50	40.20	19.20	40.60	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	25.54	2.50	7.50	40.20	19.20	40.60	86	11	3
Condo/Townhouse	25.54	2.50	7.50	40.20	19.20	40.60	86	11	3
Elementary School	9.50	2.50	7.30	65.00	30.00	5.00	63	25	12
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16
Medical Office Building	9.50	2.50	7.30	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Retirement Community	0.00	2.50	7.50	40.20	19.20	40.60	86	11	3
Single Family Housing	30.34	2.50	7.50	40.20	19.20	40.60	86	11	3
Strip Mall	9.50	2.50	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.678603	0.033467	0.154883	0.087633	0.010129	0.004154	0.021098	0.000000	0.000000	0.001947	0.006573	0.001515	0.000000
City Park	0.648659	0.031990	0.148049	0.083766	0.009682	0.003971	0.020167	0.041048	0.002441	0.001861	0.006283	0.001448	0.000637
Condo/Townhouse	0.678603	0.033467	0.154883	0.087633	0.010129	0.004154	0.021098	0.000000	0.000000	0.001947	0.006573	0.001515	0.000000
Condo/Townhouse	0.678603	0.033467	0.154883	0.087633	0.010129	0.004154	0.021098	0.000000	0.000000	0.001947	0.006573	0.001515	0.000000
Elementary School	0.650662	0.032089	0.148506	0.084025	0.009712	0.003983	0.020229	0.041175	0.000000	0.001867	0.006302	0.001452	0.000000
Government Office Building	0.648659	0.031990	0.148049	0.083766	0.009682	0.003971	0.020167	0.041048	0.002441	0.001861	0.006283	0.001448	0.000637
Medical Office Building	0.679633	0.033518	0.155118	0.087766	0.010144	0.004161	0.021130	0.000000	0.000000	0.001950	0.006583	0.000000	0.000000
Other Asphalt Surfaces	0.648659	0.031990	0.148049	0.083766	0.009682	0.003971	0.020167	0.041048	0.002441	0.001861	0.006283	0.001448	0.000637
Retirement Community	0.679633	0.033518	0.155118	0.087766	0.010144	0.004161	0.021130	0.000000	0.000000	0.001950	0.006583	0.000000	0.000000
Single Family Housing	0.678151	0.033444	0.154780	0.087575	0.010122	0.004152	0.021084	0.000000	0.000000	0.001946	0.006569	0.001514	0.000666
Strip Mall	0.651608	0.032135	0.148722	0.084147	0.009726	0.003989	0.020259	0.041235	0.000000	0.001869	0.006312	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,498.8112	4,498.8112	0.1857	0.0384	4,514.9059
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,498.8112	4,498.8112	0.1857	0.0384	4,514.9059
NaturalGas Mitigated	0.2360	2.0222	0.8991	0.0129		0.1630	0.1630		0.1630	0.1630	0.0000	2,335.4261	2,335.4261	0.0448	0.0428	2,349.3043
NaturalGas Unmitigated	0.2360	2.0222	0.8991	0.0129		0.1630	0.1630		0.1630	0.1630	0.0000	2,335.4261	2,335.4261	0.0448	0.0428	2,349.3043

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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					
Apartments Low Rise	6.74381e+006	0.0364	0.3107	0.1322	1.9800e-003		0.0251	0.0251		0.0251	0.0251	0.0000	359.8755	359.8755	6.9000e-003	6.6000e-003	362.0140
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	3.50796e+006	0.0189	0.1616	0.0688	1.0300e-003		0.0131	0.0131		0.0131	0.0131	0.0000	187.1980	187.1980	3.5900e-003	3.4300e-003	188.3104
Condo/Townhouse	7.57719e+006	0.0409	0.3491	0.1486	2.2300e-003		0.0282	0.0282		0.0282	0.0282	0.0000	404.3476	404.3476	7.7500e-003	7.4100e-003	406.7504
Elementary School	742607	4.0000e-003	0.0364	0.0306	2.2000e-004		2.7700e-003	2.7700e-003		2.7700e-003	2.7700e-003	0.0000	39.6283	39.6283	7.6000e-004	7.3000e-004	39.8638
Government Office Building	104600	5.6000e-004	5.1300e-003	4.3100e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.5819	5.5819	1.1000e-004	1.0000e-004	5.6150
Medical Office Building	830838	4.4800e-003	0.0407	0.0342	2.4000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003	0.0000	44.3367	44.3367	8.5000e-004	8.1000e-004	44.6001
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
Retirement Community	5.31205e+006	0.0286	0.2448	0.1042	1.5600e-003		0.0198	0.0198		0.0198	0.0198	0.0000	283.4711	283.4711	5.4300e-003	5.2000e-003	285.1557
Single Family Housing	1.87238e+007	0.1010	0.8628	0.3671	5.5100e-003		0.0698	0.0698		0.0698	0.0698	0.0000	999.1742	999.1742	0.0192	0.0183	1,005.1118
Strip Mall	221364	1.1900e-003	0.0109	9.1100e-003	7.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	11.8128	11.8128	2.3000e-004	2.2000e-004	11.8830
Total		0.2360	2.0222	0.8991	0.0129		0.1631	0.1631		0.1631	0.1631	0.0000	2,335.4261	2,335.4261	0.0448	0.0428	2,349.3043

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	6.74381e+006	0.0364	0.3107	0.1322	1.9800e-003		0.0251	0.0251		0.0251	0.0251	0.0000	359.8755	359.8755	6.9000e-003	6.6000e-003	362.0140
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	3.50796e+006	0.0189	0.1616	0.0688	1.0300e-003		0.0131	0.0131		0.0131	0.0131	0.0000	187.1980	187.1980	3.5900e-003	3.4300e-003	188.3104
Condo/Townhouse	7.57719e+006	0.0409	0.3491	0.1486	2.2300e-003		0.0282	0.0282		0.0282	0.0282	0.0000	404.3476	404.3476	7.7500e-003	7.4100e-003	406.7504
Elementary School	742607	4.0000e-003	0.0364	0.0306	2.2000e-004		2.7700e-003	2.7700e-003		2.7700e-003	2.7700e-003	0.0000	39.6283	39.6283	7.6000e-004	7.3000e-004	39.8638
Government Office Building	104600	5.6000e-004	5.1300e-003	4.3100e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.5819	5.5819	1.1000e-004	1.0000e-004	5.6150
Medical Office Building	830838	4.4800e-003	0.0407	0.0342	2.4000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003	0.0000	44.3367	44.3367	8.5000e-004	8.1000e-004	44.6001
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
Retirement Community	5.31205e+006	0.0286	0.2448	0.1042	1.5600e-003		0.0198	0.0198		0.0198	0.0198	0.0000	283.4711	283.4711	5.4300e-003	5.2000e-003	285.1557
Single Family Housing	1.87238e+007	0.1010	0.8628	0.3671	5.5100e-003		0.0698	0.0698		0.0698	0.0698	0.0000	999.1742	999.1742	0.0192	0.0183	1,005.1118
Strip Mall	221364	1.1900e-003	0.0109	9.1100e-003	7.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	11.8128	11.8128	2.3000e-004	2.2000e-004	11.8830
Total		0.2360	2.0222	0.8991	0.0129		0.1631	0.1631		0.1631	0.1631	0.0000	2,335.4261	2,335.4261	0.0448	0.0428	2,349.3043

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.47294e+006	469.3089	0.0194	4.0100e-003	470.9879
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	2.03622e+006	648.7839	0.0268	5.5400e-003	651.1049
Condo/Townhouse	942695	300.3629	0.0124	2.5700e-003	301.4375
Elementary School	432062	137.6643	5.6800e-003	1.1800e-003	138.1568
Government Office Building	133200	42.4404	1.7500e-003	3.6000e-004	42.5922
Medical Office Building	1.05801e+006	337.1039	0.0139	2.8800e-003	338.3099
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Retirement Community	1.20905e+006	385.2291	0.0159	3.2900e-003	386.6073
Single Family Housing	4.97598e+006	1,585.4549	0.0655	0.0135	1,591.1269
Strip Mall	1.85946e+006	592.4630	0.0245	5.0600e-003	594.5826
Total		4,498.8112	0.1857	0.0384	4,514.9059

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.47294e+006	469.3089	0.0194	4.0100e-003	470.9879
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	2.03622e+006	648.7839	0.0268	5.5400e-003	651.1049
Condo/Townhouse	942695	300.3629	0.0124	2.5700e-003	301.4375
Elementary School	432062	137.6643	5.6800e-003	1.1800e-003	138.1568
Government Office Building	133200	42.4404	1.7500e-003	3.6000e-004	42.5922
Medical Office Building	1.05801e+006	337.1039	0.0139	2.8800e-003	338.3099
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Retirement Community	1.20905e+006	385.2291	0.0159	3.2900e-003	386.6073
Single Family Housing	4.97598e+006	1,585.4549	0.0655	0.0135	1,591.1269
Strip Mall	1.85946e+006	592.4630	0.0245	5.0600e-003	594.5826
Total		4,498.8112	0.1857	0.0384	4,514.9059

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	15.9939	0.8664	12.9067	5.2700e-003		0.1284	0.1284		0.1284	0.1284	0.0000	855.8632	855.8632	0.0357	0.0153	861.3190
Unmitigated	15.9939	0.8664	12.9067	5.2700e-003		0.1284	0.1284		0.1284	0.1284	0.0000	855.8632	855.8632	0.0357	0.0153	861.3190

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.2580					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	14.2741					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0844	0.7212	0.3069	4.6000e-003		0.0583	0.0583		0.0583	0.0583	0.0000	835.2239	835.2239	0.0160	0.0153	840.1872
Landscaping	0.3775	0.1452	12.5998	6.7000e-004		0.0700	0.0700		0.0700	0.0700	0.0000	20.6394	20.6394	0.0197	0.0000	21.1318
Total	15.9939	0.8664	12.9067	5.2700e-003		0.1284	0.1284		0.1284	0.1284	0.0000	855.8632	855.8632	0.0357	0.0153	861.3190

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.2580					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	14.2741					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0844	0.7212	0.3069	4.6000e-003		0.0583	0.0583		0.0583	0.0583	0.0000	835.2239	835.2239	0.0160	0.0153	840.1872
Landscaping	0.3775	0.1452	12.5998	6.7000e-004		0.0700	0.0700		0.0700	0.0700	0.0000	20.6394	20.6394	0.0197	0.0000	21.1318
Total	15.9939	0.8664	12.9067	5.2700e-003		0.1284	0.1284		0.1284	0.1284	0.0000	855.8632	855.8632	0.0357	0.0153	861.3190

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,032.6011	4.4305	0.1121	1,176.7708
Unmitigated	1,032.6011	4.4305	0.1121	1,176.7708

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	21.1751 / 13.3495	141.8240	0.6956	0.0175	164.4121
City Park	0 / 37.4125	132.4360	5.4700e-003	1.1300e-003	132.9098
Condo/Townhouse	36.0302 / 22.7147	241.3189	1.1835	0.0297	279.7535
Elementary School	2.0606 / 5.2987	27.9595	0.0683	1.8200e-003	30.2082
Government Office Building	1.9866 / 1.21759	13.1823	0.0653	1.6400e-003	15.3011
Medical Office Building	9.96692 / 1.89846	51.2328	0.3268	8.0800e-003	61.8093
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Retirement Community	16.6794 / 10.5153	111.7137	0.5479	0.0137	129.5062
Single Family Housing	36.8772 / 23.2487	246.9919	1.2114	0.0304	286.3300
Strip Mall	9.93757 / 6.09077	65.9420	0.3264	8.1800e-003	76.5406
Total		1,032.6011	4.4305	0.1121	1,176.7708

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	21.1751 / 13.3495	141.8240	0.6956	0.0175	164.4121
City Park	0 / 37.4125	132.4360	5.4700e-003	1.1300e-003	132.9098
Condo/Townhouse	36.0302 / 22.7147	241.3189	1.1835	0.0297	279.7535
Elementary School	2.0606 / 5.2987	27.9595	0.0683	1.8200e-003	30.2082
Government Office Building	1.9866 / 1.21759	13.1823	0.0653	1.6400e-003	15.3011
Medical Office Building	9.96692 / 1.89846	51.2328	0.3268	8.0800e-003	61.8093
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Retirement Community	16.6794 / 10.5153	111.7137	0.5479	0.0137	129.5062
Single Family Housing	36.8772 / 23.2487	246.9919	1.2114	0.0304	286.3300
Strip Mall	9.93757 / 6.09077	65.9420	0.3264	8.1800e-003	76.5406
Total		1,032.601 1	4.4305	0.1121	1,176.770 8

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	477.2866	28.2068	0.0000	1,182.4573
Unmitigated	477.2866	28.2068	0.0000	1,182.4573

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	149.5	30.3472	1.7935	0.0000	75.1838
City Park	2.7	0.5481	0.0324	0.0000	1.3578
Condo/Townhouse	254.38	51.6368	3.0517	0.0000	127.9281
Elementary School	155.13	31.4900	1.8610	0.0000	78.0151
Government Office Building	9.3	1.8878	0.1116	0.0000	4.6770
Medical Office Building	857.84	174.1338	10.2910	0.0000	431.4090
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Retirement Community	117.76	23.9042	1.4127	0.0000	59.2217
Single Family Housing	663.79	134.7434	7.9631	0.0000	333.8210
Strip Mall	140.87	28.5953	1.6899	0.0000	70.8437
Total		477.2866	28.2068	0.0000	1,182.4573

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	149.5	30.3472	1.7935	0.0000	75.1838
City Park	2.7	0.5481	0.0324	0.0000	1.3578
Condo/Townhouse	254.38	51.6368	3.0517	0.0000	127.9281
Elementary School	155.13	31.4900	1.8610	0.0000	78.0151
Government Office Building	9.3	1.8878	0.1116	0.0000	4.6770
Medical Office Building	857.84	174.1338	10.2910	0.0000	431.4090
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Retirement Community	117.76	23.9042	1.4127	0.0000	59.2217
Single Family Housing	663.79	134.7434	7.9631	0.0000	333.8210
Strip Mall	140.87	28.5953	1.6899	0.0000	70.8437
Total		477.2866	28.2068	0.0000	1,182.4573

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Avanti South Project - Antelope Valley APCD Air District, Summer

Avanti South Project
Antelope Valley APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	10.00	1000sqft	1.30	10,000.00	0
Medical Office Building	79.43	1000sqft	5.20	79,430.00	0
Elementary School	850.00	Student	12.80	71,062.86	0
Other Asphalt Surfaces	38.40	Acre	38.40	1,672,704.00	0
City Park	31.50	Acre	31.50	50,000.00	0
Apartments Low Rise	325.00	Dwelling Unit	14.30	325,000.00	930
Condo/Townhouse	378.00	Dwelling Unit	48.30	756,000.00	1081
Condo/Townhouse	175.00	Dwelling Unit	22.80	350,000.00	501
Retirement Community	256.00	Dwelling Unit	31.30	486,400.00	732
Single Family Housing	566.00	Dwelling Unit	93.00	1,415,000.00	1619
Strip Mall	134.16	1000sqft	8.80	134,160.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2032
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Avanti South Project - Antelope Valley APCD Air District, Summer

Project Characteristics - All default values.

Land Use - Dimensions and acreage per Avanti South Specific Plan Tables 2-2 and 2-3 (May 2017) and Royal Investors Group, LLC

Construction Phase - Construction Schedule per Royal Investors Group

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Trips and VMT -

On-road Fugitive Dust - Based on California Statewide Silt Lading Values for Collector Streets in ARB's Miscellaneous Process Methodology 7.9 Entrained Road Travel, Paved Road Dust (April 2014).

Grading - Based on Avanti South Specific Plan (December 2016), net material exported 1352 cubic yards (714 cubic yards for Avanti South and 638 cubic yards for Avanti West)1352.

Architectural Coating - AVAQMD Rule 1113. Assume 90% flat paints (50 g/L) and 10% non-flat paints at 100 g/L. Parking VOC content assumed to be compliant with AVAMD Rule 1113's Traffic Marking Coating VOC content.

Vehicle Trips - Adjustments based on Traffic Study completed for Avanti South plan; 3 mile C-C adjustment based on nearby medical, small strip mall locations in vicinity

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust - Based on California Statewide Silt Lading Values for Collector Streets in ARB's Miscellaneous Process Methodology 7.9 Entrained Road Travel, Paved Road Dust (November 2016).

Woodstoves - No wood burning stoves or fireplaces

Area Coating - AVAMD Rule 1113. Assume 90% flat paints (50 g/L) and 10% non-flat paints at 100 g/L. Parking VOC content assumed to be compliant with AVAMD Rule 1113's Traffic Marking Coating VOC content.

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Use of no less than Tier 3 engines in all equipment to reduce NOx impact.

Avanti South Project - Antelope Valley APCD Air District, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	178.75	0.00
tblFireplaces	NumberNoFireplace	32.50	0.00
tblFireplaces	NumberWood	113.75	0.00

Avanti South Project - Antelope Valley APCD Air District, Summer

tblFireplaces	NumberWood	193.55	0.00
tblFireplaces	NumberWood	89.60	0.00
tblFireplaces	NumberWood	198.10	0.00
tblFleetMix	FleetMixLandUseSubType	Government Office Building	Apartments Low Rise
tblFleetMix	FleetMixLandUseSubType	Medical Office Building	City Park
tblFleetMix	FleetMixLandUseSubType	Elementary School	Condo/Townhouse
tblFleetMix	FleetMixLandUseSubType	Other Asphalt Surfaces	Condo/Townhouse
tblFleetMix	FleetMixLandUseSubType	City Park	Elementary School
tblFleetMix	FleetMixLandUseSubType	Apartments Low Rise	Government Office Building
tblFleetMix	FleetMixLandUseSubType	Condo/Townhouse	Medical Office Building
tblFleetMix	FleetMixLandUseSubType	Condo/Townhouse	Other Asphalt Surfaces
tblFleetMix	HHD	0.04	0.00
tblFleetMix	HHD	0.04	0.00
tblFleetMix	HHD	0.04	0.00
tblFleetMix	HHD	0.04	0.04
tblFleetMix	HHD	0.04	0.00
tblFleetMix	HHD	0.04	0.00
tblFleetMix	HHD	0.04	0.00
tblFleetMix	HHD	0.04	0.04
tblFleetMix	LDA	0.65	0.68
tblFleetMix	LDA	0.65	0.68
tblFleetMix	LDA	0.65	0.68
tblFleetMix	LDA	0.65	0.65
tblFleetMix	LDA	0.65	0.68
tblFleetMix	LDA	0.65	0.68
tblFleetMix	LDA	0.65	0.68
tblFleetMix	LDA	0.65	0.68
tblFleetMix	LDA	0.65	0.65

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tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT1	0.03	0.03
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tblFleetMix	LDT2	0.15	0.15
tblFleetMix	LDT2	0.15	0.15
tblFleetMix	LDT2	0.15	0.15
tblFleetMix	LDT2	0.15	0.16
tblFleetMix	LDT2	0.15	0.16
tblFleetMix	LDT2	0.15	0.15
tblFleetMix	LDT2	0.15	0.15
tblFleetMix	LHD1	9.6820e-003	0.01
tblFleetMix	LHD1	9.6820e-003	0.01
tblFleetMix	LHD1	9.6820e-003	0.01
tblFleetMix	LHD1	9.6820e-003	9.7120e-003
tblFleetMix	LHD1	9.6820e-003	0.01
tblFleetMix	LHD1	9.6820e-003	0.01
tblFleetMix	LHD1	9.6820e-003	0.01
tblFleetMix	LHD1	9.6820e-003	9.7260e-003
tblFleetMix	LHD2	3.9710e-003	4.1540e-003
tblFleetMix	LHD2	3.9710e-003	4.1540e-003
tblFleetMix	LHD2	3.9710e-003	4.1540e-003

Avanti South Project - Antelope Valley APCD Air District, Summer

tblFleetMix	MH	6.3700e-004	6.6600e-004
tblFleetMix	MH	6.3700e-004	0.00
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	OBUS	2.4410e-003	0.00
tblFleetMix	OBUS	2.4410e-003	0.00
tblFleetMix	OBUS	2.4410e-003	0.00
tblFleetMix	OBUS	2.4410e-003	0.00
tblFleetMix	OBUS	2.4410e-003	0.00
tblFleetMix	OBUS	2.4410e-003	0.00
tblFleetMix	OBUS	2.4410e-003	0.00
tblFleetMix	OBUS	2.4410e-003	0.00
tblFleetMix	SBUS	1.4480e-003	1.5150e-003
tblFleetMix	SBUS	1.4480e-003	1.5150e-003
tblFleetMix	SBUS	1.4480e-003	1.5150e-003
tblFleetMix	SBUS	1.4480e-003	1.4520e-003
tblFleetMix	SBUS	1.4480e-003	0.00
tblFleetMix	SBUS	1.4480e-003	0.00
tblFleetMix	SBUS	1.4480e-003	1.5140e-003
tblFleetMix	SBUS	1.4480e-003	0.00
tblFleetMix	UBUS	1.8610e-003	1.9470e-003

Avanti South Project - Antelope Valley APCD Air District, Summer

tblFleetMix	UBUS	1.8610e-003	1.9470e-003
tblFleetMix	UBUS	1.8610e-003	1.9470e-003
tblFleetMix	UBUS	1.8610e-003	1.8670e-003
tblFleetMix	UBUS	1.8610e-003	1.9500e-003
tblFleetMix	UBUS	1.8610e-003	1.9500e-003
tblFleetMix	UBUS	1.8610e-003	1.9460e-003
tblFleetMix	UBUS	1.8610e-003	1.8690e-003
tblGrading	AcresOfGrading	851.50	524.00
tblGrading	MaterialExported	0.00	1,352.00
tblLandUse	BuildingSpaceSquareFeet	175,000.00	350,000.00
tblLandUse	BuildingSpaceSquareFeet	378,000.00	756,000.00
tblLandUse	BuildingSpaceSquareFeet	256,000.00	486,400.00
tblLandUse	BuildingSpaceSquareFeet	1,018,800.00	1,415,000.00
tblLandUse	GreenSpaceSquareFeet	1,372,140.00	50,000.00
tblLandUse	LandUseSquareFeet	1,372,140.00	50,000.00
tblLandUse	LandUseSquareFeet	175,000.00	350,000.00
tblLandUse	LandUseSquareFeet	378,000.00	756,000.00
tblLandUse	LandUseSquareFeet	256,000.00	486,400.00
tblLandUse	LandUseSquareFeet	1,018,800.00	1,415,000.00
tblLandUse	LotAcreage	0.23	1.30
tblLandUse	LotAcreage	1.82	5.20
tblLandUse	LotAcreage	1.63	12.80
tblLandUse	LotAcreage	20.31	14.30
tblLandUse	LotAcreage	10.94	22.80
tblLandUse	LotAcreage	23.63	48.30
tblLandUse	LotAcreage	51.20	31.30
tblLandUse	LotAcreage	183.77	93.00

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tblLandUse	LotAcreage	3.08	8.80
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOnRoadDust	RoadSiltLoading	0.10	0.03
tblOnRoadDust	RoadSiltLoading	0.10	0.03
tblOnRoadDust	RoadSiltLoading	0.10	0.03
tblOnRoadDust	RoadSiltLoading	0.10	0.03
tblOnRoadDust	RoadSiltLoading	0.10	0.03
tblProjectCharacteristics	OperationalYear	2018	2032
tblSolidWaste	SolidWasteGenerationRate	2.71	2.70
tblTripsAndVMT	WorkerTripNumber	43.00	30.00
tblVehicleTrips	CC_TL	7.30	2.50
tblVehicleTrips	CC_TL	7.30	2.50
tblVehicleTrips	CC_TL	7.30	2.50
tblVehicleTrips	HS_TL	7.30	2.50

Avanti South Project - Antelope Valley APCD Air District, Summer

tblVehicleTrips	HS_TL	7.30	2.50
tblVehicleTrips	HS_TL	7.30	2.50
tblVehicleTrips	HS_TL	7.30	2.50
tblVehicleTrips	HW_TL	10.80	30.34
tblVehicleTrips	HW_TL	10.80	25.54
tblVehicleTrips	HW_TL	10.80	0.00
tblVehicleTrips	HW_TL	10.80	30.34
tblVehicleTrips	ST_TR	7.16	6.39
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.03	2.61
tblVehicleTrips	ST_TR	42.04	49.97
tblVehicleTrips	SU_TR	6.07	5.86
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.95	2.84
tblVehicleTrips	SU_TR	20.43	25.24
tblVehicleTrips	WD_TR	6.59	6.65
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	2.40	3.44
tblVehicleTrips	WD_TR	44.32	42.70
tblWater	OutdoorWaterUseRate	37,531,662.51	37,412,514.38
tblWoodstoves	NumberCatalytic	16.25	0.00
tblWoodstoves	NumberCatalytic	27.65	0.00
tblWoodstoves	NumberCatalytic	12.80	0.00
tblWoodstoves	NumberCatalytic	28.30	0.00
tblWoodstoves	NumberNoncatalytic	16.25	0.00
tblWoodstoves	NumberNoncatalytic	27.65	0.00

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tblWoodstoves	NumberNoncatalytic	12.80	0.00
tblWoodstoves	NumberNoncatalytic	28.30	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

Avanti South Project - Antelope Valley APCD Air District, Summer

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					
2017	5.0764	52.3549	24.5399	0.0398	18.1286	2.8800	21.0085	9.9489	2.6496	12.5985	0.0000	4,071.499 2	4,071.499 2	1.2019	0.0000	4,101.546 3
2018	37.3384	148.6556	193.1543	0.4668	22.4245	6.3361	28.7606	10.4227	5.8292	16.2519	0.0000	46,995.86 52	46,995.86 52	4.5968	0.0000	47,089.92 28
2019	35.0383	136.5217	179.1911	0.4611	9.5667	4.3464	13.9131	2.8590	4.1330	6.9920	0.0000	46,357.10 68	46,357.10 68	3.5981	0.0000	46,447.05 78
2020	33.1143	124.9966	166.9797	0.4540	9.5668	3.7508	13.3175	2.8590	3.5639	6.4229	0.0000	45,550.15 94	45,550.15 94	3.4161	0.0000	45,635.56 08
2021	31.5087	113.8754	158.1914	0.4482	9.5668	3.1387	12.7055	2.8590	2.9790	5.8380	0.0000	44,970.31 47	44,970.31 47	3.2868	0.0000	45,052.48 35
2022	30.1798	104.7825	150.2458	0.4401	9.5669	2.6833	12.2502	2.8590	2.5482	5.4072	0.0000	44,171.40 33	44,171.40 33	3.1811	0.0000	44,250.93 00
2023	28.9144	90.3423	142.6563	0.4292	9.5669	2.3444	11.9114	2.8590	2.2250	5.0841	0.0000	43,071.70 88	43,071.70 88	2.9772	0.0000	43,146.13 99
2024	28.0345	86.5652	134.7943	0.4205	9.5670	2.0948	11.6618	2.8591	1.9861	4.8451	0.0000	42,200.90 45	42,200.90 45	2.8984	0.0000	42,273.36 32
2025	27.2437	82.7242	129.4311	0.4128	9.5670	1.8433	11.4104	2.8591	1.7464	4.6055	0.0000	41,429.34 09	41,429.34 09	2.8354	0.0000	41,500.22 59
Maximum	37.3384	148.6556	193.1543	0.4668	22.4245	6.3361	28.7606	10.4227	5.8292	16.2519	0.0000	46,995.86 52	46,995.86 52	4.5968	0.0000	47,089.92 28

Avanti South Project - Antelope Valley APCD Air District, Summer

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	91.3599	19.2038	147.4829	0.1197		2.2004	2.2004		2.2004	2.2004	0.0000	22,708.31 86	22,708.31 86	0.6717	0.4117	22,847.79 18
Energy	1.2931	11.0804	4.9265	0.0705		0.8934	0.8934		0.8934	0.8934		14,106.118 2	14,106.118 2	0.2704	0.2586	14,189.94 38
Mobile	34.3351	86.7700	390.7880	1.4755	67.3173	0.8887	68.2060	20.2438	0.8225	21.0663		148,965.6 175	148,965.6 175	4.9056		149,088.2 570
Total	126.9881	117.0541	543.1974	1.6657	67.3173	3.9825	71.2998	20.2438	3.9163	24.1601	0.0000	185,780.0 543	185,780.0 543	5.8476	0.6703	186,125.9 926

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	91.3599	19.2038	147.4829	0.1197		2.2004	2.2004		2.2004	2.2004	0.0000	22,708.31 86	22,708.31 86	0.6717	0.4117	22,847.79 18
Energy	1.2931	11.0804	4.9265	0.0705		0.8934	0.8934		0.8934	0.8934		14,106.118 2	14,106.118 2	0.2704	0.2586	14,189.94 38
Mobile	34.3351	86.7700	390.7880	1.4755	67.3173	0.8887	68.2060	20.2438	0.8225	21.0663		148,965.6 175	148,965.6 175	4.9056		149,088.2 570
Total	126.9881	117.0541	543.1974	1.6657	67.3173	3.9825	71.2998	20.2438	3.9163	24.1601	0.0000	185,780.0 543	185,780.0 543	5.8476	0.6703	186,125.9 926

Avanti South Project - Antelope Valley APCD Air District, Summer

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/2/2017	3/2/2018	5	110	
2	Grading	Grading	3/5/2018	9/3/2018	5	131	
3	Building Construction	Building Construction	9/4/2018	9/1/2025	5	1825	
4	Paving	Paving	9/4/2018	9/1/2025	5	1825	
5	Architectural Coating	Architectural Coating	9/4/2018	9/1/2025	5	1825	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 524

Acres of Paving: 38.4

Residential Indoor: 6,748,110; Residential Outdoor: 2,249,370; Non-Residential Indoor: 516,979; Non-Residential Outdoor: 172,326; Striped Parking Area: 100,362 (Architectural Coating – sqft)

OffRoad Equipment

Avanti South Project - Antelope Valley APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	3	8.00	158	0.38
Grading	Graders	3	8.00	187	0.41
Grading	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	5	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	3	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Pavers	3	8.00	130	0.42
Paving	Paving Equipment	3	8.00	132	0.36
Paving	Rollers	3	8.00	80	0.38
Architectural Coating	Air Compressors	3	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	17	30.00	0.00	169.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	1,845.00	512.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	369.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Avanti South Project - Antelope Valley APCD Air District, Summer

Use Cleaner Engines for Construction Equipment

Clean Paved Roads

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.950 0	3,894.950 0	1.1934		3,924.785 2
Total	4.9608	52.2754	23.4554	0.0380	18.0663	2.8786	20.9448	9.9307	2.6483	12.5790		3,894.950 0	3,894.950 0	1.1934		3,924.785 2

Avanti South Project - Antelope Valley APCD Air District, Summer

3.2 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1156	0.0795	1.0846	1.7800e-003	0.0623	1.3900e-003	0.0637	0.0182	1.2900e-003	0.0195		176.5491	176.5491	8.4800e-003		176.7611
Total	0.1156	0.0795	1.0846	1.7800e-003	0.0623	1.3900e-003	0.0637	0.0182	1.2900e-003	0.0195		176.5491	176.5491	8.4800e-003		176.7611

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	0.9312	19.0656	22.9600	0.0380	18.0663	0.9462	19.0124	9.9307	0.9462	10.8769	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852

Avanti South Project - Antelope Valley APCD Air District, Summer

3.2 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1156	0.0795	1.0846	1.7800e-003	0.0623	1.3900e-003	0.0637	0.0182	1.2900e-003	0.0195		176.5491	176.5491	8.4800e-003		176.7611
Total	0.1156	0.0795	1.0846	1.7800e-003	0.0623	1.3900e-003	0.0637	0.0182	1.2900e-003	0.0195		176.5491	176.5491	8.4800e-003		176.7611

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708		3,831.6239	3,831.6239	1.1928		3,861.4448
Total	4.5627	48.1988	22.4763	0.0380	18.0663	2.5769	20.6432	9.9307	2.3708	12.3014		3,831.6239	3,831.6239	1.1928		3,861.4448

Avanti South Project - Antelope Valley APCD Air District, Summer

3.2 Site Preparation - 2018

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	0.1026	0.0693	0.9493	1.7300e-003	0.0623	1.3200e-003	0.0636	0.0182	1.2200e-003	0.0194		172.1282	172.1282	7.4900e-003		172.3155
Total	0.1026	0.0693	0.9493	1.7300e-003	0.0623	1.3200e-003	0.0636	0.0182	1.2200e-003	0.0194		172.1282	172.1282	7.4900e-003		172.3155

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448
Total	0.9312	19.0656	22.9600	0.0380	18.0663	0.9462	19.0124	9.9307	0.9462	10.8769	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448

Avanti South Project - Antelope Valley APCD Air District, Summer

3.2 Site Preparation - 2018

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	0.1026	0.0693	0.9493	1.7300e-003	0.0623	1.3200e-003	0.0636	0.0182	1.2200e-003	0.0194		172.1282	172.1282	7.4900e-003		172.3155
Total	0.1026	0.0693	0.9493	1.7300e-003	0.0623	1.3200e-003	0.0636	0.0182	1.2200e-003	0.0194		172.1282	172.1282	7.4900e-003		172.3155

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					22.3094	0.0000	22.3094	10.3889	0.0000	10.3889			0.0000			0.0000
Off-Road	12.4577	147.1970	79.6443	0.1461		6.3326	6.3326		5.8260	5.8260		14,711.4033	14,711.4033	4.5799		14,825.8998
Total	12.4577	147.1970	79.6443	0.1461	22.3094	6.3326	28.6420	10.3889	5.8260	16.2149		14,711.4033	14,711.4033	4.5799		14,825.8998

Avanti South Project - Antelope Valley APCD Air District, Summer

3.3 Grading - 2018

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	0.0115	0.3823	0.0770	1.1100e-003	0.0112	1.2800e-003	0.0125	3.3900e-003	1.2200e-003	4.6100e-003		116.8073	116.8073	4.4000e-003		116.9173
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	0.1710	0.1155	1.5821	2.8900e-003	0.1039	2.2000e-003	0.1061	0.0304	2.0300e-003	0.0324		286.8803	286.8803	0.0125		287.1925
Total	0.1825	0.4979	1.6591	4.0000e-003	0.1151	3.4800e-003	0.1185	0.0338	3.2500e-003	0.0370		403.6876	403.6876	0.0169		404.1098

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					22.3094	0.0000	22.3094	10.3889	0.0000	10.3889			0.0000			0.0000
Off-Road	3.5874	70.1532	83.3095	0.1461		2.9045	2.9045		2.9045	2.9045	0.0000	14,711.4033	14,711.4033	4.5799		14,825.8998
Total	3.5874	70.1532	83.3095	0.1461	22.3094	2.9045	25.2139	10.3889	2.9045	13.2934	0.0000	14,711.4033	14,711.4033	4.5799		14,825.8998

Avanti South Project - Antelope Valley APCD Air District, Summer

3.3 Grading - 2018

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	0.0115	0.3823	0.0770	1.1100e-003	0.0112	1.2800e-003	0.0125	3.3900e-003	1.2200e-003	4.6100e-003		116.8073	116.8073	4.4000e-003		116.9173
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	0.1710	0.1155	1.5821	2.8900e-003	0.1039	2.2000e-003	0.1061	0.0304	2.0300e-003	0.0324		286.8803	286.8803	0.0125		287.1925
Total	0.1825	0.4979	1.6591	4.0000e-003	0.1151	3.4800e-003	0.1185	0.0338	3.2500e-003	0.0370		403.6876	403.6876	0.0169		404.1098

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.7449	36.8194	29.9844	0.0471		2.3578	2.3578		2.2593	2.2593		4,471.8254	4,471.8254	0.8707		4,493.5935
Total	4.7449	36.8194	29.9844	0.0471		2.3578	2.3578		2.2593	2.2593		4,471.8254	4,471.8254	0.8707		4,493.5935

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 Building Construction - 2018

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	2.3391	68.9170	15.5837	0.1581	1.8215	0.4784	2.2998	0.5941	0.4576	1.0518		16,565.40 85	16,565.40 85	0.7820		16,584.95 84
Worker	10.5185	7.1052	97.3015	0.1777	6.3880	0.1351	6.5230	1.8679	0.1246	1.9925		17,643.13 54	17,643.13 54	0.7681		17,662.33 89
Total	12.8576	76.0222	112.8852	0.3358	8.2094	0.6135	8.8228	2.4621	0.5822	3.0442		34,208.54 39	34,208.54 39	1.5501		34,247.29 73

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,471.825 4	4,471.825 4	0.8707		4,493.593 5
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,471.825 4	4,471.825 4	0.8707		4,493.593 5

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 Building Construction - 2018

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	2.3391	68.9170	15.5837	0.1581	1.8215	0.4784	2.2998	0.5941	0.4576	1.0518		16,565.40 85	16,565.40 85	0.7820		16,584.95 84
Worker	10.5185	7.1052	97.3015	0.1777	6.3880	0.1351	6.5230	1.8679	0.1246	1.9925		17,643.13 54	17,643.13 54	0.7681		17,662.33 89
Total	12.8576	76.0222	112.8852	0.3358	8.2094	0.6135	8.8228	2.4621	0.5822	3.0442		34,208.54 39	34,208.54 39	1.5501		34,247.29 73

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1698	33.5105	29.3744	0.0471		2.0312	2.0312		1.9469	1.9469		4,439.334 3	4,439.334 3	0.8387		4,460.302 1
Total	4.1698	33.5105	29.3744	0.0471		2.0312	2.0312		1.9469	1.9469		4,439.334 3	4,439.334 3	0.8387		4,460.302 1

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 Building Construction - 2019

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	2.1366	65.1508	14.2189	0.1575	1.8215	0.4033	2.2248	0.5942	0.3858	0.9800		16,500.25 92	16,500.25 92	0.7488		16,518.97 99
Worker	9.6031	6.3117	87.6191	0.1736	6.3880	0.1319	6.5199	1.8679	0.1216	1.9895		17,242.72 29	17,242.72 29	0.6963		17,260.13 12
Total	11.7397	71.4626	101.8380	0.3311	8.2095	0.5352	8.7447	2.4621	0.5074	2.9695		33,742.98 21	33,742.98 21	1.4452		33,779.11 10

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,439.334 3	4,439.334 3	0.8387		4,460.302 1
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,439.334 3	4,439.334 3	0.8387		4,460.302 1

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 Building Construction - 2019

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	2.1366	65.1508	14.2189	0.1575	1.8215	0.4033	2.2248	0.5942	0.3858	0.9800		16,500.25 92	16,500.25 92	0.7488		16,518.97 99
Worker	9.6031	6.3117	87.6191	0.1736	6.3880	0.1319	6.5199	1.8679	0.1216	1.9895		17,242.72 29	17,242.72 29	0.6963		17,260.13 12
Total	11.7397	71.4626	101.8380	0.3311	8.2095	0.5352	8.7447	2.4621	0.5074	2.9695		33,742.98 21	33,742.98 21	1.4452		33,779.11 10

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7374	30.7493	28.9129	0.0471		1.7610	1.7610		1.6881	1.6881		4,396.724 5	4,396.724 5	0.8134		4,417.060 1
Total	3.7374	30.7493	28.9129	0.0471		1.7610	1.7610		1.6881	1.6881		4,396.724 5	4,396.724 5	0.8134		4,417.060 1

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 Building Construction - 2020

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	1.7921	59.5698	12.4906	0.1567	1.8216	0.2621	2.0837	0.5942	0.2507	0.8449		16,421.4780	16,421.4780	0.6949		16,438.8506
Worker	8.8582	5.6446	79.4021	0.1684	6.3880	0.1276	6.5156	1.8679	0.1176	1.9855		16,738.2528	16,738.2528	0.6182		16,753.7074
Total	10.6503	65.2144	91.8927	0.3251	8.2096	0.3897	8.5993	2.4621	0.3683	2.8304		33,159.7308	33,159.7308	1.3131		33,192.5580

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,396.7245	4,396.7245	0.8134		4,417.0601
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,396.7245	4,396.7245	0.8134		4,417.0601

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 Building Construction - 2020

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	1.7921	59.5698	12.4906	0.1567	1.8216	0.2621	2.0837	0.5942	0.2507	0.8449		16,421.4780	16,421.4780	0.6949		16,438.8506
Worker	8.8582	5.6446	79.4021	0.1684	6.3880	0.1276	6.5156	1.8679	0.1176	1.9855		16,738.2528	16,738.2528	0.6182		16,753.7074
Total	10.6503	65.2144	91.8927	0.3251	8.2096	0.3897	8.5993	2.4621	0.3683	2.8304		33,159.7308	33,159.7308	1.3131		33,192.5580

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3429	28.0993	28.4777	0.0471		1.5088	1.5088		1.4462	1.4462		4,397.0684	4,397.0684	0.7927		4,416.8863
Total	3.3429	28.0993	28.4777	0.0471		1.5088	1.5088		1.4462	1.4462		4,397.0684	4,397.0684	0.7927		4,416.8863

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.5015	54.0758	11.0073	0.1560	1.8217	0.0851	1.9068	0.5942	0.0814	0.6756		16,344.9670	16,344.9670	0.6551		16,361.3455
Worker	8.3008	5.1253	73.7805	0.1641	6.3880	0.1252	6.5131	1.8679	0.1153	1.9832		16,323.4835	16,323.4835	0.5698		16,337.7283
Total	9.8022	59.2011	84.7878	0.3201	8.2096	0.2103	8.4199	2.4621	0.1967	2.6588		32,668.4505	32,668.4505	1.2249		32,699.0738

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,397.0684	4,397.0684	0.7927		4,416.8863
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,397.0684	4,397.0684	0.7927		4,416.8863

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.5015	54.0758	11.0073	0.1560	1.8217	0.0851	1.9068	0.5942	0.0814	0.6756		16,344.9670	16,344.9670	0.6551		16,361.3455
Worker	8.3008	5.1253	73.7805	0.1641	6.3880	0.1252	6.5131	1.8679	0.1153	1.9832		16,323.4835	16,323.4835	0.5698		16,337.7283
Total	9.8022	59.2011	84.7878	0.3201	8.2096	0.2103	8.4199	2.4621	0.1967	2.6588		32,668.4505	32,668.4505	1.2249		32,699.0738

3.4 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	3.0281	25.5494	28.1827	0.0471		1.2861	1.2861		1.2338	1.2338		4,398.1766	4,398.1766	0.7799		4,417.6747
Total	3.0281	25.5494	28.1827	0.0471		1.2861	1.2861		1.2338	1.2338		4,398.1766	4,398.1766	0.7799		4,417.6747

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 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	1.4059	51.2748	10.2802	0.1549	1.8217	0.0715	1.8932	0.5942	0.0683	0.6626		16,229.15 23	16,229.15 23	0.6293		16,244.88 46
Worker	7.7796	4.6493	68.1732	0.1584	6.3880	0.1213	6.5092	1.8679	0.1117	1.9796		15,758.61 90	15,758.61 90	0.5176		15,771.55 86
Total	9.1854	55.9241	78.4535	0.3133	8.2097	0.1927	8.4024	2.4621	0.1800	2.6422		31,987.77 13	31,987.77 13	1.1469		32,016.44 32

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,398.176 6	4,398.176 6	0.7799		4,417.674 7
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,398.176 6	4,398.176 6	0.7799		4,417.674 7

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 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	1.4059	51.2748	10.2802	0.1549	1.8217	0.0715	1.8932	0.5942	0.0683	0.6626		16,229.15 23	16,229.15 23	0.6293		16,244.88 46
Worker	7.7796	4.6493	68.1732	0.1584	6.3880	0.1213	6.5092	1.8679	0.1117	1.9796		15,758.61 90	15,758.61 90	0.5176		15,771.55 86
Total	9.1854	55.9241	78.4535	0.3133	8.2097	0.1927	8.4024	2.4621	0.1800	2.6422		31,987.77 13	31,987.77 13	1.1469		32,016.44 32

3.4 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	2.7941	23.7100	28.0047	0.0471		1.1149	1.1149		1.0697	1.0697		4,399.178 1	4,399.178 1	0.7671		4,418.355 6
Total	2.7941	23.7100	28.0047	0.0471		1.1149	1.1149		1.0697	1.0697		4,399.178 1	4,399.178 1	0.7671		4,418.355 6

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 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	1.1015	41.0101	9.1498	0.1510	1.8218	0.0380	1.8597	0.5942	0.0363	0.6305		15,823.18 32	15,823.18 32	0.5023		15,835.73 94
Worker	7.3091	4.2251	62.9964	0.1526	6.3880	0.1180	6.5059	1.8679	0.1086	1.9765		15,185.72 67	15,185.72 67	0.4698		15,197.47 08
Total	8.4106	45.2352	72.1463	0.3036	8.2097	0.1559	8.3656	2.4622	0.1449	2.6071		31,008.90 98	31,008.90 98	0.9720		31,033.21 02

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,399.178 1	4,399.178 1	0.7671		4,418.355 6
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,399.178 1	4,399.178 1	0.7671		4,418.355 6

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 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	1.1015	41.0101	9.1498	0.1510	1.8218	0.0380	1.8597	0.5942	0.0363	0.6305		15,823.18 32	15,823.18 32	0.5023		15,835.73 94
Worker	7.3091	4.2251	62.9964	0.1526	6.3880	0.1180	6.5059	1.8679	0.1086	1.9765		15,185.72 67	15,185.72 67	0.4698		15,197.47 08
Total	8.4106	45.2352	72.1463	0.3036	8.2097	0.1559	8.3656	2.4622	0.1449	2.6071		31,008.90 98	31,008.90 98	0.9720		31,033.21 02

3.4 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	2.6088	22.2755	27.8822	0.0471		0.9728	0.9728		0.9330	0.9330		4,399.736 9	4,399.736 9	0.7563		4,418.645 0
Total	2.6088	22.2755	27.8822	0.0471		0.9728	0.9728		0.9330	0.9330		4,399.736 9	4,399.736 9	0.7563		4,418.645 0

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 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	1.0503	40.4678	8.5319	0.1492	1.8218	0.0371	1.8589	0.5942	0.0355	0.6297		15,637.0177	15,637.0177	0.4954		15,649.4014
Worker	6.8696	3.8432	57.0747	0.1469	6.3880	0.1142	6.5021	1.8679	0.1051	1.9730		14,620.6451	14,620.6451	0.4226		14,631.2091
Total	7.9199	44.3111	65.6066	0.2961	8.2098	0.1513	8.3610	2.4622	0.1406	2.6027		30,257.6628	30,257.6628	0.9179		30,280.6105

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,399.7369	4,399.7369	0.7563		4,418.6450
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,399.7369	4,399.7369	0.7563		4,418.6450

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 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	1.0503	40.4678	8.5319	0.1492	1.8218	0.0371	1.8589	0.5942	0.0355	0.6297		15,637.01 77	15,637.01 77	0.4954		15,649.40 14
Worker	6.8696	3.8432	57.0747	0.1469	6.3880	0.1142	6.5021	1.8679	0.1051	1.9730		14,620.64 51	14,620.64 51	0.4226		14,631.20 91
Total	7.9199	44.3111	65.6066	0.2961	8.2098	0.1513	8.3610	2.4622	0.1406	2.6027		30,257.66 28	30,257.66 28	0.9179		30,280.61 05

3.4 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	2.4284	20.8413	27.7601	0.0471		0.8372	0.8372		0.8029	0.8029		4,400.623 2	4,400.623 2	0.7457		4,419.264 4
Total	2.4284	20.8413	27.7601	0.0471		0.8372	0.8372		0.8029	0.8029		4,400.623 2	4,400.623 2	0.7457		4,419.264 4

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 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	1.0288	40.1568	8.2462	0.1484	1.8219	0.0367	1.8586	0.5943	0.0351	0.6294		15,552.45 92	15,552.45 92	0.4887		15,564.67 63
Worker	6.5068	3.5230	53.0499	0.1411	6.3880	0.1118	6.4998	1.8679	0.1029	1.9709		14,054.28 84	14,054.28 84	0.3869		14,063.96 08
Total	7.5356	43.6798	61.2961	0.2896	8.2098	0.1486	8.3584	2.4622	0.1380	2.6002		29,606.74 76	29,606.74 76	0.8756		29,628.63 71

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,400.623 2	4,400.623 2	0.7457		4,419.264 4
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,400.623 2	4,400.623 2	0.7457		4,419.264 4

Avanti South Project - Antelope Valley APCD Air District, Summer

3.4 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	1.0288	40.1568	8.2462	0.1484	1.8219	0.0367	1.8586	0.5943	0.0351	0.6294		15,552.45 92	15,552.45 92	0.4887		15,564.67 63
Worker	6.5068	3.5230	53.0499	0.1411	6.3880	0.1118	6.4998	1.8679	0.1029	1.9709		14,054.28 84	14,054.28 84	0.3869		14,063.96 08
Total	7.5356	43.6798	61.2961	0.2896	8.2098	0.1486	8.3584	2.4622	0.1380	2.6002		29,606.74 76	29,606.74 76	0.8756		29,628.63 71

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4656	26.2814	22.1946	0.0342		1.4342	1.4342		1.3195	1.3195		3,441.133 1	3,441.133 1	1.0713		3,467.914 9
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.5207	26.2814	22.1946	0.0342		1.4342	1.4342		1.3195	1.3195		3,441.133 1	3,441.133 1	1.0713		3,467.914 9

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 Paving - 2018

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	0.1311	0.0886	1.2130	2.2200e-003	0.0796	1.6800e-003	0.0813	0.0233	1.5500e-003	0.0248		219.9415	219.9415	9.5800e-003		220.1809
Total	0.1311	0.0886	1.2130	2.2200e-003	0.0796	1.6800e-003	0.0813	0.0233	1.5500e-003	0.0248		219.9415	219.9415	9.5800e-003		220.1809

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,441.1331	3,441.1331	1.0713		3,467.9149
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,441.1331	3,441.1331	1.0713		3,467.9149

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 Paving - 2018

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	0.1311	0.0886	1.2130	2.2200e-003	0.0796	1.6800e-003	0.0813	0.0233	1.5500e-003	0.0248		219.9415	219.9415	9.5800e-003		220.1809
Total	0.1311	0.0886	1.2130	2.2200e-003	0.0796	1.6800e-003	0.0813	0.0233	1.5500e-003	0.0248		219.9415	219.9415	9.5800e-003		220.1809

3.5 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1817	22.8661	21.9973	0.0342		1.2369	1.2369		1.1379	1.1379		3,385.5037	3,385.5037	1.0711		3,412.2822
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.2368	22.8661	21.9973	0.0342		1.2369	1.2369		1.1379	1.1379		3,385.5037	3,385.5037	1.0711		3,412.2822

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 Paving - 2019

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	0.1197	0.0787	1.0923	2.1600e-003	0.0796	1.6400e-003	0.0813	0.0233	1.5200e-003	0.0248		214.9499	214.9499	8.6800e-003		215.1670
Total	0.1197	0.0787	1.0923	2.1600e-003	0.0796	1.6400e-003	0.0813	0.0233	1.5200e-003	0.0248		214.9499	214.9499	8.6800e-003		215.1670

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,385.5037	3,385.5037	1.0711		3,412.2822
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,385.5037	3,385.5037	1.0711		3,412.2822

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 Paving - 2019

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	0.1197	0.0787	1.0923	2.1600e-003	0.0796	1.6400e-003	0.0813	0.0233	1.5200e-003	0.0248		214.9499	214.9499	8.6800e-003		215.1670
Total	0.1197	0.0787	1.0923	2.1600e-003	0.0796	1.6400e-003	0.0813	0.0233	1.5200e-003	0.0248		214.9499	214.9499	8.6800e-003		215.1670

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0348	21.0984	21.9781	0.0342		1.1292	1.1292		1.0389	1.0389		3,311.6002	3,311.6002	1.0710		3,338.3761
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0900	21.0984	21.9781	0.0342		1.1292	1.1292		1.0389	1.0389		3,311.6002	3,311.6002	1.0710		3,338.3761

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 Paving - 2020

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	0.1104	0.0704	0.9898	2.1000e-003	0.0796	1.5900e-003	0.0812	0.0233	1.4700e-003	0.0248		208.6612	208.6612	7.7100e-003		208.8538
Total	0.1104	0.0704	0.9898	2.1000e-003	0.0796	1.5900e-003	0.0812	0.0233	1.4700e-003	0.0248		208.6612	208.6612	7.7100e-003		208.8538

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.6002	3,311.6002	1.0710		3,338.3761
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.6002	3,311.6002	1.0710		3,338.3761

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 Paving - 2020

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	0.1104	0.0704	0.9898	2.1000e-003	0.0796	1.5900e-003	0.0812	0.0233	1.4700e-003	0.0248		208.6612	208.6612	7.7100e-003		208.8538
Total	0.1104	0.0704	0.9898	2.1000e-003	0.0796	1.5900e-003	0.0812	0.0233	1.4700e-003	0.0248		208.6612	208.6612	7.7100e-003		208.8538

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8833	19.3786	21.9799	0.0342		1.0166	1.0166		0.9353	0.9353		3,310.8163	3,310.8163	1.0708		3,337.5859
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.9385	19.3786	21.9799	0.0342		1.0166	1.0166		0.9353	0.9353		3,310.8163	3,310.8163	1.0708		3,337.5859

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1035	0.0639	0.9198	2.0500e-003	0.0796	1.5600e-003	0.0812	0.0233	1.4400e-003	0.0247		203.4906	203.4906	7.1000e-003		203.6682
Total	0.1035	0.0639	0.9198	2.0500e-003	0.0796	1.5600e-003	0.0812	0.0233	1.4400e-003	0.0247		203.4906	203.4906	7.1000e-003		203.6682

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,310.8163	3,310.8163	1.0708		3,337.5859
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,310.8163	3,310.8163	1.0708		3,337.5859

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1035	0.0639	0.9198	2.0500e-003	0.0796	1.5600e-003	0.0812	0.0233	1.4400e-003	0.0247		203.4906	203.4906	7.1000e-003		203.6682
Total	0.1035	0.0639	0.9198	2.0500e-003	0.0796	1.5600e-003	0.0812	0.0233	1.4400e-003	0.0247		203.4906	203.4906	7.1000e-003		203.6682

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6542	16.6873	21.8707	0.0342		0.8519	0.8519		0.7837	0.7837		3,311.4905	3,311.4905	1.0710		3,338.2655
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7094	16.6873	21.8707	0.0342		0.8519	0.8519		0.7837	0.7837		3,311.4905	3,311.4905	1.0710		3,338.2655

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 Paving - 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	0.0970	0.0580	0.8499	1.9700e-003	0.0796	1.5100e-003	0.0811	0.0233	1.3900e-003	0.0247		196.4489	196.4489	6.4500e-003		196.6102
Total	0.0970	0.0580	0.8499	1.9700e-003	0.0796	1.5100e-003	0.0811	0.0233	1.3900e-003	0.0247		196.4489	196.4489	6.4500e-003		196.6102

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.4904	3,311.4904	1.0710		3,338.2655
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.4904	3,311.4904	1.0710		3,338.2655

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 Paving - 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	0.0970	0.0580	0.8499	1.9700e-003	0.0796	1.5100e-003	0.0811	0.0233	1.3900e-003	0.0247		196.4489	196.4489	6.4500e-003		196.6102
Total	0.0970	0.0580	0.8499	1.9700e-003	0.0796	1.5100e-003	0.0811	0.0233	1.3900e-003	0.0247		196.4489	196.4489	6.4500e-003		196.6102

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5491	15.2875	21.8763	0.0342		0.7653	0.7653		0.7041	0.7041		3,311.3762	3,311.3762	1.0710		3,338.1504
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6042	15.2875	21.8763	0.0342		0.7653	0.7653		0.7041	0.7041		3,311.3762	3,311.3762	1.0710		3,338.1504

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0911	0.0527	0.7853	1.9000e-003	0.0796	1.4700e-003	0.0811	0.0233	1.3500e-003	0.0246		189.3072	189.3072	5.8600e-003		189.4536
Total	0.0911	0.0527	0.7853	1.9000e-003	0.0796	1.4700e-003	0.0811	0.0233	1.3500e-003	0.0246		189.3072	189.3072	5.8600e-003		189.4536

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.3762	3,311.3762	1.0710		3,338.1504
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.3762	3,311.3762	1.0710		3,338.1504

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0911	0.0527	0.7853	1.9000e-003	0.0796	1.4700e-003	0.0811	0.0233	1.3500e-003	0.0246		189.3072	189.3072	5.8600e-003		189.4536
Total	0.0911	0.0527	0.7853	1.9000e-003	0.0796	1.4700e-003	0.0811	0.0233	1.3500e-003	0.0246		189.3072	189.3072	5.8600e-003		189.4536

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4822	14.2869	21.9386	0.0342		0.7028	0.7028		0.6466	0.6466		3,311.3208	3,311.3208	1.0710		3,338.0945
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5374	14.2869	21.9386	0.0342		0.7028	0.7028		0.6466	0.6466		3,311.3208	3,311.3208	1.0710		3,338.0945

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0856	0.0479	0.7115	1.8300e-003	0.0796	1.4200e-003	0.0811	0.0233	1.3100e-003	0.0246		182.2628	182.2628	5.2700e-003		182.3945
Total	0.0856	0.0479	0.7115	1.8300e-003	0.0796	1.4200e-003	0.0811	0.0233	1.3100e-003	0.0246		182.2628	182.2628	5.2700e-003		182.3945

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.3208	3,311.3208	1.0710		3,338.0945
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.3208	3,311.3208	1.0710		3,338.0945

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0856	0.0479	0.7115	1.8300e-003	0.0796	1.4200e-003	0.0811	0.0233	1.3100e-003	0.0246		182.2628	182.2628	5.2700e-003		182.3945
Total	0.0856	0.0479	0.7115	1.8300e-003	0.0796	1.4200e-003	0.0811	0.0233	1.3100e-003	0.0246		182.2628	182.2628	5.2700e-003		182.3945

3.5 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	1.3727	12.8725	21.8670	0.0342		0.6278	0.6278		0.5776	0.5776		3,310.1177	3,310.1177	1.0706		3,336.8817
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4279	12.8725	21.8670	0.0342		0.6278	0.6278		0.5776	0.5776		3,310.1177	3,310.1177	1.0706		3,336.8817

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 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	0.0811	0.0439	0.6613	1.7600e-003	0.0796	1.3900e-003	0.0810	0.0233	1.2800e-003	0.0246		175.2025	175.2025	4.8200e-003		175.3231
Total	0.0811	0.0439	0.6613	1.7600e-003	0.0796	1.3900e-003	0.0810	0.0233	1.2800e-003	0.0246		175.2025	175.2025	4.8200e-003		175.3231

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,310.1177	3,310.1177	1.0706		3,336.8817
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,310.1177	3,310.1177	1.0706		3,336.8817

Avanti South Project - Antelope Valley APCD Air District, Summer

3.5 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	0.0811	0.0439	0.6613	1.7600e-003	0.0796	1.3900e-003	0.0810	0.0233	1.2800e-003	0.0246		175.2025	175.2025	4.8200e-003		175.3231
Total	0.0811	0.0439	0.6613	1.7600e-003	0.0796	1.3900e-003	0.0810	0.0233	1.2800e-003	0.0246		175.2025	175.2025	4.8200e-003		175.3231

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.1945	8.0230	7.4168	0.0119		0.6022	0.6022		0.6022	0.6022		1,125.7942	1,125.7942	0.1070		1,128.4685
Total	14.9804	8.0230	7.4168	0.0119		0.6022	0.6022		0.6022	0.6022		1,125.7942	1,125.7942	0.1070		1,128.4685

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 Architectural Coating - 2018

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	2.1037	1.4210	19.4603	0.0355	1.2776	0.0270	1.3046	0.3736	0.0249	0.3985		3,528.627 1	3,528.627 1	0.1536		3,532.467 8
Total	2.1037	1.4210	19.4603	0.0355	1.2776	0.0270	1.3046	0.3736	0.0249	0.3985		3,528.627 1	3,528.627 1	0.1536		3,532.467 8

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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.794 2	1,125.794 2	0.1070		1,128.468 5
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.794 2	1,125.794 2	0.1070		1,128.468 5

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 Architectural Coating - 2018

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	2.1037	1.4210	19.4603	0.0355	1.2776	0.0270	1.3046	0.3736	0.0249	0.3985		3,528.627 1	3,528.627 1	0.1536		3,532.467 8
Total	2.1037	1.4210	19.4603	0.0355	1.2776	0.0270	1.3046	0.3736	0.0249	0.3985		3,528.627 1	3,528.627 1	0.1536		3,532.467 8

3.6 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.0658	7.3415	7.3653	0.0119		0.5151	0.5151		0.5151	0.5151		1,125.792 2	1,125.792 2	0.0951		1,128.169 4
Total	14.8516	7.3415	7.3653	0.0119		0.5151	0.5151		0.5151	0.5151		1,125.792 2	1,125.792 2	0.0951		1,128.169 4

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 Architectural Coating - 2019

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	1.9206	1.2624	17.5238	0.0347	1.2776	0.0264	1.3040	0.3736	0.0243	0.3979		3,448.544 6	3,448.544 6	0.1393		3,452.026 2
Total	1.9206	1.2624	17.5238	0.0347	1.2776	0.0264	1.3040	0.3736	0.0243	0.3979		3,448.544 6	3,448.544 6	0.1393		3,452.026 2

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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.792 2	1,125.792 2	0.0951		1,128.169 4
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.792 2	1,125.792 2	0.0951		1,128.169 4

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 Architectural Coating - 2019

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	1.9206	1.2624	17.5238	0.0347	1.2776	0.0264	1.3040	0.3736	0.0243	0.3979		3,448.544 6	3,448.544 6	0.1393		3,452.026 2
Total	1.9206	1.2624	17.5238	0.0347	1.2776	0.0264	1.3040	0.3736	0.0243	0.3979		3,448.544 6	3,448.544 6	0.1393		3,452.026 2

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.9687	6.7354	7.3257	0.0119		0.4437	0.4437		0.4437	0.4437		1,125.792 2	1,125.792 2	0.0872		1,127.971 3
Total	14.7546	6.7354	7.3257	0.0119		0.4437	0.4437		0.4437	0.4437		1,125.792 2	1,125.792 2	0.0872		1,127.971 3

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 Architectural Coating - 2020

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	1.7717	1.1289	15.8804	0.0337	1.2776	0.0255	1.3031	0.3736	0.0235	0.3971		3,347.6506	3,347.6506	0.1236		3,350.7415
Total	1.7717	1.1289	15.8804	0.0337	1.2776	0.0255	1.3031	0.3736	0.0235	0.3971		3,347.6506	3,347.6506	0.1236		3,350.7415

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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7922	1,125.7922	0.0872		1,127.9713
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7922	1,125.7922	0.0872		1,127.9713

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 Architectural Coating - 2020

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	1.7717	1.1289	15.8804	0.0337	1.2776	0.0255	1.3031	0.3736	0.0235	0.3971		3,347.6506	3,347.6506	0.1236		3,350.7415
Total	1.7717	1.1289	15.8804	0.0337	1.2776	0.0255	1.3031	0.3736	0.0235	0.3971		3,347.6506	3,347.6506	0.1236		3,350.7415

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.8756	6.1074	7.2702	0.0119		0.3764	0.3764		0.3764	0.3764		1,125.7922	1,125.7922	0.0773		1,127.7237
Total	14.6615	6.1074	7.2702	0.0119		0.3764	0.3764		0.3764	0.3764		1,125.7922	1,125.7922	0.0773		1,127.7237

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.6602	1.0251	14.7561	0.0328	1.2776	0.0250	1.3026	0.3736	0.0231	0.3966		3,264.6967	3,264.6967	0.1140		3,267.5457
Total	1.6602	1.0251	14.7561	0.0328	1.2776	0.0250	1.3026	0.3736	0.0231	0.3966		3,264.6967	3,264.6967	0.1140		3,267.5457

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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7922	1,125.7922	0.0773		1,127.7237
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7922	1,125.7922	0.0773		1,127.7237

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.6602	1.0251	14.7561	0.0328	1.2776	0.0250	1.3026	0.3736	0.0231	0.3966		3,264.6967	3,264.6967	0.1140		3,267.5457
Total	1.6602	1.0251	14.7561	0.0328	1.2776	0.0250	1.3026	0.3736	0.0231	0.3966		3,264.6967	3,264.6967	0.1140		3,267.5457

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.8182	5.6339	7.2544	0.0119		0.3269	0.3269		0.3269	0.3269		1,125.7922	1,125.7922	0.0733		1,127.6246
Total	14.6040	5.6339	7.2544	0.0119		0.3269	0.3269		0.3269	0.3269		1,125.7922	1,125.7922	0.0733		1,127.6246

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 Architectural Coating - 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	1.5559	0.9299	13.6347	0.0317	1.2776	0.0243	1.3018	0.3736	0.0223	0.3959		3,151.7238	3,151.7238	0.1035		3,154.3117
Total	1.5559	0.9299	13.6347	0.0317	1.2776	0.0243	1.3018	0.3736	0.0223	0.3959		3,151.7238	3,151.7238	0.1035		3,154.3117

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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7922	1,125.7922	0.0733		1,127.6246
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7922	1,125.7922	0.0733		1,127.6246

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 Architectural Coating - 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	1.5559	0.9299	13.6347	0.0317	1.2776	0.0243	1.3018	0.3736	0.0223	0.3959		3,151.7238	3,151.7238	0.1035		3,154.3117
Total	1.5559	0.9299	13.6347	0.0317	1.2776	0.0243	1.3018	0.3736	0.0223	0.3959		3,151.7238	3,151.7238	0.1035		3,154.3117

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7666	5.2120	7.2445	0.0119		0.2833	0.2833		0.2833	0.2833		1,125.7922	1,125.7922	0.0674		1,127.4760
Total	14.5525	5.2120	7.2445	0.0119		0.2833	0.2833		0.2833	0.2833		1,125.7922	1,125.7922	0.0674		1,127.4760

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.4618	0.8450	12.5993	0.0305	1.2776	0.0236	1.3012	0.3736	0.0217	0.3953		3,037.145 3	3,037.145 3	0.0940		3,039.494 2
Total	1.4618	0.8450	12.5993	0.0305	1.2776	0.0236	1.3012	0.3736	0.0217	0.3953		3,037.145 3	3,037.145 3	0.0940		3,039.494 2

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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.792 2	1,125.792 2	0.0674		1,127.476 0
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.792 2	1,125.792 2	0.0674		1,127.476 0

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.4618	0.8450	12.5993	0.0305	1.2776	0.0236	1.3012	0.3736	0.0217	0.3953		3,037.145 3	3,037.145 3	0.0940		3,039.494 2
Total	1.4618	0.8450	12.5993	0.0305	1.2776	0.0236	1.3012	0.3736	0.0217	0.3953		3,037.145 3	3,037.145 3	0.0940		3,039.494 2

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7231	4.8752	7.2405	0.0119		0.2437	0.2437		0.2437	0.2437		1,125.792 2	1,125.792 2	0.0634		1,127.377 0
Total	14.5089	4.8752	7.2405	0.0119		0.2437	0.2437		0.2437	0.2437		1,125.792 2	1,125.792 2	0.0634		1,127.377 0

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.3739	0.7687	11.4149	0.0294	1.2776	0.0228	1.3004	0.3736	0.0210	0.3946		2,924.1290	2,924.1290	0.0845		2,926.2418
Total	1.3739	0.7687	11.4149	0.0294	1.2776	0.0228	1.3004	0.3736	0.0210	0.3946		2,924.1290	2,924.1290	0.0845		2,926.2418

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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7922	1,125.7922	0.0634		1,127.3770
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7922	1,125.7922	0.0634		1,127.3770

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.3739	0.7687	11.4149	0.0294	1.2776	0.0228	1.3004	0.3736	0.0210	0.3946		2,924.1290	2,924.1290	0.0845		2,926.2418
Total	1.3739	0.7687	11.4149	0.0294	1.2776	0.0228	1.3004	0.3736	0.0210	0.3946		2,924.1290	2,924.1290	0.0845		2,926.2418

3.6 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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6834	4.5820	7.2365	0.0119		0.2060	0.2060		0.2060	0.2060		1,125.7922	1,125.7922	0.0614		1,127.3275
Total	14.4693	4.5820	7.2365	0.0119		0.2060	0.2060		0.2060	0.2060		1,125.7922	1,125.7922	0.0614		1,127.3275

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 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	1.3014	0.7046	10.6100	0.0282	1.2776	0.0224	1.3000	0.3736	0.0206	0.3942		2,810.857 7	2,810.857 7	0.0774		2,812.792 2
Total	1.3014	0.7046	10.6100	0.0282	1.2776	0.0224	1.3000	0.3736	0.0206	0.3942		2,810.857 7	2,810.857 7	0.0774		2,812.792 2

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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.792 2	1,125.792 2	0.0614		1,127.327 5
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.792 2	1,125.792 2	0.0614		1,127.327 5

Avanti South Project - Antelope Valley APCD Air District, Summer

3.6 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	1.3014	0.7046	10.6100	0.0282	1.2776	0.0224	1.3000	0.3736	0.0206	0.3942		2,810.857 7	2,810.857 7	0.0774		2,812.792 2
Total	1.3014	0.7046	10.6100	0.0282	1.2776	0.0224	1.3000	0.3736	0.0206	0.3942		2,810.857 7	2,810.857 7	0.0774		2,812.792 2

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Avanti South Project - Antelope Valley APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	34.3351	86.7700	390.7880	1.4755	67.3173	0.8887	68.2060	20.2438	0.8225	21.0663		148,965.6 175	148,965.6 175	4.9056		149,088.2 570
Unmitigated	34.3351	86.7700	390.7880	1.4755	67.3173	0.8887	68.2060	20.2438	0.8225	21.0663		148,965.6 175	148,965.6 175	4.9056		149,088.2 570

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	2,161.25	2,076.75	1904.50	10,731,459	10,731,459
City Park	0.00	0.00	0.00		
Condo/Townhouse	2,196.18	2,143.26	1829.52	9,520,417	9,520,417
Condo/Townhouse	1,016.75	992.25	847.00	4,407,601	4,407,601
Elementary School	1,096.50	0.00	0.00	1,442,648	1,442,648
Government Office Building	0.00	0.00	0.00		
Medical Office Building	2,869.81	711.69	123.12	2,930,608	2,930,608
Other Asphalt Surfaces	0.00	0.00	0.00		
Retirement Community	880.64	668.16	727.04	944,181	944,181
Single Family Housing	5,388.32	5,609.06	4878.92	27,163,078	27,163,078
Strip Mall	5,728.63	6,703.98	3386.20	5,097,167	5,097,167
Total	21,338.08	18,905.15	13,696.29	62,237,160	62,237,160

4.3 Trip Type Information

Avanti South Project - Antelope Valley APCD Air District, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	30.34	2.50	7.50	40.20	19.20	40.60	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	25.54	2.50	7.50	40.20	19.20	40.60	86	11	3
Condo/Townhouse	25.54	2.50	7.50	40.20	19.20	40.60	86	11	3
Elementary School	9.50	2.50	7.30	65.00	30.00	5.00	63	25	12
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16
Medical Office Building	9.50	2.50	7.30	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Retirement Community	0.00	2.50	7.50	40.20	19.20	40.60	86	11	3
Single Family Housing	30.34	2.50	7.50	40.20	19.20	40.60	86	11	3
Strip Mall	9.50	2.50	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.678603	0.033467	0.154883	0.087633	0.010129	0.004154	0.021098	0.000000	0.000000	0.001947	0.006573	0.001515	0.000000
City Park	0.648659	0.031990	0.148049	0.083766	0.009682	0.003971	0.020167	0.041048	0.002441	0.001861	0.006283	0.001448	0.000637
Condo/Townhouse	0.678603	0.033467	0.154883	0.087633	0.010129	0.004154	0.021098	0.000000	0.000000	0.001947	0.006573	0.001515	0.000000
Condo/Townhouse	0.678603	0.033467	0.154883	0.087633	0.010129	0.004154	0.021098	0.000000	0.000000	0.001947	0.006573	0.001515	0.000000
Elementary School	0.650662	0.032089	0.148506	0.084025	0.009712	0.003983	0.020229	0.041175	0.000000	0.001867	0.006302	0.001452	0.000000
Government Office Building	0.648659	0.031990	0.148049	0.083766	0.009682	0.003971	0.020167	0.041048	0.002441	0.001861	0.006283	0.001448	0.000637
Medical Office Building	0.679633	0.033518	0.155118	0.087766	0.010144	0.004161	0.021130	0.000000	0.000000	0.001950	0.006583	0.000000	0.000000
Other Asphalt Surfaces	0.648659	0.031990	0.148049	0.083766	0.009682	0.003971	0.020167	0.041048	0.002441	0.001861	0.006283	0.001448	0.000637
Retirement Community	0.679633	0.033518	0.155118	0.087766	0.010144	0.004161	0.021130	0.000000	0.000000	0.001950	0.006583	0.000000	0.000000
Single Family Housing	0.678151	0.033444	0.154780	0.087575	0.010122	0.004152	0.021084	0.000000	0.000000	0.001946	0.006569	0.001514	0.000666
Strip Mall	0.651608	0.032135	0.148722	0.084147	0.009726	0.003989	0.020259	0.041235	0.000000	0.001869	0.006312	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

Avanti South Project - Antelope Valley APCD Air District, Summer

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	1.2931	11.0804	4.9265	0.0705		0.8934	0.8934		0.8934	0.8934		14,106.1182	14,106.1182	0.2704	0.2586	14,189.9438
NaturalGas Unmitigated	1.2931	11.0804	4.9265	0.0705		0.8934	0.8934		0.8934	0.8934		14,106.1182	14,106.1182	0.2704	0.2586	14,189.9438

Avanti South Project - Antelope Valley APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	18476.2	0.1993	1.7027	0.7246	0.0109		0.1377	0.1377		0.1377	0.1377		2,173.6702	2,173.6702	0.0417	0.0399	2,186.5872
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	20759.4	0.2239	1.9131	0.8141	0.0122		0.1547	0.1547		0.1547	0.1547		2,442.2845	2,442.2845	0.0468	0.0448	2,456.7978
Condo/Townhouse	9610.84	0.1037	0.8857	0.3769	5.6500e-003		0.0716	0.0716		0.0716	0.0716		1,130.6873	1,130.6873	0.0217	0.0207	1,137.4064
Elementary School	2034.54	0.0219	0.1995	0.1676	1.2000e-003		0.0152	0.0152		0.0152	0.0152		239.3576	239.3576	4.5900e-003	4.3900e-003	240.7800
Government Office Building	286.575	3.0900e-003	0.0281	0.0236	1.7000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003		33.7148	33.7148	6.5000e-004	6.2000e-004	33.9151
Medical Office Building	2276.27	0.0246	0.2232	0.1875	1.3400e-003		0.0170	0.0170		0.0170	0.0170		267.7962	267.7962	5.1300e-003	4.9100e-003	269.3876
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
Retirement Community	14553.6	0.1570	1.3412	0.5707	8.5600e-003		0.1084	0.1084		0.1084	0.1084		1,712.1833	1,712.1833	0.0328	0.0314	1,722.3579
Single Family Housing	51298.1	0.5532	4.7275	2.0117	0.0302		0.3822	0.3822		0.3822	0.3822		6,035.0742	6,035.0742	0.1157	0.1106	6,070.9376
Strip Mall	606.477	6.5400e-003	0.0595	0.0500	3.6000e-004		4.5200e-003	4.5200e-003		4.5200e-003	4.5200e-003		71.3502	71.3502	1.3700e-003	1.3100e-003	71.7742
Total		1.2931	11.0804	4.9265	0.0705		0.8934	0.8934		0.8934	0.8934		14,106.1182	14,106.1182	0.2704	0.2586	14,189.9438

Avanti South Project - Antelope Valley APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	18.4762	0.1993	1.7027	0.7246	0.0109		0.1377	0.1377		0.1377	0.1377		2,173.6702	2,173.6702	0.0417	0.0399	2,186.5872
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	20.7594	0.2239	1.9131	0.8141	0.0122		0.1547	0.1547		0.1547	0.1547		2,442.2845	2,442.2845	0.0468	0.0448	2,456.7978
Condo/Townhouse	9.61084	0.1037	0.8857	0.3769	5.6500e-003		0.0716	0.0716		0.0716	0.0716		1,130.6873	1,130.6873	0.0217	0.0207	1,137.4064
Elementary School	2.03454	0.0219	0.1995	0.1676	1.2000e-003		0.0152	0.0152		0.0152	0.0152		239.3576	239.3576	4.5900e-003	4.3900e-003	240.7800
Government Office Building	0.286575	3.0900e-003	0.0281	0.0236	1.7000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003		33.7148	33.7148	6.5000e-004	6.2000e-004	33.9151
Medical Office Building	2.27627	0.0246	0.2232	0.1875	1.3400e-003		0.0170	0.0170		0.0170	0.0170		267.7962	267.7962	5.1300e-003	4.9100e-003	269.3876
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
Retirement Community	14.5536	0.1570	1.3412	0.5707	8.5600e-003		0.1084	0.1084		0.1084	0.1084		1,712.1833	1,712.1833	0.0328	0.0314	1,722.3579
Single Family Housing	51.2981	0.5532	4.7275	2.0117	0.0302		0.3822	0.3822		0.3822	0.3822		6,035.0742	6,035.0742	0.1157	0.1106	6,070.9376
Strip Mall	0.606477	6.5400e-003	0.0595	0.0500	3.6000e-004		4.5200e-003	4.5200e-003		4.5200e-003	4.5200e-003		71.3502	71.3502	1.3700e-003	1.3100e-003	71.7742
Total		1.2931	11.0804	4.9265	0.0705		0.8934	0.8934		0.8934	0.8934		14,106.1182	14,106.1182	0.2704	0.2586	14,189.9438

6.0 Area Detail

6.1 Mitigation Measures Area

Avanti South Project - Antelope Valley APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	91.3599	19.2038	147.4829	0.1197		2.2004	2.2004		2.2004	2.2004	0.0000	22,708.3186	22,708.3186	0.6717	0.4117	22,847.7918
Unmitigated	91.3599	19.2038	147.4829	0.1197		2.2004	2.2004		2.2004	2.2004	0.0000	22,708.3186	22,708.3186	0.6717	0.4117	22,847.7918

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	6.8929					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	78.2140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.0584	17.5902	7.4852	0.1123		1.4222	1.4222		1.4222	1.4222	0.0000	22,455.5294	22,455.5294	0.4304	0.4117	22,588.9714
Landscaping	4.1946	1.6136	139.9977	7.4100e-003		0.7782	0.7782		0.7782	0.7782		252.7892	252.7892	0.2413		258.8204
Total	91.3599	19.2038	147.4829	0.1197		2.2004	2.2004		2.2004	2.2004	0.0000	22,708.3186	22,708.3186	0.6717	0.4117	22,847.7918

Avanti South Project - Antelope Valley APCD Air District, Summer

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	6.8929					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	78.2140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.0584	17.5902	7.4852	0.1123		1.4222	1.4222		1.4222	1.4222	0.0000	22,455.5294	22,455.5294	0.4304	0.4117	22,588.9714
Landscaping	4.1946	1.6136	139.9977	7.4100e-003		0.7782	0.7782		0.7782	0.7782		252.7892	252.7892	0.2413		258.8204
Total	91.3599	19.2038	147.4829	0.1197		2.2004	2.2004		2.2004	2.2004	0.0000	22,708.3186	22,708.3186	0.6717	0.4117	22,847.7918

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Avanti South Project - Antelope Valley APCD Air District, Summer

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Avanti South Project - Antelope Valley APCD Air District, Winter

Avanti South Project
Antelope Valley APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	10.00	1000sqft	1.30	10,000.00	0
Medical Office Building	79.43	1000sqft	5.20	79,430.00	0
Elementary School	850.00	Student	12.80	71,062.86	0
Other Asphalt Surfaces	38.40	Acre	38.40	1,672,704.00	0
City Park	31.50	Acre	31.50	50,000.00	0
Apartments Low Rise	325.00	Dwelling Unit	14.30	325,000.00	930
Condo/Townhouse	378.00	Dwelling Unit	48.30	756,000.00	1081
Condo/Townhouse	175.00	Dwelling Unit	22.80	350,000.00	501
Retirement Community	256.00	Dwelling Unit	31.30	486,400.00	732
Single Family Housing	566.00	Dwelling Unit	93.00	1,415,000.00	1619
Strip Mall	134.16	1000sqft	8.80	134,160.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2032
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Avanti South Project - Antelope Valley APCD Air District, Winter

Project Characteristics - All default values.

Land Use - Dimensions and acreage per Avanti South Specific Plan Tables 2-2 and 2-3 (May 2017) and Royal Investors Group, LLC

Construction Phase - Construction Schedule per Royal Investors Group

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Off-road Equipment - Construction Equipment per Royal Investors Group, LLC

Trips and VMT -

On-road Fugitive Dust - Based on California Statewide Silt Lading Values for Collector Streets in ARB's Miscellaneous Process Methodology 7.9 Entrained Road Travel, Paved Road Dust (April 2014).

Grading - Based on Avanti South Specific Plan (December 2016), net material exported 1352 cubic yards (714 cubic yards for Avanti South and 638 cubic yards for Avanti West)1352.

Architectural Coating - AVAQMD Rule 1113. Assume 90% flat paints (50 g/L) and 10% non-flat paints at 100 g/L. Parking VOC content assumed to be compliant with AVAMD Rule 1113's Traffic Marking Coating VOC content.

Vehicle Trips - Adjustments based on Traffic Study completed for Avanti South plan; 3 mile C-C adjustment based on nearby medical, small strip mall locations in vicinity

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust - Based on California Statewide Silt Lading Values for Collector Streets in ARB's Miscellaneous Process Methodology 7.9 Entrained Road Travel, Paved Road Dust (November 2016).

Woodstoves - No wood burning stoves or fireplaces

Area Coating - AVAMD Rule 1113. Assume 90% flat paints (50 g/L) and 10% non-flat paints at 100 g/L. Parking VOC content assumed to be compliant with AVAMD Rule 1113's Traffic Marking Coating VOC content.

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Use of no less than Tier 3 engines in all equipment to reduce NOx impact.

Avanti South Project - Antelope Valley APCD Air District, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	178.75	0.00
tblFireplaces	NumberNoFireplace	32.50	0.00
tblFireplaces	NumberWood	113.75	0.00

Avanti South Project - Antelope Valley APCD Air District, Winter

tblFireplaces	NumberWood	193.55	0.00
tblFireplaces	NumberWood	89.60	0.00
tblFireplaces	NumberWood	198.10	0.00
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tblFleetMix	FleetMixLandUseSubType	Elementary School	Condo/Townhouse
tblFleetMix	FleetMixLandUseSubType	Other Asphalt Surfaces	Condo/Townhouse
tblFleetMix	FleetMixLandUseSubType	City Park	Elementary School
tblFleetMix	FleetMixLandUseSubType	Apartments Low Rise	Government Office Building
tblFleetMix	FleetMixLandUseSubType	Condo/Townhouse	Medical Office Building
tblFleetMix	FleetMixLandUseSubType	Condo/Townhouse	Other Asphalt Surfaces
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tblFleetMix	HHD	0.04	0.00
tblFleetMix	HHD	0.04	0.04
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tblFleetMix	LDA	0.65	0.68
tblFleetMix	LDA	0.65	0.68
tblFleetMix	LDA	0.65	0.65
tblFleetMix	LDA	0.65	0.68
tblFleetMix	LDA	0.65	0.68
tblFleetMix	LDA	0.65	0.68
tblFleetMix	LDA	0.65	0.68

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tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT1	0.03	0.03
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tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT1	0.03	0.03
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tblFleetMix	LDT2	0.15	0.15
tblFleetMix	LDT2	0.15	0.15
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tblFleetMix	LDT2	0.15	0.16
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tblFleetMix	LHD1	9.6820e-003	0.01
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tblFleetMix	LHD1	9.6820e-003	0.01
tblFleetMix	LHD1	9.6820e-003	0.01
tblFleetMix	LHD1	9.6820e-003	9.7260e-003
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tblFleetMix	LHD2	3.9710e-003	4.1540e-003
tblFleetMix	LHD2	3.9710e-003	4.1540e-003

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tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
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Avanti South Project - Antelope Valley APCD Air District, Winter

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tblFleetMix	UBUS	1.8610e-003	1.9500e-003
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tblGrading	MaterialExported	0.00	1,352.00
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tblLandUse	BuildingSpaceSquareFeet	378,000.00	756,000.00
tblLandUse	BuildingSpaceSquareFeet	256,000.00	486,400.00
tblLandUse	BuildingSpaceSquareFeet	1,018,800.00	1,415,000.00
tblLandUse	GreenSpaceSquareFeet	1,372,140.00	50,000.00
tblLandUse	LandUseSquareFeet	1,372,140.00	50,000.00
tblLandUse	LandUseSquareFeet	175,000.00	350,000.00
tblLandUse	LandUseSquareFeet	378,000.00	756,000.00
tblLandUse	LandUseSquareFeet	256,000.00	486,400.00
tblLandUse	LandUseSquareFeet	1,018,800.00	1,415,000.00
tblLandUse	LotAcreage	0.23	1.30
tblLandUse	LotAcreage	1.82	5.20
tblLandUse	LotAcreage	1.63	12.80
tblLandUse	LotAcreage	20.31	14.30
tblLandUse	LotAcreage	10.94	22.80
tblLandUse	LotAcreage	23.63	48.30
tblLandUse	LotAcreage	51.20	31.30
tblLandUse	LotAcreage	183.77	93.00

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tblLandUse	LotAcreage	3.08	8.80
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOnRoadDust	RoadSiltLoading	0.10	0.03
tblOnRoadDust	RoadSiltLoading	0.10	0.03
tblOnRoadDust	RoadSiltLoading	0.10	0.03
tblOnRoadDust	RoadSiltLoading	0.10	0.03
tblOnRoadDust	RoadSiltLoading	0.10	0.03
tblProjectCharacteristics	OperationalYear	2018	2032
tblSolidWaste	SolidWasteGenerationRate	2.71	2.70
tblTripsAndVMT	WorkerTripNumber	43.00	30.00
tblVehicleTrips	CC_TL	7.30	2.50
tblVehicleTrips	CC_TL	7.30	2.50
tblVehicleTrips	CC_TL	7.30	2.50
tblVehicleTrips	HS_TL	7.30	2.50

Avanti South Project - Antelope Valley APCD Air District, Winter

tblVehicleTrips	HS_TL	7.30	2.50
tblVehicleTrips	HS_TL	7.30	2.50
tblVehicleTrips	HS_TL	7.30	2.50
tblVehicleTrips	HW_TL	10.80	30.34
tblVehicleTrips	HW_TL	10.80	25.54
tblVehicleTrips	HW_TL	10.80	0.00
tblVehicleTrips	HW_TL	10.80	30.34
tblVehicleTrips	ST_TR	7.16	6.39
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.03	2.61
tblVehicleTrips	ST_TR	42.04	49.97
tblVehicleTrips	SU_TR	6.07	5.86
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.95	2.84
tblVehicleTrips	SU_TR	20.43	25.24
tblVehicleTrips	WD_TR	6.59	6.65
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	2.40	3.44
tblVehicleTrips	WD_TR	44.32	42.70
tblWater	OutdoorWaterUseRate	37,531,662.51	37,412,514.38
tblWoodstoves	NumberCatalytic	16.25	0.00
tblWoodstoves	NumberCatalytic	27.65	0.00
tblWoodstoves	NumberCatalytic	12.80	0.00
tblWoodstoves	NumberCatalytic	28.30	0.00
tblWoodstoves	NumberNoncatalytic	16.25	0.00
tblWoodstoves	NumberNoncatalytic	27.65	0.00

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tblWoodstoves	NumberNoncatalytic	12.80	0.00
tblWoodstoves	NumberNoncatalytic	28.30	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

Avanti South Project - Antelope Valley APCD Air District, Winter

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					
2017	5.0687	52.3598	24.3385	0.0396	18.1286	2.8800	21.0085	9.9489	2.6496	12.5985	0.0000	4,050.7938	4,050.7938	1.2008	0.0000	4,080.8144
2018	36.5478	149.0098	172.7338	0.4351	22.4245	6.3361	28.7606	10.4227	5.8293	16.2519	0.0000	43,830.5313	43,830.5313	4.5955	0.0000	43,923.3872
2019	34.3019	136.7317	160.6416	0.4300	9.5667	4.3521	13.9189	2.8590	4.1385	6.9975	0.0000	43,241.0019	43,241.0019	3.5581	0.0000	43,329.9548
2020	32.4388	125.0114	150.0331	0.4236	9.5668	3.7539	13.3206	2.8590	3.5669	6.4259	0.0000	42,498.4961	42,498.4961	3.3857	0.0000	42,583.1395
2021	30.8772	113.7203	142.3129	0.4183	9.5668	3.1409	12.7077	2.8590	2.9811	5.8401	0.0000	41,975.6357	41,975.6357	3.2630	0.0000	42,057.2106
2022	29.6005	104.5506	135.5141	0.4111	9.5669	2.6853	12.2522	2.8590	2.5500	5.4090	0.0000	41,254.5870	41,254.5870	3.1651	0.0000	41,333.7153
2023	28.3673	90.1694	128.6509	0.4012	9.5669	2.3455	11.9124	2.8590	2.2261	5.0851	0.0000	40,262.5576	40,262.5576	2.9533	0.0000	40,336.3897
2024	27.5437	86.3411	122.2362	0.3934	9.5670	2.0958	11.6628	2.8591	1.9871	4.8461	0.0000	39,481.6855	39,481.6855	2.8832	0.0000	39,553.7644
2025	26.7936	82.4664	117.7742	0.3866	9.5670	1.8443	11.4113	2.8591	1.7473	4.6064	0.0000	38,796.8581	38,796.8581	2.8260	0.0000	38,867.5066
Maximum	36.5478	149.0098	172.7338	0.4351	22.4245	6.3361	28.7606	10.4227	5.8293	16.2519	0.0000	43,830.5313	43,830.5313	4.5955	0.0000	43,923.3872

Avanti South Project - Antelope Valley APCD Air District, Winter

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	91.3599	19.2038	147.4829	0.1197		2.2004	2.2004		2.2004	2.2004	0.0000	22,708.3186	22,708.3186	0.6717	0.4117	22,847.7918
Energy	1.2931	11.0804	4.9265	0.0705		0.8934	0.8934		0.8934	0.8934		14,106.1182	14,106.1182	0.2704	0.2586	14,189.9438
Mobile	27.6746	87.7934	326.9286	1.3238	67.3173	0.8895	68.2068	20.2438	0.8233	21.0671		133,809.5487	133,809.5487	4.7358		133,927.9434
Total	120.3276	118.0775	479.3380	1.5140	67.3173	3.9833	71.3006	20.2438	3.9171	24.1609	0.0000	170,623.9855	170,623.9855	5.6778	0.6703	170,965.6790

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	91.3599	19.2038	147.4829	0.1197		2.2004	2.2004		2.2004	2.2004	0.0000	22,708.3186	22,708.3186	0.6717	0.4117	22,847.7918
Energy	1.2931	11.0804	4.9265	0.0705		0.8934	0.8934		0.8934	0.8934		14,106.1182	14,106.1182	0.2704	0.2586	14,189.9438
Mobile	27.6746	87.7934	326.9286	1.3238	67.3173	0.8895	68.2068	20.2438	0.8233	21.0671		133,809.5487	133,809.5487	4.7358		133,927.9434
Total	120.3276	118.0775	479.3380	1.5140	67.3173	3.9833	71.3006	20.2438	3.9171	24.1609	0.0000	170,623.9855	170,623.9855	5.6778	0.6703	170,965.6790

Avanti South Project - Antelope Valley APCD Air District, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/2/2017	3/2/2018	5	110	
2	Grading	Grading	3/5/2018	9/3/2018	5	131	
3	Building Construction	Building Construction	9/4/2018	9/1/2025	5	1825	
4	Paving	Paving	9/4/2018	9/1/2025	5	1825	
5	Architectural Coating	Architectural Coating	9/4/2018	9/1/2025	5	1825	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 524

Acres of Paving: 38.4

Residential Indoor: 6,748,110; Residential Outdoor: 2,249,370; Non-Residential Indoor: 516,979; Non-Residential Outdoor: 172,326; Striped Parking Area: 100,362 (Architectural Coating – sqft)

OffRoad Equipment

Avanti South Project - Antelope Valley APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	3	8.00	158	0.38
Grading	Graders	3	8.00	187	0.41
Grading	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	5	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	3	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Pavers	3	8.00	130	0.42
Paving	Paving Equipment	3	8.00	132	0.36
Paving	Rollers	3	8.00	80	0.38
Architectural Coating	Air Compressors	3	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	17	30.00	0.00	169.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	1,845.00	512.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	369.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Avanti South Project - Antelope Valley APCD Air District, Winter

Use Cleaner Engines for Construction Equipment

Clean Paved Roads

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.950 0	3,894.950 0	1.1934		3,924.785 2
Total	4.9608	52.2754	23.4554	0.0380	18.0663	2.8786	20.9448	9.9307	2.6483	12.5790		3,894.950 0	3,894.950 0	1.1934		3,924.785 2

Avanti South Project - Antelope Valley APCD Air District, Winter

3.2 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1079	0.0844	0.8831	1.5700e-003	0.0623	1.3900e-003	0.0637	0.0182	1.2900e-003	0.0195		155.8438	155.8438	7.4200e-003		156.0292
Total	0.1079	0.0844	0.8831	1.5700e-003	0.0623	1.3900e-003	0.0637	0.0182	1.2900e-003	0.0195		155.8438	155.8438	7.4200e-003		156.0292

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	0.9312	19.0656	22.9600	0.0380	18.0663	0.9462	19.0124	9.9307	0.9462	10.8769	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852

Avanti South Project - Antelope Valley APCD Air District, Winter

3.2 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1079	0.0844	0.8831	1.5700e-003	0.0623	1.3900e-003	0.0637	0.0182	1.2900e-003	0.0195		155.8438	155.8438	7.4200e-003		156.0292
Total	0.1079	0.0844	0.8831	1.5700e-003	0.0623	1.3900e-003	0.0637	0.0182	1.2900e-003	0.0195		155.8438	155.8438	7.4200e-003		156.0292

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708		3,831.6239	3,831.6239	1.1928		3,861.4448
Total	4.5627	48.1988	22.4763	0.0380	18.0663	2.5769	20.6432	9.9307	2.3708	12.3014		3,831.6239	3,831.6239	1.1928		3,861.4448

Avanti South Project - Antelope Valley APCD Air District, Winter

3.2 Site Preparation - 2018

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	0.0954	0.0735	0.7689	1.5300e-003	0.0623	1.3200e-003	0.0636	0.0182	1.2200e-003	0.0194		151.8831	151.8831	6.5200e-003		152.0460
Total	0.0954	0.0735	0.7689	1.5300e-003	0.0623	1.3200e-003	0.0636	0.0182	1.2200e-003	0.0194		151.8831	151.8831	6.5200e-003		152.0460

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448
Total	0.9312	19.0656	22.9600	0.0380	18.0663	0.9462	19.0124	9.9307	0.9462	10.8769	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448

Avanti South Project - Antelope Valley APCD Air District, Winter

3.2 Site Preparation - 2018

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	0.0954	0.0735	0.7689	1.5300e-003	0.0623	1.3200e-003	0.0636	0.0182	1.2200e-003	0.0194		151.8831	151.8831	6.5200e-003		152.0460
Total	0.0954	0.0735	0.7689	1.5300e-003	0.0623	1.3200e-003	0.0636	0.0182	1.2200e-003	0.0194		151.8831	151.8831	6.5200e-003		152.0460

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					22.3094	0.0000	22.3094	10.3889	0.0000	10.3889			0.0000			0.0000
Off-Road	12.4577	147.1970	79.6443	0.1461		6.3326	6.3326		5.8260	5.8260		14,711.4033	14,711.4033	4.5799		14,825.8998
Total	12.4577	147.1970	79.6443	0.1461	22.3094	6.3326	28.6420	10.3889	5.8260	16.2149		14,711.4033	14,711.4033	4.5799		14,825.8998

Avanti South Project - Antelope Valley APCD Air District, Winter

3.3 Grading - 2018

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	0.0120	0.3856	0.0850	1.0800e-003	0.0112	1.3000e-003	0.0125	3.3900e-003	1.2500e-003	4.6400e-003		113.6102	113.6102	4.7500e-003		113.7290
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	0.1590	0.1224	1.2814	2.5500e-003	0.1039	2.2000e-003	0.1061	0.0304	2.0300e-003	0.0324		253.1385	253.1385	0.0109		253.4100
Total	0.1710	0.5080	1.3664	3.6300e-003	0.1151	3.5000e-003	0.1186	0.0338	3.2800e-003	0.0370		366.7487	366.7487	0.0156		367.1390

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					22.3094	0.0000	22.3094	10.3889	0.0000	10.3889			0.0000			0.0000
Off-Road	3.5874	70.1532	83.3095	0.1461		2.9045	2.9045		2.9045	2.9045	0.0000	14,711.4033	14,711.4033	4.5799		14,825.8998
Total	3.5874	70.1532	83.3095	0.1461	22.3094	2.9045	25.2139	10.3889	2.9045	13.2934	0.0000	14,711.4033	14,711.4033	4.5799		14,825.8998

Avanti South Project - Antelope Valley APCD Air District, Winter

3.3 Grading - 2018

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	0.0120	0.3856	0.0850	1.0800e-003	0.0112	1.3000e-003	0.0125	3.3900e-003	1.2500e-003	4.6400e-003		113.6102	113.6102	4.7500e-003		113.7290
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	0.1590	0.1224	1.2814	2.5500e-003	0.1039	2.2000e-003	0.1061	0.0304	2.0300e-003	0.0324		253.1385	253.1385	0.0109		253.4100
Total	0.1710	0.5080	1.3664	3.6300e-003	0.1151	3.5000e-003	0.1186	0.0338	3.2800e-003	0.0370		366.7487	366.7487	0.0156		367.1390

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.7449	36.8194	29.9844	0.0471		2.3578	2.3578		2.2593	2.2593		4,471.8254	4,471.8254	0.8707		4,493.5935
Total	4.7449	36.8194	29.9844	0.0471		2.3578	2.3578		2.2593	2.2593		4,471.8254	4,471.8254	0.8707		4,493.5935

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 Building Construction - 2018

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	2.4423	68.7564	17.5862	0.1520	1.8215	0.4850	2.3064	0.5941	0.4640	1.0581		15,916.08 24	15,916.08 24	0.8556		15,937.47 21
Worker	9.7813	7.5298	78.8079	0.1567	6.3880	0.1351	6.5230	1.8679	0.1246	1.9925		15,568.01 95	15,568.01 95	0.6678		15,584.71 44
Total	12.2236	76.2862	96.3940	0.3087	8.2094	0.6201	8.8295	2.4621	0.5885	3.0506		31,484.10 18	31,484.10 18	1.5234		31,522.18 65

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,471.825 4	4,471.825 4	0.8707		4,493.593 5
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,471.825 4	4,471.825 4	0.8707		4,493.593 5

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 Building Construction - 2018

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	2.4423	68.7564	17.5862	0.1520	1.8215	0.4850	2.3064	0.5941	0.4640	1.0581		15,916.08 24	15,916.08 24	0.8556		15,937.47 21
Worker	9.7813	7.5298	78.8079	0.1567	6.3880	0.1351	6.5230	1.8679	0.1246	1.9925		15,568.01 95	15,568.01 95	0.6678		15,584.71 44
Total	12.2236	76.2862	96.3940	0.3087	8.2094	0.6201	8.8295	2.4621	0.5885	3.0506		31,484.10 18	31,484.10 18	1.5234		31,522.18 65

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1698	33.5105	29.3744	0.0471		2.0312	2.0312		1.9469	1.9469		4,439.334 3	4,439.334 3	0.8387		4,460.302 1
Total	4.1698	33.5105	29.3744	0.0471		2.0312	2.0312		1.9469	1.9469		4,439.334 3	4,439.334 3	0.8387		4,460.302 1

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 Building Construction - 2019

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	2.2351	64.9108	16.1519	0.1513	1.8215	0.4091	2.2306	0.5942	0.3913	0.9855		15,846.83 42	15,846.83 42	0.8219		15,867.38 13
Worker	8.9145	6.6829	70.7259	0.1530	6.3880	0.1319	6.5199	1.8679	0.1216	1.9895		15,211.589 9	15,211.589 9	0.6031		15,226.66 86
Total	11.1496	71.5937	86.8777	0.3043	8.2095	0.5410	8.7504	2.4621	0.5129	2.9750		31,058.42 42	31,058.42 42	1.4250		31,094.04 99

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,439.334 3	4,439.334 3	0.8387		4,460.302 1
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,439.334 3	4,439.334 3	0.8387		4,460.302 1

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 Building Construction - 2019

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	2.2351	64.9108	16.1519	0.1513	1.8215	0.4091	2.2306	0.5942	0.3913	0.9855		15,846.83 42	15,846.83 42	0.8219		15,867.38 13
Worker	8.9145	6.6829	70.7259	0.1530	6.3880	0.1319	6.5199	1.8679	0.1216	1.9895		15,211.589 9	15,211.589 9	0.6031		15,226.66 86
Total	11.1496	71.5937	86.8777	0.3043	8.2095	0.5410	8.7504	2.4621	0.5129	2.9750		31,058.42 42	31,058.42 42	1.4250		31,094.04 99

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7374	30.7493	28.9129	0.0471		1.7610	1.7610		1.6881	1.6881		4,396.724 5	4,396.724 5	0.8134		4,417.060 1
Total	3.7374	30.7493	28.9129	0.0471		1.7610	1.7610		1.6881	1.6881		4,396.724 5	4,396.724 5	0.8134		4,417.060 1

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 Building Construction - 2020

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	1.8827	59.1880	14.2910	0.1505	1.8216	0.2652	2.0868	0.5942	0.2537	0.8479		15,762.41 41	15,762.41 41	0.7657		15,781.55 71
Worker	8.2264	5.9717	63.9402	0.1484	6.3880	0.1276	6.5156	1.8679	0.1176	1.9855		14,764.91 98	14,764.91 98	0.5348		14,778.28 90
Total	10.1091	65.1596	78.2312	0.2989	8.2096	0.3928	8.6024	2.4621	0.3713	2.8334		30,527.33 39	30,527.33 39	1.3005		30,559.84 61

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,396.724 5	4,396.724 5	0.8134		4,417.060 1
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,396.724 5	4,396.724 5	0.8134		4,417.060 1

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 Building Construction - 2020

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	1.8827	59.1880	14.2910	0.1505	1.8216	0.2652	2.0868	0.5942	0.2537	0.8479		15,762.41 41	15,762.41 41	0.7657			15,781.55 71
Worker	8.2264	5.9717	63.9402	0.1484	6.3880	0.1276	6.5156	1.8679	0.1176	1.9855		14,764.91 98	14,764.91 98	0.5348			14,778.28 90
Total	10.1091	65.1596	78.2312	0.2989	8.2096	0.3928	8.6024	2.4621	0.3713	2.8334		30,527.33 39	30,527.33 39	1.3005			30,559.84 61

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	3.3429	28.0993	28.4777	0.0471		1.5088	1.5088		1.4462	1.4462		4,397.068 4	4,397.068 4	0.7927			4,416.886 3
Total	3.3429	28.0993	28.4777	0.0471		1.5088	1.5088		1.4462	1.4462		4,397.068 4	4,397.068 4	0.7927			4,416.886 3

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.5878	53.5627	12.7175	0.1497	1.8217	0.0873	1.9090	0.5942	0.0835	0.6777		15,685.63 41	15,685.63 41	0.7251		15,703.76 18
Worker	7.7087	5.4206	59.2739	0.1447	6.3880	0.1252	6.5131	1.8679	0.1153	1.9832		14,397.371 1	14,397.371 1	0.4925		14,409.68 34
Total	9.2965	58.9833	71.9914	0.2944	8.2096	0.2125	8.4221	2.4621	0.1988	2.6609		30,083.00 52	30,083.00 52	1.2176		30,113.44 52

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,397.068 4	4,397.068 4	0.7927		4,416.886 3
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,397.068 4	4,397.068 4	0.7927		4,416.886 3

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.5878	53.5627	12.7175	0.1497	1.8217	0.0873	1.9090	0.5942	0.0835	0.6777		15,685.63 41	15,685.63 41	0.7251		15,703.76 18
Worker	7.7087	5.4206	59.2739	0.1447	6.3880	0.1252	6.5131	1.8679	0.1153	1.9832		14,397.371 1	14,397.371 1	0.4925		14,409.68 34
Total	9.2965	58.9833	71.9914	0.2944	8.2096	0.2125	8.4221	2.4621	0.1988	2.6609		30,083.00 52	30,083.00 52	1.2176		30,113.44 52

3.4 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	3.0281	25.5494	28.1827	0.0471		1.2861	1.2861		1.2338	1.2338		4,398.176 6	4,398.176 6	0.7799		4,417.674 7
Total	3.0281	25.5494	28.1827	0.0471		1.2861	1.2861		1.2338	1.2338		4,398.176 6	4,398.176 6	0.7799		4,417.674 7

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 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	1.4888	50.7199	11.9176	0.1486	1.8217	0.0734	1.8952	0.5942	0.0702	0.6644		15,566.36 30	15,566.36 30	0.6984		15,583.82 40
Worker	7.2333	4.9156	54.6727	0.1396	6.3880	0.1213	6.5092	1.8679	0.1117	1.9796		13,899.57 57	13,899.57 57	0.4474		13,910.76 09
Total	8.7222	55.6356	66.5902	0.2882	8.2097	0.1947	8.4044	2.4621	0.1819	2.6441		29,465.93 88	29,465.93 88	1.1459		29,494.58 50

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,398.176 6	4,398.176 6	0.7799		4,417.674 7
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,398.176 6	4,398.176 6	0.7799		4,417.674 7

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 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	1.4888	50.7199	11.9176	0.1486	1.8217	0.0734	1.8952	0.5942	0.0702	0.6644		15,566.36 30	15,566.36 30	0.6984		15,583.82 40
Worker	7.2333	4.9156	54.6727	0.1396	6.3880	0.1213	6.5092	1.8679	0.1117	1.9796		13,899.57 57	13,899.57 57	0.4474		13,910.76 09
Total	8.7222	55.6356	66.5902	0.2882	8.2097	0.1947	8.4044	2.4621	0.1819	2.6441		29,465.93 88	29,465.93 88	1.1459		29,494.58 50

3.4 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	2.7941	23.7100	28.0047	0.0471		1.1149	1.1149		1.0697	1.0697		4,399.178 1	4,399.178 1	0.7671		4,418.355 6
Total	2.7941	23.7100	28.0047	0.0471		1.1149	1.1149		1.0697	1.0697		4,399.178 1	4,399.178 1	0.7671		4,418.355 6

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 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	1.1637	40.5459	10.3727	0.1449	1.8218	0.0390	1.8608	0.5942	0.0373	0.6315		15,185.4783	15,185.4783	0.5553		15,199.3613
Worker	6.8066	4.4654	50.4367	0.1345	6.3880	0.1180	6.5059	1.8679	0.1086	1.9765		13,394.7931	13,394.7931	0.4062		13,404.9489
Total	7.9703	45.0113	60.8094	0.2795	8.2097	0.1570	8.3667	2.4622	0.1459	2.6081		28,580.2713	28,580.2713	0.9616		28,604.3102

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,399.1781	4,399.1781	0.7671		4,418.3556
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,399.1781	4,399.1781	0.7671		4,418.3556

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 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	1.1637	40.5459	10.3727	0.1449	1.8218	0.0390	1.8608	0.5942	0.0373	0.6315		15,185.4783	15,185.4783	0.5553		15,199.3613
Worker	6.8066	4.4654	50.4367	0.1345	6.3880	0.1180	6.5059	1.8679	0.1086	1.9765		13,394.7931	13,394.7931	0.4062		13,404.9489
Total	7.9703	45.0113	60.8094	0.2795	8.2097	0.1570	8.3667	2.4622	0.1459	2.6081		28,580.2713	28,580.2713	0.9616		28,604.3102

3.4 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	2.6088	22.2755	27.8822	0.0471		0.9728	0.9728		0.9330	0.9330		4,399.7369	4,399.7369	0.7563		4,418.6450
Total	2.6088	22.2755	27.8822	0.0471		0.9728	0.9728		0.9330	0.9330		4,399.7369	4,399.7369	0.7563		4,418.6450

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 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	1.1119	39.9791	9.7388	0.1432	1.8218	0.0381	1.8599	0.5942	0.0364	0.6307		15,004.14 58	15,004.14 58	0.5488		15,017.86 54
Worker	6.4140	4.0615	45.7218	0.1295	6.3880	0.1142	6.5021	1.8679	0.1051	1.9730		12,899.89 84	12,899.89 84	0.3660		12,909.04 73
Total	7.5259	44.0406	55.4606	0.2727	8.2098	0.1523	8.3620	2.4622	0.1415	2.6037		27,904.04 42	27,904.04 42	0.9147		27,926.91 27

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,399.736 9	4,399.736 9	0.7563		4,418.645 0
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,399.736 9	4,399.736 9	0.7563		4,418.645 0

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 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	1.1119	39.9791	9.7388	0.1432	1.8218	0.0381	1.8599	0.5942	0.0364	0.6307		15,004.14 58	15,004.14 58	0.5488		15,017.86 54
Worker	6.4140	4.0615	45.7218	0.1295	6.3880	0.1142	6.5021	1.8679	0.1051	1.9730		12,899.89 84	12,899.89 84	0.3660		12,909.04 73
Total	7.5259	44.0406	55.4606	0.2727	8.2098	0.1523	8.3620	2.4622	0.1415	2.6037		27,904.04 42	27,904.04 42	0.9147		27,926.91 27

3.4 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	2.4284	20.8413	27.7601	0.0471		0.8372	0.8372		0.8029	0.8029		4,400.623 2	4,400.623 2	0.7457		4,419.264 4
Total	2.4284	20.8413	27.7601	0.0471		0.8372	0.8372		0.8029	0.8029		4,400.623 2	4,400.623 2	0.7457		4,419.264 4

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 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	1.0899	39.6579	9.4390	0.1424	1.8219	0.0377	1.8595	0.5943	0.0360	0.6303		14,924.65 16	14,924.65 16	0.5421		14,938.20 38
Worker	6.0853	3.7219	42.4520	0.1245	6.3880	0.1118	6.4998	1.8679	0.1029	1.9709		12,400.90 18	12,400.90 18	0.3351		12,409.27 81
Total	7.1752	43.3798	51.8910	0.2669	8.2098	0.1495	8.3593	2.4622	0.1389	2.6011		27,325.55 34	27,325.55 34	0.8771		27,347.48 18

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,400.623 2	4,400.623 2	0.7457		4,419.264 4
Total	1.1950	24.6076	30.2425	0.0471		1.5876	1.5876		1.5876	1.5876	0.0000	4,400.623 2	4,400.623 2	0.7457		4,419.264 4

Avanti South Project - Antelope Valley APCD Air District, Winter

3.4 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	1.0899	39.6579	9.4390	0.1424	1.8219	0.0377	1.8595	0.5943	0.0360	0.6303		14,924.65 16	14,924.65 16	0.5421		14,938.20 38
Worker	6.0853	3.7219	42.4520	0.1245	6.3880	0.1118	6.4998	1.8679	0.1029	1.9709		12,400.90 18	12,400.90 18	0.3351		12,409.27 81
Total	7.1752	43.3798	51.8910	0.2669	8.2098	0.1495	8.3593	2.4622	0.1389	2.6011		27,325.55 34	27,325.55 34	0.8771		27,347.48 18

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4656	26.2814	22.1946	0.0342		1.4342	1.4342		1.3195	1.3195		3,441.133 1	3,441.133 1	1.0713		3,467.914 9
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.5207	26.2814	22.1946	0.0342		1.4342	1.4342		1.3195	1.3195		3,441.133 1	3,441.133 1	1.0713		3,467.914 9

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 Paving - 2018

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	0.1219	0.0939	0.9824	1.9500e-003	0.0796	1.6800e-003	0.0813	0.0233	1.5500e-003	0.0248		194.0729	194.0729	8.3200e-003		194.2810
Total	0.1219	0.0939	0.9824	1.9500e-003	0.0796	1.6800e-003	0.0813	0.0233	1.5500e-003	0.0248		194.0729	194.0729	8.3200e-003		194.2810

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,441.1331	3,441.1331	1.0713		3,467.9149
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,441.1331	3,441.1331	1.0713		3,467.9149

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 Paving - 2018

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	0.1219	0.0939	0.9824	1.9500e-003	0.0796	1.6800e-003	0.0813	0.0233	1.5500e-003	0.0248		194.0729	194.0729	8.3200e-003		194.2810
Total	0.1219	0.0939	0.9824	1.9500e-003	0.0796	1.6800e-003	0.0813	0.0233	1.5500e-003	0.0248		194.0729	194.0729	8.3200e-003		194.2810

3.5 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1817	22.8661	21.9973	0.0342		1.2369	1.2369		1.1379	1.1379		3,385.5037	3,385.5037	1.0711		3,412.2822
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.2368	22.8661	21.9973	0.0342		1.2369	1.2369		1.1379	1.1379		3,385.5037	3,385.5037	1.0711		3,412.2822

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 Paving - 2019

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	0.1111	0.0833	0.8817	1.9100e-003	0.0796	1.6400e-003	0.0813	0.0233	1.5200e-003	0.0248		189.6296	189.6296	7.5200e-003		189.8176
Total	0.1111	0.0833	0.8817	1.9100e-003	0.0796	1.6400e-003	0.0813	0.0233	1.5200e-003	0.0248		189.6296	189.6296	7.5200e-003		189.8176

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,385.5037	3,385.5037	1.0711		3,412.2822
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,385.5037	3,385.5037	1.0711		3,412.2822

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 Paving - 2019

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	0.1111	0.0833	0.8817	1.9100e-003	0.0796	1.6400e-003	0.0813	0.0233	1.5200e-003	0.0248		189.6296	189.6296	7.5200e-003		189.8176
Total	0.1111	0.0833	0.8817	1.9100e-003	0.0796	1.6400e-003	0.0813	0.0233	1.5200e-003	0.0248		189.6296	189.6296	7.5200e-003		189.8176

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0348	21.0984	21.9781	0.0342		1.1292	1.1292		1.0389	1.0389		3,311.6002	3,311.6002	1.0710		3,338.3761
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0900	21.0984	21.9781	0.0342		1.1292	1.1292		1.0389	1.0389		3,311.6002	3,311.6002	1.0710		3,338.3761

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 Paving - 2020

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	0.1026	0.0744	0.7971	1.8500e-003	0.0796	1.5900e-003	0.0812	0.0233	1.4700e-003	0.0248		184.0613	184.0613	6.6700e-003		184.2280
Total	0.1026	0.0744	0.7971	1.8500e-003	0.0796	1.5900e-003	0.0812	0.0233	1.4700e-003	0.0248		184.0613	184.0613	6.6700e-003		184.2280

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.6002	3,311.6002	1.0710		3,338.3761
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.6002	3,311.6002	1.0710		3,338.3761

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 Paving - 2020

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	0.1026	0.0744	0.7971	1.8500e-003	0.0796	1.5900e-003	0.0812	0.0233	1.4700e-003	0.0248		184.0613	184.0613	6.6700e-003		184.2280
Total	0.1026	0.0744	0.7971	1.8500e-003	0.0796	1.5900e-003	0.0812	0.0233	1.4700e-003	0.0248		184.0613	184.0613	6.6700e-003		184.2280

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8833	19.3786	21.9799	0.0342		1.0166	1.0166		0.9353	0.9353		3,310.8163	3,310.8163	1.0708		3,337.5859
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.9385	19.3786	21.9799	0.0342		1.0166	1.0166		0.9353	0.9353		3,310.8163	3,310.8163	1.0708		3,337.5859

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0961	0.0676	0.7389	1.8000e-003	0.0796	1.5600e-003	0.0812	0.0233	1.4400e-003	0.0247		179.4794	179.4794	6.1400e-003		179.6329
Total	0.0961	0.0676	0.7389	1.8000e-003	0.0796	1.5600e-003	0.0812	0.0233	1.4400e-003	0.0247		179.4794	179.4794	6.1400e-003		179.6329

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,310.8163	3,310.8163	1.0708		3,337.5859
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,310.8163	3,310.8163	1.0708		3,337.5859

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0961	0.0676	0.7389	1.8000e-003	0.0796	1.5600e-003	0.0812	0.0233	1.4400e-003	0.0247		179.4794	179.4794	6.1400e-003		179.6329
Total	0.0961	0.0676	0.7389	1.8000e-003	0.0796	1.5600e-003	0.0812	0.0233	1.4400e-003	0.0247		179.4794	179.4794	6.1400e-003		179.6329

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6542	16.6873	21.8707	0.0342		0.8519	0.8519		0.7837	0.7837		3,311.4905	3,311.4905	1.0710		3,338.2655
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7094	16.6873	21.8707	0.0342		0.8519	0.8519		0.7837	0.7837		3,311.4905	3,311.4905	1.0710		3,338.2655

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 Paving - 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	0.0902	0.0613	0.6816	1.7400e-003	0.0796	1.5100e-003	0.0811	0.0233	1.3900e-003	0.0247		173.2738	173.2738	5.5800e-003		173.4133
Total	0.0902	0.0613	0.6816	1.7400e-003	0.0796	1.5100e-003	0.0811	0.0233	1.3900e-003	0.0247		173.2738	173.2738	5.5800e-003		173.4133

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.4904	3,311.4904	1.0710		3,338.2655
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.4904	3,311.4904	1.0710		3,338.2655

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 Paving - 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	0.0902	0.0613	0.6816	1.7400e-003	0.0796	1.5100e-003	0.0811	0.0233	1.3900e-003	0.0247		173.2738	173.2738	5.5800e-003		173.4133
Total	0.0902	0.0613	0.6816	1.7400e-003	0.0796	1.5100e-003	0.0811	0.0233	1.3900e-003	0.0247		173.2738	173.2738	5.5800e-003		173.4133

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5491	15.2875	21.8763	0.0342		0.7653	0.7653		0.7041	0.7041		3,311.3762	3,311.3762	1.0710		3,338.1504
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6042	15.2875	21.8763	0.0342		0.7653	0.7653		0.7041	0.7041		3,311.3762	3,311.3762	1.0710		3,338.1504

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0849	0.0557	0.6288	1.6800e-003	0.0796	1.4700e-003	0.0811	0.0233	1.3500e-003	0.0246		166.9812	166.9812	5.0600e-003		167.1078
Total	0.0849	0.0557	0.6288	1.6800e-003	0.0796	1.4700e-003	0.0811	0.0233	1.3500e-003	0.0246		166.9812	166.9812	5.0600e-003		167.1078

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.3762	3,311.3762	1.0710		3,338.1504
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.3762	3,311.3762	1.0710		3,338.1504

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0849	0.0557	0.6288	1.6800e-003	0.0796	1.4700e-003	0.0811	0.0233	1.3500e-003	0.0246		166.9812	166.9812	5.0600e-003		167.1078
Total	0.0849	0.0557	0.6288	1.6800e-003	0.0796	1.4700e-003	0.0811	0.0233	1.3500e-003	0.0246		166.9812	166.9812	5.0600e-003		167.1078

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4822	14.2869	21.9386	0.0342		0.7028	0.7028		0.6466	0.6466		3,311.3208	3,311.3208	1.0710		3,338.0945
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5374	14.2869	21.9386	0.0342		0.7028	0.7028		0.6466	0.6466		3,311.3208	3,311.3208	1.0710		3,338.0945

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0506	0.5700	1.6100e-003	0.0796	1.4200e-003	0.0811	0.0233	1.3100e-003	0.0246		160.8117	160.8117	4.5600e-003		160.9258
Total	0.0800	0.0506	0.5700	1.6100e-003	0.0796	1.4200e-003	0.0811	0.0233	1.3100e-003	0.0246		160.8117	160.8117	4.5600e-003		160.9258

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.3208	3,311.3208	1.0710		3,338.0945
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,311.3208	3,311.3208	1.0710		3,338.0945

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0506	0.5700	1.6100e-003	0.0796	1.4200e-003	0.0811	0.0233	1.3100e-003	0.0246		160.8117	160.8117	4.5600e-003		160.9258
Total	0.0800	0.0506	0.5700	1.6100e-003	0.0796	1.4200e-003	0.0811	0.0233	1.3100e-003	0.0246		160.8117	160.8117	4.5600e-003		160.9258

3.5 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	1.3727	12.8725	21.8670	0.0342		0.6278	0.6278		0.5776	0.5776		3,310.1177	3,310.1177	1.0706		3,336.8817
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4279	12.8725	21.8670	0.0342		0.6278	0.6278		0.5776	0.5776		3,310.1177	3,310.1177	1.0706		3,336.8817

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 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	0.0759	0.0464	0.5292	1.5500e-003	0.0796	1.3900e-003	0.0810	0.0233	1.2800e-003	0.0246		154.5912	154.5912	4.1800e-003		154.6956
Total	0.0759	0.0464	0.5292	1.5500e-003	0.0796	1.3900e-003	0.0810	0.0233	1.2800e-003	0.0246		154.5912	154.5912	4.1800e-003		154.6956

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	0.8414	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,310.1177	3,310.1177	1.0706		3,336.8817
Paving	0.0551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8965	16.9429	25.9435	0.0342		0.9140	0.9140		0.9140	0.9140	0.0000	3,310.1177	3,310.1177	1.0706		3,336.8817

Avanti South Project - Antelope Valley APCD Air District, Winter

3.5 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	0.0759	0.0464	0.5292	1.5500e-003	0.0796	1.3900e-003	0.0810	0.0233	1.2800e-003	0.0246		154.5912	154.5912	4.1800e-003		154.6956
Total	0.0759	0.0464	0.5292	1.5500e-003	0.0796	1.3900e-003	0.0810	0.0233	1.2800e-003	0.0246		154.5912	154.5912	4.1800e-003		154.6956

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.1945	8.0230	7.4168	0.0119		0.6022	0.6022		0.6022	0.6022		1,125.7942	1,125.7942	0.1070		1,128.4685
Total	14.9804	8.0230	7.4168	0.0119		0.6022	0.6022		0.6022	0.6022		1,125.7942	1,125.7942	0.1070		1,128.4685

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 Architectural Coating - 2018

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	1.9563	1.5060	15.7616	0.0313	1.2776	0.0270	1.3046	0.3736	0.0249	0.3985		3,113.6039	3,113.6039	0.1336		3,116.9429
Total	1.9563	1.5060	15.7616	0.0313	1.2776	0.0270	1.3046	0.3736	0.0249	0.3985		3,113.6039	3,113.6039	0.1336		3,116.9429

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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7942	1,125.7942	0.1070		1,128.4685
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7942	1,125.7942	0.1070		1,128.4685

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 Architectural Coating - 2018

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	1.9563	1.5060	15.7616	0.0313	1.2776	0.0270	1.3046	0.3736	0.0249	0.3985		3,113.6039	3,113.6039	0.1336		3,116.9429
Total	1.9563	1.5060	15.7616	0.0313	1.2776	0.0270	1.3046	0.3736	0.0249	0.3985		3,113.6039	3,113.6039	0.1336		3,116.9429

3.6 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.0658	7.3415	7.3653	0.0119		0.5151	0.5151		0.5151	0.5151		1,125.7922	1,125.7922	0.0951		1,128.1694
Total	14.8516	7.3415	7.3653	0.0119		0.5151	0.5151		0.5151	0.5151		1,125.7922	1,125.7922	0.0951		1,128.1694

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 Architectural Coating - 2019

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	1.7829	1.3366	14.1452	0.0306	1.2776	0.0264	1.3040	0.3736	0.0243	0.3979		3,042.318 0	3,042.318 0	0.1206		3,045.333 7
Total	1.7829	1.3366	14.1452	0.0306	1.2776	0.0264	1.3040	0.3736	0.0243	0.3979		3,042.318 0	3,042.318 0	0.1206		3,045.333 7

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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.792 2	1,125.792 2	0.0951		1,128.169 4
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.792 2	1,125.792 2	0.0951		1,128.169 4

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 Architectural Coating - 2019

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	1.7829	1.3366	14.1452	0.0306	1.2776	0.0264	1.3040	0.3736	0.0243	0.3979		3,042.318 0	3,042.318 0	0.1206		3,045.333 7
Total	1.7829	1.3366	14.1452	0.0306	1.2776	0.0264	1.3040	0.3736	0.0243	0.3979		3,042.318 0	3,042.318 0	0.1206		3,045.333 7

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.9687	6.7354	7.3257	0.0119		0.4437	0.4437		0.4437	0.4437		1,125.792 2	1,125.792 2	0.0872		1,127.971 3
Total	14.7546	6.7354	7.3257	0.0119		0.4437	0.4437		0.4437	0.4437		1,125.792 2	1,125.792 2	0.0872		1,127.971 3

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 Architectural Coating - 2020

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	1.6453	1.1943	12.7880	0.0297	1.2776	0.0255	1.3031	0.3736	0.0235	0.3971		2,952.9840	2,952.9840	0.1070		2,955.6578
Total	1.6453	1.1943	12.7880	0.0297	1.2776	0.0255	1.3031	0.3736	0.0235	0.3971		2,952.9840	2,952.9840	0.1070		2,955.6578

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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7922	1,125.7922	0.0872		1,127.9713
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7922	1,125.7922	0.0872		1,127.9713

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 Architectural Coating - 2020

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	1.6453	1.1943	12.7880	0.0297	1.2776	0.0255	1.3031	0.3736	0.0235	0.3971		2,952.9840	2,952.9840	0.1070		2,955.6578
Total	1.6453	1.1943	12.7880	0.0297	1.2776	0.0255	1.3031	0.3736	0.0235	0.3971		2,952.9840	2,952.9840	0.1070		2,955.6578

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.8756	6.1074	7.2702	0.0119		0.3764	0.3764		0.3764	0.3764		1,125.7922	1,125.7922	0.0773		1,127.7237
Total	14.6615	6.1074	7.2702	0.0119		0.3764	0.3764		0.3764	0.3764		1,125.7922	1,125.7922	0.0773		1,127.7237

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.5418	1.0841	11.8548	0.0289	1.2776	0.0250	1.3026	0.3736	0.0231	0.3966		2,879.474 2	2,879.474 2	0.0985		2,881.936 7
Total	1.5418	1.0841	11.8548	0.0289	1.2776	0.0250	1.3026	0.3736	0.0231	0.3966		2,879.474 2	2,879.474 2	0.0985		2,881.936 7

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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.792 2	1,125.792 2	0.0773		1,127.723 7
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.792 2	1,125.792 2	0.0773		1,127.723 7

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.5418	1.0841	11.8548	0.0289	1.2776	0.0250	1.3026	0.3736	0.0231	0.3966		2,879.474 2	2,879.474 2	0.0985		2,881.936 7
Total	1.5418	1.0841	11.8548	0.0289	1.2776	0.0250	1.3026	0.3736	0.0231	0.3966		2,879.474 2	2,879.474 2	0.0985		2,881.936 7

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.8182	5.6339	7.2544	0.0119		0.3269	0.3269		0.3269	0.3269		1,125.792 2	1,125.792 2	0.0733		1,127.624 6
Total	14.6040	5.6339	7.2544	0.0119		0.3269	0.3269		0.3269	0.3269		1,125.792 2	1,125.792 2	0.0733		1,127.624 6

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 Architectural Coating - 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	1.4467	0.9831	10.9345	0.0279	1.2776	0.0243	1.3018	0.3736	0.0223	0.3959		2,779.915 1	2,779.915 1	0.0895		2,782.152 2
Total	1.4467	0.9831	10.9345	0.0279	1.2776	0.0243	1.3018	0.3736	0.0223	0.3959		2,779.915 1	2,779.915 1	0.0895		2,782.152 2

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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.792 2	1,125.792 2	0.0733		1,127.624 6
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.792 2	1,125.792 2	0.0733		1,127.624 6

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 Architectural Coating - 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	1.4467	0.9831	10.9345	0.0279	1.2776	0.0243	1.3018	0.3736	0.0223	0.3959		2,779.915 1	2,779.915 1	0.0895		2,782.152 2
Total	1.4467	0.9831	10.9345	0.0279	1.2776	0.0243	1.3018	0.3736	0.0223	0.3959		2,779.915 1	2,779.915 1	0.0895		2,782.152 2

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7666	5.2120	7.2445	0.0119		0.2833	0.2833		0.2833	0.2833		1,125.792 2	1,125.792 2	0.0674		1,127.476 0
Total	14.5525	5.2120	7.2445	0.0119		0.2833	0.2833		0.2833	0.2833		1,125.792 2	1,125.792 2	0.0674		1,127.476 0

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.3613	0.8931	10.0874	0.0269	1.2776	0.0236	1.3012	0.3736	0.0217	0.3953		2,678.9586	2,678.9586	0.0813		2,680.9898
Total	1.3613	0.8931	10.0874	0.0269	1.2776	0.0236	1.3012	0.3736	0.0217	0.3953		2,678.9586	2,678.9586	0.0813		2,680.9898

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7922	1,125.7922	0.0674		1,127.4760
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7922	1,125.7922	0.0674		1,127.4760

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.3613	0.8931	10.0874	0.0269	1.2776	0.0236	1.3012	0.3736	0.0217	0.3953		2,678.9586	2,678.9586	0.0813		2,680.9898
Total	1.3613	0.8931	10.0874	0.0269	1.2776	0.0236	1.3012	0.3736	0.0217	0.3953		2,678.9586	2,678.9586	0.0813		2,680.9898

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7231	4.8752	7.2405	0.0119		0.2437	0.2437		0.2437	0.2437		1,125.7922	1,125.7922	0.0634		1,127.3770
Total	14.5089	4.8752	7.2405	0.0119		0.2437	0.2437		0.2437	0.2437		1,125.7922	1,125.7922	0.0634		1,127.3770

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2828	0.8123	9.1444	0.0259	1.2776	0.0228	1.3004	0.3736	0.0210	0.3946		2,579.9797	2,579.9797	0.0732		2,581.8095
Total	1.2828	0.8123	9.1444	0.0259	1.2776	0.0228	1.3004	0.3736	0.0210	0.3946		2,579.9797	2,579.9797	0.0732		2,581.8095

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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7922	1,125.7922	0.0634		1,127.3770
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.7922	1,125.7922	0.0634		1,127.3770

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2828	0.8123	9.1444	0.0259	1.2776	0.0228	1.3004	0.3736	0.0210	0.3946		2,579.9797	2,579.9797	0.0732		2,581.8095
Total	1.2828	0.8123	9.1444	0.0259	1.2776	0.0228	1.3004	0.3736	0.0210	0.3946		2,579.9797	2,579.9797	0.0732		2,581.8095

3.6 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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6834	4.5820	7.2365	0.0119		0.2060	0.2060		0.2060	0.2060		1,125.7922	1,125.7922	0.0614		1,127.3275
Total	14.4693	4.5820	7.2365	0.0119		0.2060	0.2060		0.2060	0.2060		1,125.7922	1,125.7922	0.0614		1,127.3275

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 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	1.2171	0.7444	8.4904	0.0249	1.2776	0.0224	1.3000	0.3736	0.0206	0.3942		2,480.180 4	2,480.180 4	0.0670		2,481.855 6
Total	1.2171	0.7444	8.4904	0.0249	1.2776	0.0224	1.3000	0.3736	0.0206	0.3942		2,480.180 4	2,480.180 4	0.0670		2,481.855 6

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	13.7859					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2377	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.792 2	1,125.792 2	0.0614		1,127.327 5
Total	14.0236	5.4279	7.3297	0.0119		0.3804	0.3804		0.3804	0.3804	0.0000	1,125.792 2	1,125.792 2	0.0614		1,127.327 5

Avanti South Project - Antelope Valley APCD Air District, Winter

3.6 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	1.2171	0.7444	8.4904	0.0249	1.2776	0.0224	1.3000	0.3736	0.0206	0.3942		2,480.180 4	2,480.180 4	0.0670		2,481.855 6
Total	1.2171	0.7444	8.4904	0.0249	1.2776	0.0224	1.3000	0.3736	0.0206	0.3942		2,480.180 4	2,480.180 4	0.0670		2,481.855 6

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Avanti South Project - Antelope Valley APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	27.6746	87.7934	326.9286	1.3238	67.3173	0.8895	68.2068	20.2438	0.8233	21.0671		133,809.5487	133,809.5487	4.7358		133,927.9434
Unmitigated	27.6746	87.7934	326.9286	1.3238	67.3173	0.8895	68.2068	20.2438	0.8233	21.0671		133,809.5487	133,809.5487	4.7358		133,927.9434

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	2,161.25	2,076.75	1904.50	10,731,459	10,731,459
City Park	0.00	0.00	0.00		
Condo/Townhouse	2,196.18	2,143.26	1829.52	9,520,417	9,520,417
Condo/Townhouse	1,016.75	992.25	847.00	4,407,601	4,407,601
Elementary School	1,096.50	0.00	0.00	1,442,648	1,442,648
Government Office Building	0.00	0.00	0.00		
Medical Office Building	2,869.81	711.69	123.12	2,930,608	2,930,608
Other Asphalt Surfaces	0.00	0.00	0.00		
Retirement Community	880.64	668.16	727.04	944,181	944,181
Single Family Housing	5,388.32	5,609.06	4878.92	27,163,078	27,163,078
Strip Mall	5,728.63	6,703.98	3386.20	5,097,167	5,097,167
Total	21,338.08	18,905.15	13,696.29	62,237,160	62,237,160

4.3 Trip Type Information

Avanti South Project - Antelope Valley APCD Air District, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	30.34	2.50	7.50	40.20	19.20	40.60	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	25.54	2.50	7.50	40.20	19.20	40.60	86	11	3
Condo/Townhouse	25.54	2.50	7.50	40.20	19.20	40.60	86	11	3
Elementary School	9.50	2.50	7.30	65.00	30.00	5.00	63	25	12
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16
Medical Office Building	9.50	2.50	7.30	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Retirement Community	0.00	2.50	7.50	40.20	19.20	40.60	86	11	3
Single Family Housing	30.34	2.50	7.50	40.20	19.20	40.60	86	11	3
Strip Mall	9.50	2.50	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.678603	0.033467	0.154883	0.087633	0.010129	0.004154	0.021098	0.000000	0.000000	0.001947	0.006573	0.001515	0.000000
City Park	0.648659	0.031990	0.148049	0.083766	0.009682	0.003971	0.020167	0.041048	0.002441	0.001861	0.006283	0.001448	0.000637
Condo/Townhouse	0.678603	0.033467	0.154883	0.087633	0.010129	0.004154	0.021098	0.000000	0.000000	0.001947	0.006573	0.001515	0.000000
Condo/Townhouse	0.678603	0.033467	0.154883	0.087633	0.010129	0.004154	0.021098	0.000000	0.000000	0.001947	0.006573	0.001515	0.000000
Elementary School	0.650662	0.032089	0.148506	0.084025	0.009712	0.003983	0.020229	0.041175	0.000000	0.001867	0.006302	0.001452	0.000000
Government Office Building	0.648659	0.031990	0.148049	0.083766	0.009682	0.003971	0.020167	0.041048	0.002441	0.001861	0.006283	0.001448	0.000637
Medical Office Building	0.679633	0.033518	0.155118	0.087766	0.010144	0.004161	0.021130	0.000000	0.000000	0.001950	0.006583	0.000000	0.000000
Other Asphalt Surfaces	0.648659	0.031990	0.148049	0.083766	0.009682	0.003971	0.020167	0.041048	0.002441	0.001861	0.006283	0.001448	0.000637
Retirement Community	0.679633	0.033518	0.155118	0.087766	0.010144	0.004161	0.021130	0.000000	0.000000	0.001950	0.006583	0.000000	0.000000
Single Family Housing	0.678151	0.033444	0.154780	0.087575	0.010122	0.004152	0.021084	0.000000	0.000000	0.001946	0.006569	0.001514	0.000666
Strip Mall	0.651608	0.032135	0.148722	0.084147	0.009726	0.003989	0.020259	0.041235	0.000000	0.001869	0.006312	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

Avanti South Project - Antelope Valley APCD Air District, Winter

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	1.2931	11.0804	4.9265	0.0705		0.8934	0.8934		0.8934	0.8934		14,106.1182	14,106.1182	0.2704	0.2586	14,189.9438
NaturalGas Unmitigated	1.2931	11.0804	4.9265	0.0705		0.8934	0.8934		0.8934	0.8934		14,106.1182	14,106.1182	0.2704	0.2586	14,189.9438

Avanti South Project - Antelope Valley APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	18476.2	0.1993	1.7027	0.7246	0.0109		0.1377	0.1377		0.1377	0.1377		2,173.6702	2,173.6702	0.0417	0.0399	2,186.5872
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	20759.4	0.2239	1.9131	0.8141	0.0122		0.1547	0.1547		0.1547	0.1547		2,442.2845	2,442.2845	0.0468	0.0448	2,456.7978
Condo/Townhouse	9610.84	0.1037	0.8857	0.3769	5.6500e-003		0.0716	0.0716		0.0716	0.0716		1,130.6873	1,130.6873	0.0217	0.0207	1,137.4064
Elementary School	2034.54	0.0219	0.1995	0.1676	1.2000e-003		0.0152	0.0152		0.0152	0.0152		239.3576	239.3576	4.5900e-003	4.3900e-003	240.7800
Government Office Building	286.575	3.0900e-003	0.0281	0.0236	1.7000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003		33.7148	33.7148	6.5000e-004	6.2000e-004	33.9151
Medical Office Building	2276.27	0.0246	0.2232	0.1875	1.3400e-003		0.0170	0.0170		0.0170	0.0170		267.7962	267.7962	5.1300e-003	4.9100e-003	269.3876
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
Retirement Community	14553.6	0.1570	1.3412	0.5707	8.5600e-003		0.1084	0.1084		0.1084	0.1084		1,712.1833	1,712.1833	0.0328	0.0314	1,722.3579
Single Family Housing	51298.1	0.5532	4.7275	2.0117	0.0302		0.3822	0.3822		0.3822	0.3822		6,035.0742	6,035.0742	0.1157	0.1106	6,070.9376
Strip Mall	606.477	6.5400e-003	0.0595	0.0500	3.6000e-004		4.5200e-003	4.5200e-003		4.5200e-003	4.5200e-003		71.3502	71.3502	1.3700e-003	1.3100e-003	71.7742
Total		1.2931	11.0804	4.9265	0.0705		0.8934	0.8934		0.8934	0.8934		14,106.1182	14,106.1182	0.2704	0.2586	14,189.9438

Avanti South Project - Antelope Valley APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	18.4762	0.1993	1.7027	0.7246	0.0109		0.1377	0.1377		0.1377	0.1377		2,173.6702	2,173.6702	0.0417	0.0399	2,186.5872
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	20.7594	0.2239	1.9131	0.8141	0.0122		0.1547	0.1547		0.1547	0.1547		2,442.2845	2,442.2845	0.0468	0.0448	2,456.7978
Condo/Townhouse	9.61084	0.1037	0.8857	0.3769	5.6500e-003		0.0716	0.0716		0.0716	0.0716		1,130.6873	1,130.6873	0.0217	0.0207	1,137.4064
Elementary School	2.03454	0.0219	0.1995	0.1676	1.2000e-003		0.0152	0.0152		0.0152	0.0152		239.3576	239.3576	4.5900e-003	4.3900e-003	240.7800
Government Office Building	0.286575	3.0900e-003	0.0281	0.0236	1.7000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003		33.7148	33.7148	6.5000e-004	6.2000e-004	33.9151
Medical Office Building	2.27627	0.0246	0.2232	0.1875	1.3400e-003		0.0170	0.0170		0.0170	0.0170		267.7962	267.7962	5.1300e-003	4.9100e-003	269.3876
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
Retirement Community	14.5536	0.1570	1.3412	0.5707	8.5600e-003		0.1084	0.1084		0.1084	0.1084		1,712.1833	1,712.1833	0.0328	0.0314	1,722.3579
Single Family Housing	51.2981	0.5532	4.7275	2.0117	0.0302		0.3822	0.3822		0.3822	0.3822		6,035.0742	6,035.0742	0.1157	0.1106	6,070.9376
Strip Mall	0.606477	6.5400e-003	0.0595	0.0500	3.6000e-004		4.5200e-003	4.5200e-003		4.5200e-003	4.5200e-003		71.3502	71.3502	1.3700e-003	1.3100e-003	71.7742
Total		1.2931	11.0804	4.9265	0.0705		0.8934	0.8934		0.8934	0.8934		14,106.1182	14,106.1182	0.2704	0.2586	14,189.9438

6.0 Area Detail

6.1 Mitigation Measures Area

Avanti South Project - Antelope Valley APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	91.3599	19.2038	147.4829	0.1197		2.2004	2.2004		2.2004	2.2004	0.0000	22,708.3186	22,708.3186	0.6717	0.4117	22,847.7918
Unmitigated	91.3599	19.2038	147.4829	0.1197		2.2004	2.2004		2.2004	2.2004	0.0000	22,708.3186	22,708.3186	0.6717	0.4117	22,847.7918

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	6.8929					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	78.2140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.0584	17.5902	7.4852	0.1123		1.4222	1.4222		1.4222	1.4222	0.0000	22,455.5294	22,455.5294	0.4304	0.4117	22,588.9714
Landscaping	4.1946	1.6136	139.9977	7.4100e-003		0.7782	0.7782		0.7782	0.7782		252.7892	252.7892	0.2413		258.8204
Total	91.3599	19.2038	147.4829	0.1197		2.2004	2.2004		2.2004	2.2004	0.0000	22,708.3186	22,708.3186	0.6717	0.4117	22,847.7918

Avanti South Project - Antelope Valley APCD Air District, Winter

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	6.8929					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	78.2140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.0584	17.5902	7.4852	0.1123		1.4222	1.4222		1.4222	1.4222	0.0000	22,455.5294	22,455.5294	0.4304	0.4117	22,588.9714
Landscaping	4.1946	1.6136	139.9977	7.4100e-003		0.7782	0.7782		0.7782	0.7782		252.7892	252.7892	0.2413		258.8204
Total	91.3599	19.2038	147.4829	0.1197		2.2004	2.2004		2.2004	2.2004	0.0000	22,708.3186	22,708.3186	0.6717	0.4117	22,847.7918

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Avanti South Project - Antelope Valley APCD Air District, Winter

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation
