



**SALEM**  
engineering group, inc.

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## **AIR QUALITY AND GREENHOUSE GAS ASSESSMENT**

**PROPOSED COMMERCIAL DEVELOPMENT  
BEAR VALLEY ROAD NEAR APPLE VALLEY ROAD  
APPLE VALLEY, CALIFORNIA**

**SALEM PROJECT NO. 3-421-0420  
MAY 21, 2021**

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May 21, 2021

Job No. 3-421-0420

**AIR QUALITY AND GREENHOUSE GAS ASSESSMENT****PROPOSED COMMERCIAL DEVELOPMENT  
BEAR VALLEY ROAD AND APPLE VALLEY ROAD  
APPLE VALLEY, CALIFORNIA****1.0 INTRODUCTION**

This report presents an assessment of potential air quality and greenhouse gas (GHG) impacts associated with the Proposed Commercial Development project to be constructed at Bear Valley Road near Apply Valley Road (subject property). At this time the following improvements are planned:

- One, 43,000 square-foot retail/grocery store
- One, 10,000 square-foot retail store
- One, 2,000 square-foot shop building
- 264 parking stalls

GHG impacts will be attributable to emissions associated with construction and operational emissions including traffic and energy use. This report presents an evaluation of existing conditions at the subject property, thresholds of significance, and potential air quality and GHG impacts associated with construction and operation of the project.

**2.0 EXISTING CONDITIONS****2.1 Current Development**

The subject property is currently undeveloped. Offsite and onsite improvements will be constructed to allow for vehicle and pedestrian access to the site. The site is also surrounded by undeveloped land with the exception of the west side where there is a large commercial development centered on a Lowe's home improvement store and restaurants including Sonic Burgers and El Pollo Loco.

**2.2 Regulatory Setting**

The United States Environmental Protection Agency (EPA) defines air quality by ambient air concentrations of specific pollutants that have been shown to be of concern with respect to health and welfare of the general public. The EPA is responsible for enforcing the Federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the EPA to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated.

In response, the EPA established both primary and secondary standards for several pollutants (called "criteria" pollutants). Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and the public welfare from air pollutants in the atmosphere.

The Federal CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. More stringent California Ambient Air Quality Standards (CAAQS) have been adapted by the California Air Resources Board (ARB) for the six criteria pollutants through the California Clean Air Act of 1988 (CCAA). The CCAA also established California Ambient Air Quality Standards (CAAQS) for additional pollutants, including sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles (see Table 1 for NAAQS and CAAQS.)

Areas that do not meet the NAAQS or the CAAQS for a particular pollutant are considered to be “Nonattainment Areas” for that pollutant. In September 1997, the EPA promulgated 8-hour O<sub>3</sub> and 24-hour and annual PM<sub>2.5</sub> national standards. As a result, this action has initiated a new planning process to monitor and evaluate emission control measures for these pollutants.

The Mojave Desert Air Basin (MDAB) is classified as an Extreme Nonattainment Area for the NAAQS for O<sub>3</sub> for all Averaging Times and a Nonattainment Area for the NAAQS PM<sub>10</sub> for all Averaging times.

The California ARB is the state regulatory agency with authority to enforce regulations to both achieve and maintain the NAAQS and CAAQS. The ARB is responsible for the development, adoption, and enforcement of the state’s motor vehicle emissions program, as well as the adoption of the CAAQS. The ARB also reviews operations and programs of the local air districts and requires each air district with jurisdiction over a nonattainment area to develop its own strategy for achieving the NAAQS and CAAQS.

The local air district has the primary responsibility for the development and implementation of rules and regulations designed to attain the NAAQS and CAAQS, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. The Mojave Desert Air Quality Management District (MDAQMD) is the local agency responsible for the administration and enforcement of air quality regulations for the SCAB.

The MDAQMD and the Southern California Association of Governments (SCAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the MDAB.

Table 1 presents a summary of the ambient air quality standards adopted by the federal and California Clean Air Acts.

**TABLE 1**  
**Ambient Air Quality Standards**

POLLUTANT	AVERAGE TIME	CALIFORNIA STANDARDS CONCENTRATION	CALIFORNIA STANDARDS METHODS	NATIONAL STANDARDS PRIMARY	NATIONAL STANDARDS SECONDARY	NATIONAL STANDARDS METHOD
Ozone (O <sub>3</sub> )	1 hour	0.09 ppm (180 µg/m <sup>3</sup> )	Ultraviolet Photometry	0.075 ppm (147 µg/m <sup>3</sup> )	0.075 ppm (147 µg/m <sup>3</sup> )	Ultraviolet Photometry
	8 hour	0.070 ppm (137 µg/m <sup>3</sup> )				
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 µg/m <sup>3</sup> )	—	Non-Dispersive Infrared Spectroscopy (NDIR)
	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )		9 ppm (10 µg/m <sup>3</sup> )	—	
Nitrogen Dioxide (NO <sub>2</sub> )	Annual	0.030 ppm (56 µg/m <sup>3</sup> )	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m <sup>3</sup> )		Gas Phase Chemiluminescence

POLLUTANT	AVERAGE TIME	CALIFORNIA STANDARDS CONCENTRATION	CALIFORNIA STANDARDS METHODS	NATIONAL STANDARDS PRIMARY	NATIONAL STANDARDS SECONDARY	NATIONAL STANDARDS METHOD
	1 hour	0.18 ppm (338 $\mu\text{g}/\text{m}^3$ )		0.100 ppm (188 $\mu\text{g}/\text{m}^3$ )		
Sulfur Dioxide (SO <sub>2</sub> )	24 hours	0.04 ppm (105 $\mu\text{g}/\text{m}^3$ )	Ultraviolet Fluorescence		0.5 ppm (1300 $\mu\text{g}/\text{m}^3$ )	Pararosaniline
	3 hours	--				
	1 hour	0.25 ppm (655 $\mu\text{g}/\text{m}^3$ )		0.075 ppm (196 $\mu\text{g}/\text{m}^3$ )		
Respirable Particulate Matter (PM <sub>10</sub> )	24 hours	50 $\mu\text{g}/\text{m}^3$	Gravimetric or Beta Attenuation	150 $\mu\text{g}/\text{m}^3$	150 $\mu\text{g}/\text{m}^3$	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 $\mu\text{g}/\text{m}^3$				
Fine Particulate Matter (PM <sub>2.5</sub> )	Annual Arithmetic Mean	12 $\mu\text{g}/\text{m}^3$	Gravimetric or Beta Attenuation	12.0 $\mu\text{g}/\text{m}^3$	15 $\mu\text{g}/\text{m}^3$	Inertial Separation and Gravimetric Analysis
	24 hours			35 $\mu\text{g}/\text{m}^3$		
Sulfates	24 hours	25 $\mu\text{g}/\text{m}^3$	Ion Chromatography	No National Standards		
Lead	30-day Average	1.5 $\mu\text{g}/\text{m}^3$	Atomic Absorption			Atomic Absorption
	Calendar Quarter			1.5 $\mu\text{g}/\text{m}^3$	1.5 $\mu\text{g}/\text{m}^3$	
	3-Month Rolling			0.15 $\mu\text{g}/\text{m}^3$	0.15 $\mu\text{g}/\text{m}^3$	
Hydrogen Sulfide	1 hour	0.03 ppm (42 $\mu\text{g}/\text{m}^3$ )	Ultraviolet Fluorescence	No National Standards		
Vinyl Chloride	24 hours	0.010 ppm (26 $\mu\text{g}/\text{m}^3$ )	Gas Chromatography	No National Standards		

ppm= parts per million;  $\mu\text{g}/\text{m}^3$  = micrograms per cubic meter;  $\text{mg}/\text{m}^3$ = milligrams per cubic meter Source: California Air Resources Board, [www.arb.ca.gov](http://www.arb.ca.gov), 2014

### 3.0 THRESHOLDS OF SIGNIFICANCE

The MDAQMD has identified numerical emission thresholds for significance for construction and operation for a project. The project-level numerical thresholds are summarized in Table 2.

**TABLE 2**  
**MDAQMD Significance Thresholds**

POLLUTANT	CONSTRUCTION AND OPERATION	
	Annual Threshold (tons)	Daily Threshold (pounds)
NO <sub>x</sub>	25	137
ROG (VOC)	25	137
PM <sub>10</sub>	15	82
PM <sub>2.5</sub>	10	54
SO <sub>x</sub>	25	137
CO	100	548
Lead	0.6	3

The entire development will be a phased development. Each year a new phase will be constructed and put into operation the following year. In taking a more conservative approach each development emission output developed in CalEEMod will start construction in 2022 and show an operation date of 2022.

**Table 3  
Construction Summary for Project Site**

AREA DISTURBED	CONSTRUCTION SUMMARY	PARKING SPACES	APPROXIMATE DURATION
43,000sf	Retail/Grocery Store	-	19 Months
10,000 sf	Strip Mall	-	19 Months
2,000 sf	Strip Mall	-	19 Months
2.38 ac	Parking Lot	264	1 Month

#### 4.1 Construction

Emissions of pollutants such as fugitive dust that are generated during construction are generally highest near the construction site. Emissions from the construction phase of the project were estimated through the use of the CalEEMod Model (ENVIRON 2016). It was assumed that the construction would be vary in timeline as stated in the above table and that heavy construction equipment would be operating at the site for eight hours per day, five days per week during project construction.

Tables 4 and 5 provide summaries of the emission estimates for construction and operation of all proposed site improvements. These projected emissions assume standard measures are implemented to reduce emissions, as calculated with the CalEEMod Model, and are compared to the regional and localized significance thresholds. The localized significance thresholds are applicable only to on-site emissions and do not consider emissions occurring on roadways during travel to and from the site. Refer to Appendix A for detailed model output files.

Table 5 includes projected emissions for all steps of construction, averaged over the project's projected construction duration. These steps include: Grading Site, Site Preparation, Building Construction, Paving, and Architectural Coatings. Note that projected emissions for all pollutants during construction are below both the MDAQMD's Air Quality Significance Thresholds.

Construction of the project would be short-term and temporary. Thus, the emissions associated with construction would not result in a significant impact on the ambient air quality. Because emissions are less than the significance levels, they would not conflict or obstruct the implementation of the AQMP or applicable portions of the SIP. Project construction would also not result in emission of any odor compounds that would cause a nuisance or significant impact to nearby receptors. The impacts associated with Project construction are therefore not considered significant.

**TABLE 4  
Estimated Construction Emissions  
Annual LBS/Day (unless otherwise shown)**

EMISSION SOURCE	ROG	NOx	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Significance Criteria</b>	137	137	548	137	82	54
<b>Project Construction Emissions</b>	75.1468	40.5483	22.0603	0.0400	20.2595	11.8516
<b>Significant?</b>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

## 4.2 Operational Impacts

The main operational impacts associated with the Project would be impacts associated with traffic. Minor impacts would be associated with energy use and area sources.

The CalEEMod Model contains emission factors from the EMFAC2014 model, which is the latest version of the Caltrans emission factor model for on-road traffic. Project-related traffic was assumed to be comprised of a mixture of vehicles in accordance with the CalEEMod Model default outputs for traffic. This assumption includes light duty autos and light duty trucks (i.e., small trucks, SUVs, and vans) as well as medium- and heavy-duty vehicles that may be traveling to the facility to make deliveries. For conservative purposes, emission factors representing the vehicle mix for 2022 were used to estimate emissions as 2022 was assumed to be the first year of full operation; based on the results of the EMFAC2014 model for subsequent years, emissions would decrease on an annual basis from 2022 onward due to phase-out of higher polluting vehicles and implementation of more stringent emission standards that are taken into account in the EMFAC2014 model. Emissions associated with area sources (energy use and landscaping activities) were also estimated using the default assumptions in the CalEEMod Model.

Table 5 below presents the results of the CalEEMod emission calculations in lbs/day for operations, as an annual average considering the project's design features. The calculation assumed that the project would be constructed to current Title 24 buildings standards and would use low flow plumbing fixtures.

**TABLE 5**  
**Estimated Operational Emissions, LBS/Day (unless otherwise shown)**

EMISSION SOURCE	ROG	NOx	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Significance Criteria</b>	137	137	548	137	82	54
<b>Project Construction Emissions</b>	17.2625	116.5006	96.9892	0.4292	20.5612	5.6623
<i>Significant?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Based on the estimates of the emissions associated with project operations, the emissions are below the significance criteria. In addition, because the emissions are less than the significance levels, they would not conflict or obstruct the implementation of the AQMP or applicable portions of the SIP. It should be noted that the emissions from vehicles are projected to decrease with time due to phase-out of older, more polluting vehicles and increasingly stringent emissions standards.

Projects involving traffic impacts may result in the formation of locally high concentrations of CO, known as CO "hot spots." Based on the traffic recommendation to be implemented, it is not anticipated that the project would have a significant impact on traffic in the area, and no intersections would degrade to unacceptable levels. The intersections in the project area would therefore operate at an acceptable LOS and would not experience CO "hot spots" because traffic congestion would not result.

In reviewing the project data, location and area a cumulatively increase in the surrounding emissions associated with the area would not result in a significant impact on the ambient air quality. In addition, because emissions are less than the significance levels they do not expose sensitive receptors to substantial pollutant concentrations.

Based on the above project analyst of the operational phase, the project will not conflict or obstruct the implementation of the AQMP or applicable portions of the SIP.

### 4.3 Odors

During construction, diesel equipment operating at the site may generate some nuisance odors; however, due to the distance of sensitive receptors to the project site and the temporary nature of construction, odors associated with project construction would not be significant.

Land uses associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations. These land uses are not proposed for the commercial project in Apple Valley, CA. Odor impacts would not be significant.

### 4.4 Project's Contribution to Criteria Pollutants

Pursuant to the Sierra Club v. Friant Ranch Supreme Court Ruling (Case No. S219783, December 24, 2018), which found on page 6 of the ruling that EIRs need to “makes a reasonable effort to substantively connect a project’s air quality impacts to likely health consequences.” Also, on page 24 of the ruling it states “The Court of Appeal identified several ways in which the EIR could have framed the analysis so as to adequately inform the public and decision makers of possible adverse health effects. The County could have, for example, identified the Project’s impact on the days of nonattainment per year.”

## 5.0 GREENHOUSE GAS EVALUATION

According to the California Natural Resources Agency, “due to the global nature of GHG emissions and their potential effects, GHG emissions will typically be addressed in a cumulative impacts analysis.” According to Appendix G of the CEQA Guidelines, the following criteria may be considered to establish the significance of GHG emissions:

Would the project:

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

As discussed in Section 15064.4 of the CEQA Guidelines, the determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency, consistent with the provisions in Section 15064. Section 15064.4 further provides that a lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

- Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
- Rely on a qualitative analysis or performance-based standards.

Section 15064.4 also advises a lead agency to consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:



1. The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

The proposed project would generate an estimated total of 471 tons of CO<sub>2</sub>e emissions during construction. Many air districts recommend amortizing construction emissions over a period of 30 years to estimate the contribution of construction emissions to operational emissions over the project lifetime. Amortized over 30 years, the construction of the project will generate 15.7 tons of CO<sub>2</sub>e on an annualized basis as shown above.

Based on the results of the CalEEMod Model, the project would generate a total of 5,612.7279 tons of CO<sub>2</sub>e emissions annually from operations. By adding the amortized construction emissions results with the operational annual CO<sub>2</sub>e emissions, the project will produce approximately 5,627 tons of CO<sub>2</sub>e over a 30-year period.

## 6.0 CONCLUSIONS

The air quality and GHG analysis for the proposed project in Apple Valley, California evaluated emissions associated with both the construction and operation of the project. Emissions associated with construction and operation were compared with significance thresholds developed by the MDAQMD, which provide a conservative means of evaluating whether project emissions would cause a significant impact on the ambient air quality or whether further evaluation is warranted. Emissions associated with construction and operation are below the significance thresholds for all phases and pollutants. Thus, the emissions associated with construction and operation of the project would not result in a significant impact.

## 7.0 REFERENCES

- Association of Environmental Professionals. 2007. *Recommendations by the Association of Environmental Professionals (AEP) on How to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents*. June.
- California Air Pollution Control Officers Association. 2008. *CEQA and Climate Change – Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. January.
- California Air Resources Board. 2014. EMFAC2014 Emissions Model.
- California Air Resources Board. 2008. *Climate Change Scoping Plan*. November.
- ENVIRON. 2014. CalEEMod Model, Version 2016.3.2
- MDAQMD. 2016. CEQA and Federal Conformity Guidelines.
- U.S. EPA. 2006. *The U.S. Inventory of Greenhouse Gas Emissions and Sinks: Fast Facts*. [www.epa.gov/climatechange/emissions/downloads06/06FastFacts.pdf](http://www.epa.gov/climatechange/emissions/downloads06/06FastFacts.pdf).

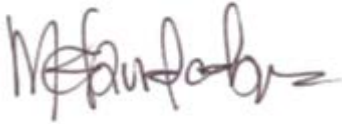
We appreciate the opportunity to assist you with this project. If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (909) 980-6455.

Respectfully submitted,

**SALEM Engineering Group, Inc.**



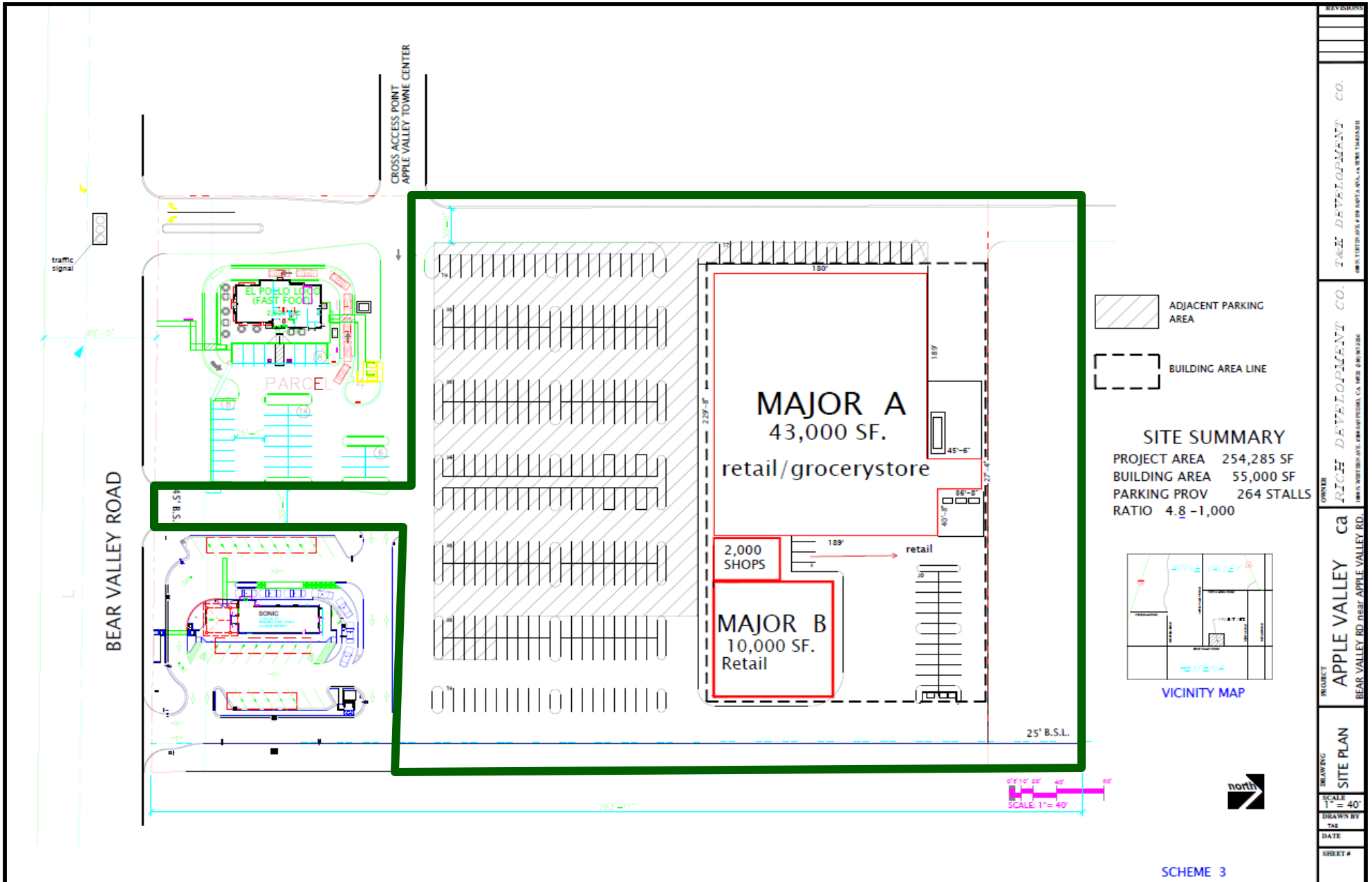
John Thomason, QSP/D/QISP, LEED AP  
Air Quality/CEQA Associate



Maria G. Ruvalcaba  
Project Manager

# A



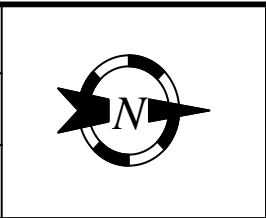


REVISIONS	
OWNER	APPLE VALLEY COMMUNITY DEVELOPMENT CO.
PROJECT	APPLE VALLEY COMMUNITY DEVELOPMENT CO.
DRAWING	SITE PLAN
SCALE	1" = 40'
DRAWN BY	TAE
DATE	
SHEET #	

**SITE PLAN**

**PROPOSED COMMERCIAL DEVELOPMENT  
BEAR VALLEY ROAD NEAR APPLE VALLEY ROAD  
APPLE VLLAEY, CALIFORNIA**

SCALE:	NTS	DATE:	May 2021
DRAWN BY:	BR	APPROVED BY:	MR
PROJECT NO.	3-421-0420	FIGURE NO.	1



APPENDIX

# B



Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summary Report

**Apple Valley Commercial Center**  
**Mojave Desert AQMD, Summary Report**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Supermarket	43.00	1000sqft	0.99	43,000.00	0
Strip Mall	12.00	1000sqft	0.28	12,000.00	0
Parking Lot	264.00	Space	2.38	105,600.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	30
<b>Climate Zone</b>	10			<b>Operational Year</b>	2022
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	702.44	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments**

Only CalEEMod defaults were used.

Project Characteristics -

Land Use -

Area Mitigation -

**2.0 Peak Daily Emissions**

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Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summary Report

**Peak Daily Construction Emissions**

Peak Daily Construction Emissions

Year	Phase	Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
lb/day													
2021	Demolition	3.2336 S	31.4833 W	22.0603 S	0.0400 S	1.6753 S	1.4745 S	3.2336 S	31.4833 W	22.0603 S	0.0400 S	1.6753 S	1.4745 S
2021	Site Preparation	3.9704 S	40.5483 W	21.7486 S	0.0395 S	20.2595 S	11.8516 S	3.9704 S	40.5483 W	21.7486 S	0.0395 S	20.2595 S	11.8516 S
2021	Grading	2.3588 S	24.7793 W	16.3528 S	0.0309 S	7.8362 S	4.4680 S	2.3588 S	24.7793 W	16.3528 S	0.0309 S	7.8362 S	4.4680 S
2021	Building Construction	2.2593 S	20.0410 S	19.1471 S	0.0397 S	1.6513 W	1.0938 W	2.2593 S	20.0410 S	19.1471 S	0.0397 S	1.6513 W	1.0938 W
2022	Building Construction	2.0386 S	18.0605 S	18.6960 S	0.0394 S	1.5009 W	0.9529 W	2.0386 S	18.0605 S	18.6960 S	0.0394 S	1.5009 W	0.9529 W
2022	Paving	1.4078 S	9.5730 W	12.7945 S	0.0205 S	0.6529 S	0.4948 S	1.4078 S	9.5730 W	12.7945 S	0.0205 S	0.6529 S	0.4948 S
2022	Architectural Coating	75.1468 S	1.4390 W	2.1739 S	3.9000e-003 S	0.1809 S	0.1084 S	75.1468 S	1.4390 W	2.1739 S	3.9000e-003 S	0.1809 S	0.1084 S
	Peak Daily Total	75.1468 S	40.5483 W	22.0603 S	0.0400 S	20.2595 S	11.8516 S	75.1468 S	40.5483 W	22.0603 S	0.0400 S	20.2595 S	11.8516 S
	Air District Threshold												
	Exceed Significance?												

**Peak Daily Operational Emissions**

Peak Daily Operational Emissions





Apple Valley Commercial Center - Mojave Desert AQMD Air District, Annual

**Apple Valley Commercial Center**  
**Mojave Desert AQMD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Supermarket	43.00	1000sqft	0.99	43,000.00	0
Strip Mall	12.00	1000sqft	0.28	12,000.00	0
Parking Lot	264.00	Space	2.38	105,600.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	30
<b>Climate Zone</b>	10			<b>Operational Year</b>	2022
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True

**2.0 Emissions Summary**



Apple Valley Commercial Center - Mojave Desert AQMD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-26-2021	7-25-2021	0.9163	0.9163
2	7-26-2021	10-25-2021	0.7322	0.7322
3	10-26-2021	1-25-2022	0.7113	0.7113
4	1-26-2022	4-25-2022	0.6448	0.6448
5	4-26-2022	7-25-2022	0.7728	0.7728
		Highest	0.9163	0.9163

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2893	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7000e-003	5.7000e-003	2.0000e-005	0.0000	6.0800e-003
Energy	4.6100e-003	0.0419	0.0352	2.5000e-004		3.1800e-003	3.1800e-003		3.1800e-003	3.1800e-003	0.0000	613.0207	613.0207	0.0243	5.6800e-003	615.3217
Mobile	1.5915	14.8298	12.1274	0.0517	2.5717	0.0278	2.5995	0.6893	0.0260	0.7153	0.0000	4,818.9584	4,818.9584	0.5372	0.0000	4,832.3871
Waste						0.0000	0.0000		0.0000	0.0000	51.7871	0.0000	51.7871	3.0605	0.0000	128.3002
Water						0.0000	0.0000		0.0000	0.0000	1.9636	28.1872	30.1508	0.2029	5.0000e-003	36.7128
<b>Total</b>	<b>1.8854</b>	<b>14.8717</b>	<b>12.1655</b>	<b>0.0519</b>	<b>2.5717</b>	<b>0.0310</b>	<b>2.6027</b>	<b>0.6893</b>	<b>0.0292</b>	<b>0.7185</b>	<b>53.7507</b>	<b>5,460.1720</b>	<b>5,513.9227</b>	<b>3.8249</b>	<b>0.0107</b>	<b>5,612.7279</b>

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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	0.2893	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7000e-003	5.7000e-003	2.0000e-005	0.0000	6.0800e-003
Energy	4.6100e-003	0.0419	0.0352	2.5000e-004		3.1800e-003	3.1800e-003		3.1800e-003	3.1800e-003	0.0000	613.0207	613.0207	0.0243	5.6800e-003	615.3217
Mobile	1.5915	14.8298	12.1274	0.0517	2.5717	0.0278	2.5995	0.6893	0.0260	0.7153	0.0000	4,818.9584	4,818.9584	0.5372	0.0000	4,832.3871
Waste						0.0000	0.0000		0.0000	0.0000	51.7871	0.0000	51.7871	3.0605	0.0000	128.3002
Water						0.0000	0.0000		0.0000	0.0000	1.9636	28.1872	30.1508	0.2029	5.0000e-003	36.7128
<b>Total</b>	<b>1.8854</b>	<b>14.8717</b>	<b>12.1655</b>	<b>0.0519</b>	<b>2.5717</b>	<b>0.0310</b>	<b>2.6027</b>	<b>0.6893</b>	<b>0.0292</b>	<b>0.7185</b>	<b>53.7507</b>	<b>5,460.1720</b>	<b>5,513.9227</b>	<b>3.8249</b>	<b>0.0107</b>	<b>5,612.7279</b>

	ROG	NOx	CO	SO2	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**

## Apple Valley Commercial Center - Mojave Desert AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/26/2021	5/21/2021	5	20	
2	Site Preparation	Site Preparation	5/22/2021	5/28/2021	5	5	
3	Grading	Grading	5/29/2021	6/9/2021	5	8	
4	Building Construction	Building Construction	6/10/2021	4/27/2022	5	230	
5	Paving	Paving	4/28/2022	5/23/2022	5	18	
6	Architectural Coating	Architectural Coating	5/24/2022	6/16/2022	5	18	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 2.38**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 82,500; Non-Residential Outdoor: 27,500; Striped Parking Area: 6,336 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Apple Valley Commercial Center - Mojave Desert AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Demolition	Excavators	3	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	62.00	26.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0317	0.3144	0.2157	3.9000e-004		0.0155	0.0155		0.0144	0.0144	0.0000	34.0008	34.0008	9.5700e-003	0.0000	34.2400
<b>Total</b>	<b>0.0317</b>	<b>0.3144</b>	<b>0.2157</b>	<b>3.9000e-004</b>		<b>0.0155</b>	<b>0.0155</b>		<b>0.0144</b>	<b>0.0144</b>	<b>0.0000</b>	<b>34.0008</b>	<b>34.0008</b>	<b>9.5700e-003</b>	<b>0.0000</b>	<b>34.2400</b>

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**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.6000e-004	4.2300e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9906	0.9906	3.0000e-005	0.0000	0.9914
<b>Total</b>	<b>5.9000e-004</b>	<b>4.6000e-004</b>	<b>4.2300e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>1.0000e-005</b>	<b>1.2200e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>0.9906</b>	<b>0.9906</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.9914</b>

**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	0.0317	0.3144	0.2157	3.9000e-004		0.0155	0.0155		0.0144	0.0144	0.0000	34.0007	34.0007	9.5700e-003	0.0000	34.2400
<b>Total</b>	<b>0.0317</b>	<b>0.3144</b>	<b>0.2157</b>	<b>3.9000e-004</b>		<b>0.0155</b>	<b>0.0155</b>		<b>0.0144</b>	<b>0.0144</b>	<b>0.0000</b>	<b>34.0007</b>	<b>34.0007</b>	<b>9.5700e-003</b>	<b>0.0000</b>	<b>34.2400</b>



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**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.6000e-004	4.2300e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9906	0.9906	3.0000e-005	0.0000	0.9914
<b>Total</b>	<b>5.9000e-004</b>	<b>4.6000e-004</b>	<b>4.2300e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>1.0000e-005</b>	<b>1.2200e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>0.9906</b>	<b>0.9906</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.9914</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1012	0.0529	1.0000e-004		5.1100e-003	5.1100e-003		4.7000e-003	4.7000e-003	0.0000	8.3589	8.3589	2.7000e-003	0.0000	8.4265
<b>Total</b>	<b>9.7200e-003</b>	<b>0.1012</b>	<b>0.0529</b>	<b>1.0000e-004</b>	<b>0.0452</b>	<b>5.1100e-003</b>	<b>0.0503</b>	<b>0.0248</b>	<b>4.7000e-003</b>	<b>0.0295</b>	<b>0.0000</b>	<b>8.3589</b>	<b>8.3589</b>	<b>2.7000e-003</b>	<b>0.0000</b>	<b>8.4265</b>

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**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.2700e-003	0.0000	3.6000e-004	0.0000	3.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2972	0.2972	1.0000e-005	0.0000	0.2974
<b>Total</b>	<b>1.8000e-004</b>	<b>1.4000e-004</b>	<b>1.2700e-003</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>3.7000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.2972</b>	<b>0.2972</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.2974</b>

**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					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1012	0.0529	1.0000e-004		5.1100e-003	5.1100e-003		4.7000e-003	4.7000e-003	0.0000	8.3589	8.3589	2.7000e-003	0.0000	8.4265
<b>Total</b>	<b>9.7200e-003</b>	<b>0.1012</b>	<b>0.0529</b>	<b>1.0000e-004</b>	<b>0.0452</b>	<b>5.1100e-003</b>	<b>0.0503</b>	<b>0.0248</b>	<b>4.7000e-003</b>	<b>0.0295</b>	<b>0.0000</b>	<b>8.3589</b>	<b>8.3589</b>	<b>2.7000e-003</b>	<b>0.0000</b>	<b>8.4265</b>

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**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.2700e-003	0.0000	3.6000e-004	0.0000	3.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2972	0.2972	1.0000e-005	0.0000	0.2974
<b>Total</b>	<b>1.8000e-004</b>	<b>1.4000e-004</b>	<b>1.2700e-003</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>3.7000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.2972</b>	<b>0.2972</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.2974</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1600e-003	0.0990	0.0634	1.2000e-004		4.6400e-003	4.6400e-003		4.2700e-003	4.2700e-003	0.0000	10.4215	10.4215	3.3700e-003	0.0000	10.5057
<b>Total</b>	<b>9.1600e-003</b>	<b>0.0990</b>	<b>0.0634</b>	<b>1.2000e-004</b>	<b>0.0262</b>	<b>4.6400e-003</b>	<b>0.0309</b>	<b>0.0135</b>	<b>4.2700e-003</b>	<b>0.0177</b>	<b>0.0000</b>	<b>10.4215</b>	<b>10.4215</b>	<b>3.3700e-003</b>	<b>0.0000</b>	<b>10.5057</b>

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**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.8000e-004	1.6900e-003	0.0000	4.8000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3962	0.3962	1.0000e-005	0.0000	0.3966
<b>Total</b>	<b>2.3000e-004</b>	<b>1.8000e-004</b>	<b>1.6900e-003</b>	<b>0.0000</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.3962</b>	<b>0.3962</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3966</b>

**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					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1600e-003	0.0990	0.0634	1.2000e-004		4.6400e-003	4.6400e-003		4.2700e-003	4.2700e-003	0.0000	10.4215	10.4215	3.3700e-003	0.0000	10.5057
<b>Total</b>	<b>9.1600e-003</b>	<b>0.0990</b>	<b>0.0634</b>	<b>1.2000e-004</b>	<b>0.0262</b>	<b>4.6400e-003</b>	<b>0.0309</b>	<b>0.0135</b>	<b>4.2700e-003</b>	<b>0.0177</b>	<b>0.0000</b>	<b>10.4215</b>	<b>10.4215</b>	<b>3.3700e-003</b>	<b>0.0000</b>	<b>10.5057</b>

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**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.8000e-004	1.6900e-003	0.0000	4.8000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3962	0.3962	1.0000e-005	0.0000	0.3966
<b>Total</b>	<b>2.3000e-004</b>	<b>1.8000e-004</b>	<b>1.6900e-003</b>	<b>0.0000</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.3962</b>	<b>0.3962</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3966</b>

**3.5 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1397	1.2813	1.2183	1.9800e-003		0.0705	0.0705		0.0662	0.0662	0.0000	170.2534	170.2534	0.0411	0.0000	171.2803
<b>Total</b>	<b>0.1397</b>	<b>1.2813</b>	<b>1.2183</b>	<b>1.9800e-003</b>		<b>0.0705</b>	<b>0.0705</b>		<b>0.0662</b>	<b>0.0662</b>	<b>0.0000</b>	<b>170.2534</b>	<b>170.2534</b>	<b>0.0411</b>	<b>0.0000</b>	<b>171.2803</b>

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**3.5 Building Construction - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	5.6700e-003	0.1797	0.0427	5.6000e-004	0.0128	2.9000e-004	0.0131	3.6900e-003	2.7000e-004	3.9600e-003	0.0000	52.7456	52.7456	4.5900e-003	0.0000	52.8603
Worker	0.0178	0.0139	0.1286	3.3000e-004	0.0368	2.3000e-004	0.0370	9.7700e-003	2.1000e-004	9.9800e-003	0.0000	30.0947	30.0947	9.5000e-004	0.0000	30.1185
<b>Total</b>	<b>0.0235</b>	<b>0.1936</b>	<b>0.1713</b>	<b>8.9000e-004</b>	<b>0.0495</b>	<b>5.2000e-004</b>	<b>0.0501</b>	<b>0.0135</b>	<b>4.8000e-004</b>	<b>0.0139</b>	<b>0.0000</b>	<b>82.8403</b>	<b>82.8403</b>	<b>5.5400e-003</b>	<b>0.0000</b>	<b>82.9789</b>

**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	0.1397	1.2813	1.2183	1.9800e-003		0.0705	0.0705		0.0662	0.0662	0.0000	170.2532	170.2532	0.0411	0.0000	171.2801
<b>Total</b>	<b>0.1397</b>	<b>1.2813</b>	<b>1.2183</b>	<b>1.9800e-003</b>		<b>0.0705</b>	<b>0.0705</b>		<b>0.0662</b>	<b>0.0662</b>	<b>0.0000</b>	<b>170.2532</b>	<b>170.2532</b>	<b>0.0411</b>	<b>0.0000</b>	<b>171.2801</b>

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**3.5 Building Construction - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	5.6700e-003	0.1797	0.0427	5.6000e-004	0.0128	2.9000e-004	0.0131	3.6900e-003	2.7000e-004	3.9600e-003	0.0000	52.7456	52.7456	4.5900e-003	0.0000	52.8603
Worker	0.0178	0.0139	0.1286	3.3000e-004	0.0368	2.3000e-004	0.0370	9.7700e-003	2.1000e-004	9.9800e-003	0.0000	30.0947	30.0947	9.5000e-004	0.0000	30.1185
<b>Total</b>	<b>0.0235</b>	<b>0.1936</b>	<b>0.1713</b>	<b>8.9000e-004</b>	<b>0.0495</b>	<b>5.2000e-004</b>	<b>0.0501</b>	<b>0.0135</b>	<b>4.8000e-004</b>	<b>0.0139</b>	<b>0.0000</b>	<b>82.8403</b>	<b>82.8403</b>	<b>5.5400e-003</b>	<b>0.0000</b>	<b>82.9789</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0708	0.6481	0.6791	1.1200e-003		0.0336	0.0336		0.0316	0.0316	0.0000	96.1660	96.1660	0.0230	0.0000	96.7419
<b>Total</b>	<b>0.0708</b>	<b>0.6481</b>	<b>0.6791</b>	<b>1.1200e-003</b>		<b>0.0336</b>	<b>0.0336</b>		<b>0.0316</b>	<b>0.0316</b>	<b>0.0000</b>	<b>96.1660</b>	<b>96.1660</b>	<b>0.0230</b>	<b>0.0000</b>	<b>96.7419</b>

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**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9500e-003	0.0952	0.0218	3.1000e-004	7.2100e-003	1.3000e-004	7.3400e-003	2.0800e-003	1.2000e-004	2.2100e-003	0.0000	29.5522	29.5522	2.4400e-003	0.0000	29.6132
Worker	9.3600e-003	7.0100e-003	0.0659	1.8000e-004	0.0208	1.3000e-004	0.0209	5.5100e-003	1.2000e-004	5.6300e-003	0.0000	16.3786	16.3786	4.8000e-004	0.0000	16.3905
<b>Total</b>	<b>0.0123</b>	<b>0.1022</b>	<b>0.0877</b>	<b>4.9000e-004</b>	<b>0.0280</b>	<b>2.6000e-004</b>	<b>0.0282</b>	<b>7.5900e-003</b>	<b>2.4000e-004</b>	<b>7.8400e-003</b>	<b>0.0000</b>	<b>45.9308</b>	<b>45.9308</b>	<b>2.9200e-003</b>	<b>0.0000</b>	<b>46.0037</b>

**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	0.0708	0.6481	0.6791	1.1200e-003		0.0336	0.0336		0.0316	0.0316	0.0000	96.1659	96.1659	0.0230	0.0000	96.7418
<b>Total</b>	<b>0.0708</b>	<b>0.6481</b>	<b>0.6791</b>	<b>1.1200e-003</b>		<b>0.0336</b>	<b>0.0336</b>		<b>0.0316</b>	<b>0.0316</b>	<b>0.0000</b>	<b>96.1659</b>	<b>96.1659</b>	<b>0.0230</b>	<b>0.0000</b>	<b>96.7418</b>



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**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9500e-003	0.0952	0.0218	3.1000e-004	7.2100e-003	1.3000e-004	7.3400e-003	2.0800e-003	1.2000e-004	2.2100e-003	0.0000	29.5522	29.5522	2.4400e-003	0.0000	29.6132
Worker	9.3600e-003	7.0100e-003	0.0659	1.8000e-004	0.0208	1.3000e-004	0.0209	5.5100e-003	1.2000e-004	5.6300e-003	0.0000	16.3786	16.3786	4.8000e-004	0.0000	16.3905
<b>Total</b>	<b>0.0123</b>	<b>0.1022</b>	<b>0.0877</b>	<b>4.9000e-004</b>	<b>0.0280</b>	<b>2.6000e-004</b>	<b>0.0282</b>	<b>7.5900e-003</b>	<b>2.4000e-004</b>	<b>7.8400e-003</b>	<b>0.0000</b>	<b>45.9308</b>	<b>45.9308</b>	<b>2.9200e-003</b>	<b>0.0000</b>	<b>46.0037</b>

**3.6 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	8.7900e-003	0.0857	0.1098	1.7000e-004		4.3900e-003	4.3900e-003		4.0500e-003	4.0500e-003	0.0000	14.7383	14.7383	4.6300e-003	0.0000	14.8540
Paving	3.1200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0119</b>	<b>0.0857</b>	<b>0.1098</b>	<b>1.7000e-004</b>		<b>4.3900e-003</b>	<b>4.3900e-003</b>		<b>4.0500e-003</b>	<b>4.0500e-003</b>	<b>0.0000</b>	<b>14.7383</b>	<b>14.7383</b>	<b>4.6300e-003</b>	<b>0.0000</b>	<b>14.8540</b>

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**3.6 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	6.6000e-004	4.9000e-004	4.6100e-003	1.0000e-005	1.4500e-003	1.0000e-005	1.4600e-003	3.9000e-004	1.0000e-005	3.9000e-004	0.0000	1.1458	1.1458	3.0000e-005	0.0000	1.1466
<b>Total</b>	<b>6.6000e-004</b>	<b>4.9000e-004</b>	<b>4.6100e-003</b>	<b>1.0000e-005</b>	<b>1.4500e-003</b>	<b>1.0000e-005</b>	<b>1.4600e-003</b>	<b>3.9000e-004</b>	<b>1.0000e-005</b>	<b>3.9000e-004</b>	<b>0.0000</b>	<b>1.1458</b>	<b>1.1458</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.1466</b>

**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	8.7900e-003	0.0857	0.1098	1.7000e-004		4.3900e-003	4.3900e-003		4.0500e-003	4.0500e-003	0.0000	14.7383	14.7383	4.6300e-003	0.0000	14.8540
Paving	3.1200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0119</b>	<b>0.0857</b>	<b>0.1098</b>	<b>1.7000e-004</b>		<b>4.3900e-003</b>	<b>4.3900e-003</b>		<b>4.0500e-003</b>	<b>4.0500e-003</b>	<b>0.0000</b>	<b>14.7383</b>	<b>14.7383</b>	<b>4.6300e-003</b>	<b>0.0000</b>	<b>14.8540</b>

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**3.6 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	6.6000e-004	4.9000e-004	4.6100e-003	1.0000e-005	1.4500e-003	1.0000e-005	1.4600e-003	3.9000e-004	1.0000e-005	3.9000e-004	0.0000	1.1458	1.1458	3.0000e-005	0.0000	1.1466
<b>Total</b>	<b>6.6000e-004</b>	<b>4.9000e-004</b>	<b>4.6100e-003</b>	<b>1.0000e-005</b>	<b>1.4500e-003</b>	<b>1.0000e-005</b>	<b>1.4600e-003</b>	<b>3.9000e-004</b>	<b>1.0000e-005</b>	<b>3.9000e-004</b>	<b>0.0000</b>	<b>1.1458</b>	<b>1.1458</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.1466</b>

**3.7 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	0.6740					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0127	0.0163	3.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.2979	2.2979	1.5000e-004	0.0000	2.3017
<b>Total</b>	<b>0.6759</b>	<b>0.0127</b>	<b>0.0163</b>	<b>3.0000e-005</b>		<b>7.4000e-004</b>	<b>7.4000e-004</b>		<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>2.2979</b>	<b>2.2979</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>2.3017</b>

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**3.7 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	3.9000e-004	2.9000e-004	2.7700e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.8000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6875	0.6875	2.0000e-005	0.0000	0.6880
<b>Total</b>	<b>3.9000e-004</b>	<b>2.9000e-004</b>	<b>2.7700e-003</b>	<b>1.0000e-005</b>	<b>8.7000e-004</b>	<b>1.0000e-005</b>	<b>8.8000e-004</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>0.6875</b>	<b>0.6875</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6880</b>

**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	0.6740					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0127	0.0163	3.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.2979	2.2979	1.5000e-004	0.0000	2.3017
<b>Total</b>	<b>0.6759</b>	<b>0.0127</b>	<b>0.0163</b>	<b>3.0000e-005</b>		<b>7.4000e-004</b>	<b>7.4000e-004</b>		<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>2.2979</b>	<b>2.2979</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>2.3017</b>

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**3.7 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	3.9000e-004	2.9000e-004	2.7700e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.8000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6875	0.6875	2.0000e-005	0.0000	0.6880
<b>Total</b>	<b>3.9000e-004</b>	<b>2.9000e-004</b>	<b>2.7700e-003</b>	<b>1.0000e-005</b>	<b>8.7000e-004</b>	<b>1.0000e-005</b>	<b>8.8000e-004</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>0.6875</b>	<b>0.6875</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6880</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5915	14.8298	12.1274	0.0517	2.5717	0.0278	2.5995	0.6893	0.0260	0.7153	0.0000	4,818.958 4	4,818.958 4	0.5372	0.0000	4,832.387 1
Unmitigated	1.5915	14.8298	12.1274	0.0517	2.5717	0.0278	2.5995	0.6893	0.0260	0.7153	0.0000	4,818.958 4	4,818.958 4	0.5372	0.0000	4,832.387 1

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	531.84	504.48	245.16	749,961	749,961
Supermarket	4,396.32	7,636.37	7156.92	5,975,623	5,975,623
Parking Lot	0.00	0.00	0.00		
Total	4,928.16	8,140.85	7,402.08	6,725,584	6,725,584

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Strip Mall	0.542047	0.035396	0.174897	0.107230	0.017469	0.005327	0.008901	0.094756	0.001421	0.002157	0.008671	0.000709	0.001020
Supermarket	0.542047	0.035396	0.174897	0.107230	0.017469	0.005327	0.008901	0.094756	0.001421	0.002157	0.008671	0.000709	0.001020
Parking Lot	0.542047	0.035396	0.174897	0.107230	0.017469	0.005327	0.008901	0.094756	0.001421	0.002157	0.008671	0.000709	0.001020

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	567.4042	567.4042	0.0234	4.8500e-003	569.4341
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	567.4042	567.4042	0.0234	4.8500e-003	569.4341
NaturalGas Mitigated	4.6100e-003	0.0419	0.0352	2.5000e-004		3.1800e-003	3.1800e-003		3.1800e-003	3.1800e-003	0.0000	45.6165	45.6165	8.7000e-004	8.4000e-004	45.8875
NaturalGas Unmitigated	4.6100e-003	0.0419	0.0352	2.5000e-004		3.1800e-003	3.1800e-003		3.1800e-003	3.1800e-003	0.0000	45.6165	45.6165	8.7000e-004	8.4000e-004	45.8875

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Annual

**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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	26640	1.4000e-004	1.3100e-003	1.1000e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4216	1.4216	3.0000e-005	3.0000e-005	1.4301
Supermarket	828180	4.4700e-003	0.0406	0.0341	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003	0.0000	44.1948	44.1948	8.5000e-004	8.1000e-004	44.4575
<b>Total</b>		<b>4.6100e-003</b>	<b>0.0419</b>	<b>0.0352</b>	<b>2.5000e-004</b>		<b>3.1900e-003</b>	<b>3.1900e-003</b>		<b>3.1900e-003</b>	<b>3.1900e-003</b>	<b>0.0000</b>	<b>45.6165</b>	<b>45.6165</b>	<b>8.8000e-004</b>	<b>8.4000e-004</b>	<b>45.8875</b>

**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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	26640	1.4000e-004	1.3100e-003	1.1000e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4216	1.4216	3.0000e-005	3.0000e-005	1.4301
Supermarket	828180	4.4700e-003	0.0406	0.0341	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003	0.0000	44.1948	44.1948	8.5000e-004	8.1000e-004	44.4575
<b>Total</b>		<b>4.6100e-003</b>	<b>0.0419</b>	<b>0.0352</b>	<b>2.5000e-004</b>		<b>3.1900e-003</b>	<b>3.1900e-003</b>		<b>3.1900e-003</b>	<b>3.1900e-003</b>	<b>0.0000</b>	<b>45.6165</b>	<b>45.6165</b>	<b>8.8000e-004</b>	<b>8.4000e-004</b>	<b>45.8875</b>



Apple Valley Commercial Center - Mojave Desert AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	36960	11.7763	4.9000e-004	1.0000e-004	11.8184
Strip Mall	151560	48.2903	1.9900e-003	4.1000e-004	48.4630
Supermarket	1.59229e+006	507.3377	0.0210	4.3300e-003	509.1527
<b>Total</b>		<b>567.4042</b>	<b>0.0234</b>	<b>4.8400e-003</b>	<b>569.4341</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	36960	11.7763	4.9000e-004	1.0000e-004	11.8184
Strip Mall	151560	48.2903	1.9900e-003	4.1000e-004	48.4630
Supermarket	1.59229e+006	507.3377	0.0210	4.3300e-003	509.1527
<b>Total</b>		<b>567.4042</b>	<b>0.0234</b>	<b>4.8400e-003</b>	<b>569.4341</b>

**6.0 Area Detail**

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Annual

**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2893	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7000e-003	5.7000e-003	2.0000e-005	0.0000	6.0800e-003
Unmitigated	0.2893	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7000e-003	5.7000e-003	2.0000e-005	0.0000	6.0800e-003

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Annual

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0674					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2216					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7000e-004	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7000e-003	5.7000e-003	2.0000e-005	0.0000	6.0800e-003
<b>Total</b>	<b>0.2893</b>	<b>3.0000e-005</b>	<b>2.9400e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>5.7000e-003</b>	<b>5.7000e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>6.0800e-003</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0674					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2216					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7000e-004	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7000e-003	5.7000e-003	2.0000e-005	0.0000	6.0800e-003
<b>Total</b>	<b>0.2893</b>	<b>3.0000e-005</b>	<b>2.9400e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>5.7000e-003</b>	<b>5.7000e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>6.0800e-003</b>

**7.0 Water Detail**

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Annual

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	30.1508	0.2029	5.0000e-003	36.7128
Unmitigated	30.1508	0.2029	5.0000e-003	36.7128

### 7.2 Water by Land Use

#### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.88887 / 0.544791	5.8982	0.0292	7.3000e-004	6.8462
Supermarket	5.30053 / 0.163934	24.2526	0.1737	4.2700e-003	29.8666
<b>Total</b>		<b>30.1508</b>	<b>0.2029</b>	<b>5.0000e-003</b>	<b>36.7128</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.88887 / 0.544791	5.8982	0.0292	7.3000e-004	6.8462
Supermarket	5.30053 / 0.163934	24.2526	0.1737	4.2700e-003	29.8666
<b>Total</b>		<b>30.1508</b>	<b>0.2029</b>	<b>5.0000e-003</b>	<b>36.7128</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	51.7871	3.0605	0.0000	128.3002
Unmitigated	51.7871	3.0605	0.0000	128.3002

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	12.6	2.5577	0.1512	0.0000	6.3366
Supermarket	242.52	49.2294	2.9094	0.0000	121.9637
<b>Total</b>		<b>51.7871</b>	<b>3.0605</b>	<b>0.0000</b>	<b>128.3002</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	12.6	2.5577	0.1512	0.0000	6.3366
Supermarket	242.52	49.2294	2.9094	0.0000	121.9637
<b>Total</b>		<b>51.7871</b>	<b>3.0605</b>	<b>0.0000</b>	<b>128.3002</b>

**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**

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Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**Apple Valley Commercial Center**  
**Mojave Desert AQMD Air District, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Supermarket	43.00	1000sqft	0.99	43,000.00	0
Strip Mall	12.00	1000sqft	0.28	12,000.00	0
Parking Lot	264.00	Space	2.38	105,600.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	30
<b>Climate Zone</b>	10			<b>Operational Year</b>	2022
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True

**2.0 Emissions Summary**



Apple Valley Commercial Center - Mojave Desert AQMD 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	1.5868	3.0000e-004	0.0326	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0698	0.0698	1.8000e-004		0.0744
Energy	0.0253	0.2296	0.1929	1.3800e-003		0.0175	0.0175		0.0175	0.0175		275.5262	275.5262	5.2800e-003	5.0500e-003	277.1635
Mobile	12.9438	112.7432	92.4732	0.3855	20.3244	0.2192	20.5436	5.4393	0.2054	5.6448		39,626.4111	39,626.4111	4.8783		39,748.3687
<b>Total</b>	<b>14.5558</b>	<b>112.9731</b>	<b>92.6987</b>	<b>0.3869</b>	<b>20.3244</b>	<b>0.2368</b>	<b>20.5612</b>	<b>5.4393</b>	<b>0.2230</b>	<b>5.6623</b>		<b>39,902.0071</b>	<b>39,902.0071</b>	<b>4.8838</b>	<b>5.0500e-003</b>	<b>40,025.6066</b>

**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	1.5868	3.0000e-004	0.0326	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0698	0.0698	1.8000e-004		0.0744
Energy	0.0253	0.2296	0.1929	1.3800e-003		0.0175	0.0175		0.0175	0.0175		275.5262	275.5262	5.2800e-003	5.0500e-003	277.1635
Mobile	12.9438	112.7432	92.4732	0.3855	20.3244	0.2192	20.5436	5.4393	0.2054	5.6448		39,626.4111	39,626.4111	4.8783		39,748.3687
<b>Total</b>	<b>14.5558</b>	<b>112.9731</b>	<b>92.6987</b>	<b>0.3869</b>	<b>20.3244</b>	<b>0.2368</b>	<b>20.5612</b>	<b>5.4393</b>	<b>0.2230</b>	<b>5.6623</b>		<b>39,902.0071</b>	<b>39,902.0071</b>	<b>4.8838</b>	<b>5.0500e-003</b>	<b>40,025.6066</b>

Apple Valley Commercial Center - Mojave Desert AQMD 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	Demolition	Demolition	4/26/2021	5/21/2021	5	20	
2	Site Preparation	Site Preparation	5/22/2021	5/28/2021	5	5	
3	Grading	Grading	5/29/2021	6/9/2021	5	8	
4	Building Construction	Building Construction	6/10/2021	4/27/2022	5	230	
5	Paving	Paving	4/28/2022	5/23/2022	5	18	
6	Architectural Coating	Architectural Coating	5/24/2022	6/16/2022	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.38

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 82,500; Non-Residential Outdoor: 27,500; Striped Parking Area: 6,336 (Architectural Coating – sqft)

#### OffRoad Equipment

## Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Demolition	Excavators	3	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	62.00	26.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>		<b>1.5513</b>	<b>1.5513</b>		<b>1.4411</b>	<b>1.4411</b>		<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.0647	0.0427	0.3946	1.0600e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		105.9146	105.9146	3.3200e-003		105.9976
<b>Total</b>	<b>0.0647</b>	<b>0.0427</b>	<b>0.3946</b>	<b>1.0600e-003</b>	<b>0.1232</b>	<b>7.5000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>6.9000e-004</b>	<b>0.0334</b>		<b>105.9146</b>	<b>105.9146</b>	<b>3.3200e-003</b>		<b>105.9976</b>

**Mitigated Construction On-Site**

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

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.0647	0.0427	0.3946	1.0600e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		105.9146	105.9146	3.3200e-003		105.9976
<b>Total</b>	<b>0.0647</b>	<b>0.0427</b>	<b>0.3946</b>	<b>1.0600e-003</b>	<b>0.1232</b>	<b>7.5000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>6.9000e-004</b>	<b>0.0334</b>		<b>105.9146</b>	<b>105.9146</b>	<b>3.3200e-003</b>		<b>105.9976</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

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



Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0776	0.0512	0.4736	1.2800e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		127.0975	127.0975	3.9900e-003		127.1971
<b>Total</b>	<b>0.0776</b>	<b>0.0512</b>	<b>0.4736</b>	<b>1.2800e-003</b>	<b>0.1479</b>	<b>9.0000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.3000e-004</b>	<b>0.0401</b>		<b>127.0975</b>	<b>127.0975</b>	<b>3.9900e-003</b>		<b>127.1971</b>

**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	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>	<b>0.0000</b>	<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0776	0.0512	0.4736	1.2800e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		127.0975	127.0975	3.9900e-003		127.1971
<b>Total</b>	<b>0.0776</b>	<b>0.0512</b>	<b>0.4736</b>	<b>1.2800e-003</b>	<b>0.1479</b>	<b>9.0000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.3000e-004</b>	<b>0.0401</b>		<b>127.0975</b>	<b>127.0975</b>	<b>3.9900e-003</b>		<b>127.1971</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
<b>Total</b>	<b>2.2903</b>	<b>24.7367</b>	<b>15.8575</b>	<b>0.0296</b>	<b>6.5523</b>	<b>1.1599</b>	<b>7.7123</b>	<b>3.3675</b>	<b>1.0671</b>	<b>4.4346</b>		<b>2,871.9285</b>	<b>2,871.9285</b>	<b>0.9288</b>		<b>2,895.1495</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0647	0.0427	0.3946	1.0600e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		105.9146	105.9146	3.3200e-003		105.9976
<b>Total</b>	<b>0.0647</b>	<b>0.0427</b>	<b>0.3946</b>	<b>1.0600e-003</b>	<b>0.1232</b>	<b>7.5000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>6.9000e-004</b>	<b>0.0334</b>		<b>105.9146</b>	<b>105.9146</b>	<b>3.3200e-003</b>		<b>105.9976</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
<b>Total</b>	<b>2.2903</b>	<b>24.7367</b>	<b>15.8575</b>	<b>0.0296</b>	<b>6.5523</b>	<b>1.1599</b>	<b>7.7123</b>	<b>3.3675</b>	<b>1.0671</b>	<b>4.4346</b>	<b>0.0000</b>	<b>2,871.9285</b>	<b>2,871.9285</b>	<b>0.9288</b>		<b>2,895.1495</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0647	0.0427	0.3946	1.0600e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		105.9146	105.9146	3.3200e-003		105.9976
<b>Total</b>	<b>0.0647</b>	<b>0.0427</b>	<b>0.3946</b>	<b>1.0600e-003</b>	<b>0.1232</b>	<b>7.5000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>6.9000e-004</b>	<b>0.0334</b>		<b>105.9146</b>	<b>105.9146</b>	<b>3.3200e-003</b>		<b>105.9976</b>

**3.5 Building Construction - 2021**

**Unmitigated Construction On-Site**

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

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**3.5 Building Construction - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0805	2.3892	0.6261	7.3600e-003	0.1763	3.9600e-003	0.1803	0.0508	3.7800e-003	0.0546		768.4198	768.4198	0.0736		770.2584
Worker	0.2673	0.1763	1.6312	4.4000e-003	0.5093	3.1100e-003	0.5124	0.1351	2.8700e-003	0.1380		437.7802	437.7802	0.0137		438.1234
<b>Total</b>	<b>0.3478</b>	<b>2.5655</b>	<b>2.2573</b>	<b>0.0118</b>	<b>0.6857</b>	<b>7.0700e-003</b>	<b>0.6927</b>	<b>0.1859</b>	<b>6.6500e-003</b>	<b>0.1925</b>		<b>1,206.1999</b>	<b>1,206.1999</b>	<b>0.0873</b>		<b>1,208.3818</b>

**Mitigated Construction On-Site**

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

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**3.5 Building Construction - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0805	2.3892	0.6261	7.3600e-003	0.1763	3.9600e-003	0.1803	0.0508	3.7800e-003	0.0546		768.4198	768.4198	0.0736		770.2584
Worker	0.2673	0.1763	1.6312	4.4000e-003	0.5093	3.1100e-003	0.5124	0.1351	2.8700e-003	0.1380		437.7802	437.7802	0.0137		438.1234
<b>Total</b>	<b>0.3478</b>	<b>2.5655</b>	<b>2.2573</b>	<b>0.0118</b>	<b>0.6857</b>	<b>7.0700e-003</b>	<b>0.6927</b>	<b>0.1859</b>	<b>6.6500e-003</b>	<b>0.1925</b>		<b>1,206.1999</b>	<b>1,206.1999</b>	<b>0.0873</b>		<b>1,208.3818</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0743	2.2418	0.5682	7.3000e-003	0.1763	3.2000e-003	0.1795	0.0508	3.0600e-003	0.0538		762.2861	762.2861	0.0693		764.0195
Worker	0.2491	0.1576	1.4805	4.2400e-003	0.5093	3.0100e-003	0.5123	0.1351	2.7800e-003	0.1379		421.9786	421.9786	0.0122		422.2842
<b>Total</b>	<b>0.3234</b>	<b>2.3995</b>	<b>2.0487</b>	<b>0.0115</b>	<b>0.6857</b>	<b>6.2100e-003</b>	<b>0.6919</b>	<b>0.1859</b>	<b>5.8400e-003</b>	<b>0.1917</b>		<b>1,184.2647</b>	<b>1,184.2647</b>	<b>0.0816</b>		<b>1,186.3037</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0743	2.2418	0.5682	7.3000e-003	0.1763	3.2000e-003	0.1795	0.0508	3.0600e-003	0.0538		762.2861	762.2861	0.0693		764.0195
Worker	0.2491	0.1576	1.4805	4.2400e-003	0.5093	3.0100e-003	0.5123	0.1351	2.7800e-003	0.1379		421.9786	421.9786	0.0122		422.2842
<b>Total</b>	<b>0.3234</b>	<b>2.3995</b>	<b>2.0487</b>	<b>0.0115</b>	<b>0.6857</b>	<b>6.2100e-003</b>	<b>0.6919</b>	<b>0.1859</b>	<b>5.8400e-003</b>	<b>0.1917</b>		<b>1,184.2647</b>	<b>1,184.2647</b>	<b>0.0816</b>		<b>1,186.3037</b>

**3.6 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	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.3464					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3229</b>	<b>9.5221</b>	<b>12.1940</b>	<b>0.0189</b>		<b>0.4877</b>	<b>0.4877</b>		<b>0.4504</b>	<b>0.4504</b>		<b>1,805.1297</b>	<b>1,805.1297</b>	<b>0.5672</b>		<b>1,819.3091</b>



Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**3.6 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	0.0804	0.0509	0.4776	1.3700e-003	0.1643	9.7000e-004	0.1653	0.0436	9.0000e-004	0.0445		136.1221	136.1221	3.9400e-003		136.2207
<b>Total</b>	<b>0.0804</b>	<b>0.0509</b>	<b>0.4776</b>	<b>1.3700e-003</b>	<b>0.1643</b>	<b>9.7000e-004</b>	<b>0.1653</b>	<b>0.0436</b>	<b>9.0000e-004</b>	<b>0.0445</b>		<b>136.1221</b>	<b>136.1221</b>	<b>3.9400e-003</b>		<b>136.2207</b>

**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	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.3464					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3229</b>	<b>9.5221</b>	<b>12.1940</b>	<b>0.0189</b>		<b>0.4877</b>	<b>0.4877</b>		<b>0.4504</b>	<b>0.4504</b>	<b>0.0000</b>	<b>1,805.1297</b>	<b>1,805.1297</b>	<b>0.5672</b>		<b>1,819.3091</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**3.6 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	0.0804	0.0509	0.4776	1.3700e-003	0.1643	9.7000e-004	0.1653	0.0436	9.0000e-004	0.0445		136.1221	136.1221	3.9400e-003		136.2207
<b>Total</b>	<b>0.0804</b>	<b>0.0509</b>	<b>0.4776</b>	<b>1.3700e-003</b>	<b>0.1643</b>	<b>9.7000e-004</b>	<b>0.1653</b>	<b>0.0436</b>	<b>9.0000e-004</b>	<b>0.0445</b>		<b>136.1221</b>	<b>136.1221</b>	<b>3.9400e-003</b>		<b>136.2207</b>

**3.7 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	74.8913					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>75.0958</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**3.7 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	0.0482	0.0305	0.2866	8.2000e-004	0.0986	5.8000e-004	0.0992	0.0262	5.4000e-004	0.0267		81.6733	81.6733	2.3700e-003		81.7324
<b>Total</b>	<b>0.0482</b>	<b>0.0305</b>	<b>0.2866</b>	<b>8.2000e-004</b>	<b>0.0986</b>	<b>5.8000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.4000e-004</b>	<b>0.0267</b>		<b>81.6733</b>	<b>81.6733</b>	<b>2.3700e-003</b>		<b>81.7324</b>

**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	74.8913					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>75.0958</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**3.7 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	0.0482	0.0305	0.2866	8.2000e-004	0.0986	5.8000e-004	0.0992	0.0262	5.4000e-004	0.0267		81.6733	81.6733	2.3700e-003		81.7324
<b>Total</b>	<b>0.0482</b>	<b>0.0305</b>	<b>0.2866</b>	<b>8.2000e-004</b>	<b>0.0986</b>	<b>5.8000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.4000e-004</b>	<b>0.0267</b>		<b>81.6733</b>	<b>81.6733</b>	<b>2.3700e-003</b>		<b>81.7324</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Apple Valley Commercial Center - Mojave Desert AQMD 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	12.9438	112.7432	92.4732	0.3855	20.3244	0.2192	20.5436	5.4393	0.2054	5.6448		39,626.41 11	39,626.41 11	4.8783		39,748.36 87
Unmitigated	12.9438	112.7432	92.4732	0.3855	20.3244	0.2192	20.5436	5.4393	0.2054	5.6448		39,626.41 11	39,626.41 11	4.8783		39,748.36 87

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	531.84	504.48	245.16	749,961	749,961
Supermarket	4,396.32	7,636.37	7156.92	5,975,623	5,975,623
Parking Lot	0.00	0.00	0.00		
Total	4,928.16	8,140.85	7,402.08	6,725,584	6,725,584

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Strip Mall	0.542047	0.035396	0.174897	0.107230	0.017469	0.005327	0.008901	0.094756	0.001421	0.002157	0.008671	0.000709	0.001020
Supermarket	0.542047	0.035396	0.174897	0.107230	0.017469	0.005327	0.008901	0.094756	0.001421	0.002157	0.008671	0.000709	0.001020
Parking Lot	0.542047	0.035396	0.174897	0.107230	0.017469	0.005327	0.008901	0.094756	0.001421	0.002157	0.008671	0.000709	0.001020

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0253	0.2296	0.1929	1.3800e-003		0.0175	0.0175		0.0175	0.0175		275.5262	275.5262	5.2800e-003	5.0500e-003	277.1635
NaturalGas Unmitigated	0.0253	0.2296	0.1929	1.3800e-003		0.0175	0.0175		0.0175	0.0175		275.5262	275.5262	5.2800e-003	5.0500e-003	277.1635

Apple Valley Commercial Center - Mojave Desert AQMD 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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	72.9863	7.9000e-004	7.1600e-003	6.0100e-003	4.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004		8.5866	8.5866	1.6000e-004	1.6000e-004	8.6377
Supermarket	2268.99	0.0245	0.2225	0.1869	1.3300e-003		0.0169	0.0169		0.0169	0.0169		266.9396	266.9396	5.1200e-003	4.8900e-003	268.5259
<b>Total</b>		<b>0.0253</b>	<b>0.2296</b>	<b>0.1929</b>	<b>1.3700e-003</b>		<b>0.0175</b>	<b>0.0175</b>		<b>0.0175</b>	<b>0.0175</b>		<b>275.5262</b>	<b>275.5262</b>	<b>5.2800e-003</b>	<b>5.0500e-003</b>	<b>277.1635</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.0729863	7.9000e-004	7.1600e-003	6.0100e-003	4.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004		8.5866	8.5866	1.6000e-004	1.6000e-004	8.6377
Supermarket	2.26899	0.0245	0.2225	0.1869	1.3300e-003		0.0169	0.0169		0.0169	0.0169		266.9396	266.9396	5.1200e-003	4.8900e-003	268.5259
<b>Total</b>		<b>0.0253</b>	<b>0.2296</b>	<b>0.1929</b>	<b>1.3700e-003</b>		<b>0.0175</b>	<b>0.0175</b>		<b>0.0175</b>	<b>0.0175</b>		<b>275.5262</b>	<b>275.5262</b>	<b>5.2800e-003</b>	<b>5.0500e-003</b>	<b>277.1635</b>

**6.0 Area Detail**

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.5868	3.0000e-004	0.0326	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0698	0.0698	1.8000e-004		0.0744
Unmitigated	1.5868	3.0000e-004	0.0326	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0698	0.0698	1.8000e-004		0.0744



Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3693					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2144					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0300e-003	3.0000e-004	0.0326	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0698	0.0698	1.8000e-004		0.0744
<b>Total</b>	<b>1.5868</b>	<b>3.0000e-004</b>	<b>0.0326</b>	<b>0.0000</b>		<b>1.2000e-004</b>	<b>1.2000e-004</b>		<b>1.2000e-004</b>	<b>1.2000e-004</b>		<b>0.0698</b>	<b>0.0698</b>	<b>1.8000e-004</b>		<b>0.0744</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3693					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2144					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0300e-003	3.0000e-004	0.0326	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0698	0.0698	1.8000e-004		0.0744
<b>Total</b>	<b>1.5868</b>	<b>3.0000e-004</b>	<b>0.0326</b>	<b>0.0000</b>		<b>1.2000e-004</b>	<b>1.2000e-004</b>		<b>1.2000e-004</b>	<b>1.2000e-004</b>		<b>0.0698</b>	<b>0.0698</b>	<b>1.8000e-004</b>		<b>0.0744</b>

**7.0 Water Detail**

## Apple Valley Commercial Center - Mojave Desert AQMD Air District, Winter

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**7.1 Mitigation Measures Water****8.0 Waste Detail**

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**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

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**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**

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Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**Apple Valley Commercial Center**  
**Mojave Desert AQMD Air District, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Supermarket	43.00	1000sqft	0.99	43,000.00	0
Strip Mall	12.00	1000sqft	0.28	12,000.00	0
Parking Lot	264.00	Space	2.38	105,600.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	30
<b>Climate Zone</b>	10			<b>Operational Year</b>	2022
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True

**2.0 Emissions Summary**



Apple Valley Commercial Center - Mojave Desert AQMD 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	1.5868	3.0000e-004	0.0326	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0698	0.0698	1.8000e-004		0.0744
Energy	0.0253	0.2296	0.1929	1.3800e-003		0.0175	0.0175		0.0175	0.0175		275.5262	275.5262	5.2800e-003	5.0500e-003	277.1635
Mobile	15.6505	116.2707	96.7637	0.4279	20.3244	0.2145	20.5389	5.4393	0.2009	5.6402		43,954.9105	43,954.9105	4.4364		44,065.8193
<b>Total</b>	<b>17.2625</b>	<b>116.5006</b>	<b>96.9892</b>	<b>0.4292</b>	<b>20.3244</b>	<b>0.2321</b>	<b>20.5564</b>	<b>5.4393</b>	<b>0.2185</b>	<b>5.6578</b>		<b>44,230.5065</b>	<b>44,230.5065</b>	<b>4.4418</b>	<b>5.0500e-003</b>	<b>44,343.0572</b>

**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	1.5868	3.0000e-004	0.0326	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0698	0.0698	1.8000e-004		0.0744
Energy	0.0253	0.2296	0.1929	1.3800e-003		0.0175	0.0175		0.0175	0.0175		275.5262	275.5262	5.2800e-003	5.0500e-003	277.1635
Mobile	15.6505	116.2707	96.7637	0.4279	20.3244	0.2145	20.5389	5.4393	0.2009	5.6402		43,954.9105	43,954.9105	4.4364		44,065.8193
<b>Total</b>	<b>17.2625</b>	<b>116.5006</b>	<b>96.9892</b>	<b>0.4292</b>	<b>20.3244</b>	<b>0.2321</b>	<b>20.5564</b>	<b>5.4393</b>	<b>0.2185</b>	<b>5.6578</b>		<b>44,230.5065</b>	<b>44,230.5065</b>	<b>4.4418</b>	<b>5.0500e-003</b>	<b>44,343.0572</b>

Apple Valley Commercial Center - Mojave Desert AQMD 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	Demolition	Demolition	4/26/2021	5/21/2021	5	20	
2	Site Preparation	Site Preparation	5/22/2021	5/28/2021	5	5	
3	Grading	Grading	5/29/2021	6/9/2021	5	8	
4	Building Construction	Building Construction	6/10/2021	4/27/2022	5	230	
5	Paving	Paving	4/28/2022	5/23/2022	5	18	
6	Architectural Coating	Architectural Coating	5/24/2022	6/16/2022	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.38

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 82,500; Non-Residential Outdoor: 27,500; Striped Parking Area: 6,336 (Architectural Coating – sqft)

#### OffRoad Equipment

## Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Demolition	Excavators	3	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	62.00	26.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>		<b>1.5513</b>	<b>1.5513</b>		<b>1.4411</b>	<b>1.4411</b>		<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>



Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**3.2 Demolition - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.0685	0.0415	0.4953	1.2100e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		120.6001	120.6001	3.8800e-003		120.6971
<b>Total</b>	<b>0.0685</b>	<b>0.0415</b>	<b>0.4953</b>	<b>1.2100e-003</b>	<b>0.1232</b>	<b>7.5000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>6.9000e-004</b>	<b>0.0334</b>		<b>120.6001</b>	<b>120.6001</b>	<b>3.8800e-003</b>		<b>120.6971</b>

**Mitigated Construction On-Site**

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

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**3.2 Demolition - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.0685	0.0415	0.4953	1.2100e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		120.6001	120.6001	3.8800e-003		120.6971
<b>Total</b>	<b>0.0685</b>	<b>0.0415</b>	<b>0.4953</b>	<b>1.2100e-003</b>	<b>0.1232</b>	<b>7.5000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>6.9000e-004</b>	<b>0.0334</b>		<b>120.6001</b>	<b>120.6001</b>	<b>3.8800e-003</b>		<b>120.6971</b>

**3.3 Site Preparation - 2021**

**Unmitigated Construction On-Site**

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

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**3.3 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0822	0.0498	0.5944	1.4500e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		144.7201	144.7201	4.6600e-003		144.8365
<b>Total</b>	<b>0.0822</b>	<b>0.0498</b>	<b>0.5944</b>	<b>1.4500e-003</b>	<b>0.1479</b>	<b>9.0000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.3000e-004</b>	<b>0.0401</b>		<b>144.7201</b>	<b>144.7201</b>	<b>4.6600e-003</b>		<b>144.8365</b>

**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	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.0445</b>	<b>20.1107</b>	<b>9.9307</b>	<b>1.8809</b>	<b>11.8116</b>	<b>0.0000</b>	<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**3.3 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0822	0.0498	0.5944	1.4500e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		144.7201	144.7201	4.6600e-003		144.8365
<b>Total</b>	<b>0.0822</b>	<b>0.0498</b>	<b>0.5944</b>	<b>1.4500e-003</b>	<b>0.1479</b>	<b>9.0000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.3000e-004</b>	<b>0.0401</b>		<b>144.7201</b>	<b>144.7201</b>	<b>4.6600e-003</b>		<b>144.8365</b>

**3.4 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
<b>Total</b>	<b>2.2903</b>	<b>24.7367</b>	<b>15.8575</b>	<b>0.0296</b>	<b>6.5523</b>	<b>1.1599</b>	<b>7.7123</b>	<b>3.3675</b>	<b>1.0671</b>	<b>4.4346</b>		<b>2,871.9285</b>	<b>2,871.9285</b>	<b>0.9288</b>		<b>2,895.1495</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**3.4 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0415	0.4953	1.2100e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		120.6001	120.6001	3.8800e-003		120.6971
<b>Total</b>	<b>0.0685</b>	<b>0.0415</b>	<b>0.4953</b>	<b>1.2100e-003</b>	<b>0.1232</b>	<b>7.5000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>6.9000e-004</b>	<b>0.0334</b>		<b>120.6001</b>	<b>120.6001</b>	<b>3.8800e-003</b>		<b>120.6971</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
<b>Total</b>	<b>2.2903</b>	<b>24.7367</b>	<b>15.8575</b>	<b>0.0296</b>	<b>6.5523</b>	<b>1.1599</b>	<b>7.7123</b>	<b>3.3675</b>	<b>1.0671</b>	<b>4.4346</b>	<b>0.0000</b>	<b>2,871.9285</b>	<b>2,871.9285</b>	<b>0.9288</b>		<b>2,895.1495</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**3.4 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0415	0.4953	1.2100e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		120.6001	120.6001	3.8800e-003		120.6971
<b>Total</b>	<b>0.0685</b>	<b>0.0415</b>	<b>0.4953</b>	<b>1.2100e-003</b>	<b>0.1232</b>	<b>7.5000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>6.9000e-004</b>	<b>0.0334</b>		<b>120.6001</b>	<b>120.6001</b>	<b>3.8800e-003</b>		<b>120.6971</b>

**3.5 Building Construction - 2021**

**Unmitigated Construction On-Site**

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

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**3.5 Building Construction - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0752	2.4373	0.5247	7.7300e-003	0.1763	3.8600e-003	0.1802	0.0508	3.6900e-003	0.0545		807.4341	807.4341	0.0651		809.0617
Worker	0.2831	0.1716	2.0472	5.0100e-003	0.5093	3.1100e-003	0.5124	0.1351	2.8700e-003	0.1380		498.4803	498.4803	0.0160		498.8814
<b>Total</b>	<b>0.3584</b>	<b>2.6089</b>	<b>2.5719</b>	<b>0.0127</b>	<b>0.6857</b>	<b>6.9700e-003</b>	<b>0.6926</b>	<b>0.1859</b>	<b>6.5600e-003</b>	<b>0.1924</b>		<b>1,305.9144</b>	<b>1,305.9144</b>	<b>0.0812</b>		<b>1,307.9431</b>

**Mitigated Construction On-Site**

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

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**3.5 Building Construction - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0752	2.4373	0.5247	7.7300e-003	0.1763	3.8600e-003	0.1802	0.0508	3.6900e-003	0.0545		807.4341	807.4341	0.0651		809.0617
Worker	0.2831	0.1716	2.0472	5.0100e-003	0.5093	3.1100e-003	0.5124	0.1351	2.8700e-003	0.1380		498.4803	498.4803	0.0160		498.8814
<b>Total</b>	<b>0.3584</b>	<b>2.6089</b>	<b>2.5719</b>	<b>0.0127</b>	<b>0.6857</b>	<b>6.9700e-003</b>	<b>0.6926</b>	<b>0.1859</b>	<b>6.5600e-003</b>	<b>0.1924</b>		<b>1,305.9144</b>	<b>1,305.9144</b>	<b>0.0812</b>		<b>1,307.9431</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>



Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0692	2.2913	0.4711	7.6700e-003	0.1763	3.1100e-003	0.1794	0.0508	2.9800e-003	0.0538		801.3734	801.3734	0.0612		802.9030
Worker	0.2631	0.1535	1.8615	4.8300e-003	0.5093	3.0100e-003	0.5123	0.1351	2.7800e-003	0.1379		480.4552	480.4552	0.0143		480.8116
<b>Total</b>	<b>0.3324</b>	<b>2.4448</b>	<b>2.3326</b>	<b>0.0125</b>	<b>0.6857</b>	<b>6.1200e-003</b>	<b>0.6918</b>	<b>0.1859</b>	<b>5.7600e-003</b>	<b>0.1916</b>		<b>1,281.8287</b>	<b>1,281.8287</b>	<b>0.0754</b>		<b>1,283.7146</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0692	2.2913	0.4711	7.6700e-003	0.1763	3.1100e-003	0.1794	0.0508	2.9800e-003	0.0538		801.3734	801.3734	0.0612		802.9030
Worker	0.2631	0.1535	1.8615	4.8300e-003	0.5093	3.0100e-003	0.5123	0.1351	2.7800e-003	0.1379		480.4552	480.4552	0.0143		480.8116
<b>Total</b>	<b>0.3324</b>	<b>2.4448</b>	<b>2.3326</b>	<b>0.0125</b>	<b>0.6857</b>	<b>6.1200e-003</b>	<b>0.6918</b>	<b>0.1859</b>	<b>5.7600e-003</b>	<b>0.1916</b>		<b>1,281.8287</b>	<b>1,281.8287</b>	<b>0.0754</b>		<b>1,283.7146</b>

**3.6 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	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.3464					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3229</b>	<b>9.5221</b>	<b>12.1940</b>	<b>0.0189</b>		<b>0.4877</b>	<b>0.4877</b>		<b>0.4504</b>	<b>0.4504</b>		<b>1,805.1297</b>	<b>1,805.1297</b>	<b>0.5672</b>		<b>1,819.3091</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**3.6 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	0.0849	0.0495	0.6005	1.5600e-003	0.1643	9.7000e-004	0.1653	0.0436	9.0000e-004	0.0445		154.9856	154.9856	4.6000e-003		155.1005
<b>Total</b>	<b>0.0849</b>	<b>0.0495</b>	<b>0.6005</b>	<b>1.5600e-003</b>	<b>0.1643</b>	<b>9.7000e-004</b>	<b>0.1653</b>	<b>0.0436</b>	<b>9.0000e-004</b>	<b>0.0445</b>		<b>154.9856</b>	<b>154.9856</b>	<b>4.6000e-003</b>		<b>155.1005</b>

**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	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.3464					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3229</b>	<b>9.5221</b>	<b>12.1940</b>	<b>0.0189</b>		<b>0.4877</b>	<b>0.4877</b>		<b>0.4504</b>	<b>0.4504</b>	<b>0.0000</b>	<b>1,805.1297</b>	<b>1,805.1297</b>	<b>0.5672</b>		<b>1,819.3091</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**3.6 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	0.0849	0.0495	0.6005	1.5600e-003	0.1643	9.7000e-004	0.1653	0.0436	9.0000e-004	0.0445		154.9856	154.9856	4.6000e-003		155.1005
<b>Total</b>	<b>0.0849</b>	<b>0.0495</b>	<b>0.6005</b>	<b>1.5600e-003</b>	<b>0.1643</b>	<b>9.7000e-004</b>	<b>0.1653</b>	<b>0.0436</b>	<b>9.0000e-004</b>	<b>0.0445</b>		<b>154.9856</b>	<b>154.9856</b>	<b>4.6000e-003</b>		<b>155.1005</b>

**3.7 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	74.8913					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>75.0958</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**3.7 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	0.0509	0.0297	0.3603	9.3000e-004	0.0986	5.8000e-004	0.0992	0.0262	5.4000e-004	0.0267		92.9913	92.9913	2.7600e-003		93.0603
<b>Total</b>	<b>0.0509</b>	<b>0.0297</b>	<b>0.3603</b>	<b>9.3000e-004</b>	<b>0.0986</b>	<b>5.8000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.4000e-004</b>	<b>0.0267</b>		<b>92.9913</b>	<b>92.9913</b>	<b>2.7600e-003</b>		<b>93.0603</b>

**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	74.8913					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>75.0958</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**3.7 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	0.0509	0.0297	0.3603	9.3000e-004	0.0986	5.8000e-004	0.0992	0.0262	5.4000e-004	0.0267		92.9913	92.9913	2.7600e-003		93.0603
<b>Total</b>	<b>0.0509</b>	<b>0.0297</b>	<b>0.3603</b>	<b>9.3000e-004</b>	<b>0.0986</b>	<b>5.8000e-004</b>	<b>0.0992</b>	<b>0.0262</b>	<b>5.4000e-004</b>	<b>0.0267</b>		<b>92.9913</b>	<b>92.9913</b>	<b>2.7600e-003</b>		<b>93.0603</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Apple Valley Commercial Center - Mojave Desert AQMD 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	15.6505	116.2707	96.7637	0.4279	20.3244	0.2145	20.5389	5.4393	0.2009	5.6402		43,954.9105	43,954.9105	4.4364		44,065.8193
Unmitigated	15.6505	116.2707	96.7637	0.4279	20.3244	0.2145	20.5389	5.4393	0.2009	5.6402		43,954.9105	43,954.9105	4.4364		44,065.8193

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	531.84	504.48	245.16	749,961	749,961
Supermarket	4,396.32	7,636.37	7156.92	5,975,623	5,975,623
Parking Lot	0.00	0.00	0.00		
Total	4,928.16	8,140.85	7,402.08	6,725,584	6,725,584

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Strip Mall	0.542047	0.035396	0.174897	0.107230	0.017469	0.005327	0.008901	0.094756	0.001421	0.002157	0.008671	0.000709	0.001020
Supermarket	0.542047	0.035396	0.174897	0.107230	0.017469	0.005327	0.008901	0.094756	0.001421	0.002157	0.008671	0.000709	0.001020
Parking Lot	0.542047	0.035396	0.174897	0.107230	0.017469	0.005327	0.008901	0.094756	0.001421	0.002157	0.008671	0.000709	0.001020

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0253	0.2296	0.1929	1.3800e-003		0.0175	0.0175		0.0175	0.0175		275.5262	275.5262	5.2800e-003	5.0500e-003	277.1635
NaturalGas Unmitigated	0.0253	0.2296	0.1929	1.3800e-003		0.0175	0.0175		0.0175	0.0175		275.5262	275.5262	5.2800e-003	5.0500e-003	277.1635



Apple Valley Commercial Center - Mojave Desert AQMD 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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	72.9863	7.9000e-004	7.1600e-003	6.0100e-003	4.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004		8.5866	8.5866	1.6000e-004	1.6000e-004	8.6377
Supermarket	2268.99	0.0245	0.2225	0.1869	1.3300e-003		0.0169	0.0169		0.0169	0.0169		266.9396	266.9396	5.1200e-003	4.8900e-003	268.5259
<b>Total</b>		<b>0.0253</b>	<b>0.2296</b>	<b>0.1929</b>	<b>1.3700e-003</b>		<b>0.0175</b>	<b>0.0175</b>		<b>0.0175</b>	<b>0.0175</b>		<b>275.5262</b>	<b>275.5262</b>	<b>5.2800e-003</b>	<b>5.0500e-003</b>	<b>277.1635</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.0729863	7.9000e-004	7.1600e-003	6.0100e-003	4.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004		8.5866	8.5866	1.6000e-004	1.6000e-004	8.6377
Supermarket	2.26899	0.0245	0.2225	0.1869	1.3300e-003		0.0169	0.0169		0.0169	0.0169		266.9396	266.9396	5.1200e-003	4.8900e-003	268.5259
<b>Total</b>		<b>0.0253</b>	<b>0.2296</b>	<b>0.1929</b>	<b>1.3700e-003</b>		<b>0.0175</b>	<b>0.0175</b>		<b>0.0175</b>	<b>0.0175</b>		<b>275.5262</b>	<b>275.5262</b>	<b>5.2800e-003</b>	<b>5.0500e-003</b>	<b>277.1635</b>

**6.0 Area Detail**

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.5868	3.0000e-004	0.0326	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0698	0.0698	1.8000e-004		0.0744
Unmitigated	1.5868	3.0000e-004	0.0326	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0698	0.0698	1.8000e-004		0.0744

Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3693					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2144					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0300e-003	3.0000e-004	0.0326	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0698	0.0698	1.8000e-004		0.0744
<b>Total</b>	<b>1.5868</b>	<b>3.0000e-004</b>	<b>0.0326</b>	<b>0.0000</b>		<b>1.2000e-004</b>	<b>1.2000e-004</b>		<b>1.2000e-004</b>	<b>1.2000e-004</b>		<b>0.0698</b>	<b>0.0698</b>	<b>1.8000e-004</b>		<b>0.0744</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3693					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2144					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0300e-003	3.0000e-004	0.0326	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0698	0.0698	1.8000e-004		0.0744
<b>Total</b>	<b>1.5868</b>	<b>3.0000e-004</b>	<b>0.0326</b>	<b>0.0000</b>		<b>1.2000e-004</b>	<b>1.2000e-004</b>		<b>1.2000e-004</b>	<b>1.2000e-004</b>		<b>0.0698</b>	<b>0.0698</b>	<b>1.8000e-004</b>		<b>0.0744</b>

**7.0 Water Detail**

## Apple Valley Commercial Center - Mojave Desert AQMD Air District, Summer

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**7.1 Mitigation Measures Water****8.0 Waste Detail**

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**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

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**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**

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APPENDIX

C



**Apple Valley Commercial Center**  
**Mojave Desert AQMD Air District, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	2	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	6	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	11	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	4	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	1.84000E-003	1.26800E-002	1.63200E-002	3.00000E-005	7.40000E-004	7.40000E-004	0.00000E+000	2.29793E+000	2.29793E+000	1.50000E-004	0.00000E+000	2.30167E+000
Cement and Mortar Mixers	7.90000E-004	4.97000E-003	4.16000E-003	1.00000E-005	1.90000E-004	1.90000E-004	0.00000E+000	6.18670E-001	6.18670E-001	6.00000E-005	0.00000E+000	6.20280E-001
Concrete/Industrial Saws	3.85000E-003	3.03800E-002	3.67400E-002	6.00000E-005	1.73000E-003	1.73000E-003	0.00000E+000	5.37656E+000	5.37656E+000	3.10000E-004	0.00000E+000	5.38437E+000
Cranes	4.01000E-002	4.63810E-001	1.96240E-001	5.80000E-004	1.89700E-002	1.74500E-002	0.00000E+000	5.10077E+001	5.10077E+001	1.65000E-002	0.00000E+000	5.14202E+001
Excavators	7.79000E-003	7.32200E-002	1.11240E-001	1.80000E-004	3.55000E-003	3.27000E-003	0.00000E+000	1.54281E+001	1.54281E+001	4.99000E-003	0.00000E+000	1.55528E+001
Forklifts	4.26600E-002	3.91330E-001	4.01150E-001	5.30000E-004	2.71600E-002	2.49800E-002	0.00000E+000	4.63305E+001	4.63305E+001	1.49800E-002	0.00000E+000	4.67051E+001
Generator Sets	3.99600E-002	3.54240E-001	4.23380E-001	7.60000E-004	1.84300E-002	1.84300E-002	0.00000E+000	6.49989E+001	6.49989E+001	3.23000E-003	0.00000E+000	6.50797E+001
Graders	1.81000E-003	2.37000E-002	7.07000E-003	3.00000E-005	7.50000E-004	6.90000E-004	0.00000E+000	2.32850E+000	2.32850E+000	7.50000E-004	0.00000E+000	2.34733E+000
Pavers	1.86000E-003	1.88900E-002	2.59600E-002	4.00000E-005	9.00000E-004	8.30000E-004	0.00000E+000	3.71703E+000	3.71703E+000	1.20000E-003	0.00000E+000	3.74708E+000
Paving Equipment	2.41000E-003	2.34600E-002	3.43700E-002	6.00000E-005	1.14000E-003	1.05000E-003	0.00000E+000	4.83105E+000	4.83105E+000	1.56000E-003	0.00000E+000	4.87011E+000
Rollers	2.24000E-003	2.33000E-002	2.51100E-002	4.00000E-005	1.34000E-003	1.24000E-003	0.00000E+000	3.11201E+000	3.11201E+000	1.01000E-003	0.00000E+000	3.13717E+000
Rubber Tired Dozers	3.29600E-002	3.45600E-001	1.27190E-001	2.70000E-004	1.67700E-002	1.54300E-002	0.00000E+000	2.36427E+001	2.36427E+001	7.65000E-003	0.00000E+000	2.38338E+001
Tractors/Loaders/Backhoes	5.96800E-002	6.05100E-001	7.49750E-001	1.03000E-003	3.46500E-002	3.18800E-002	0.00000E+000	9.09018E+001	9.09018E+001	2.94000E-002	0.00000E+000	9.16368E+001
Welders	3.37300E-002	1.71610E-001	1.96710E-001	2.90000E-004	8.10000E-003	8.10000E-003	0.00000E+000	2.16454E+001	2.16454E+001	2.74000E-003	0.00000E+000	2.17138E+001



Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	1.84000E-003	1.26800E-002	1.63200E-002	3.00000E-005	7.40000E-004	7.40000E-004	0.00000E+000	2.29793E+000	2.29793E+000	1.50000E-004	0.00000E+000	2.30167E+000
Cement and Mortar Mixers	7.90000E-004	4.97000E-003	4.16000E-003	1.00000E-005	1.90000E-004	1.90000E-004	0.00000E+000	6.18670E+001	6.18670E+001	6.00000E-005	0.00000E+000	6.20280E+001
Concrete/Industrial Saws	3.85000E-003	3.03800E-002	3.67400E-002	6.00000E-005	1.73000E-003	1.73000E-003	0.00000E+000	5.37656E+000	5.37656E+000	3.10000E-004	0.00000E+000	5.38436E+000
Cranes	4.01000E-002	4.63810E-001	1.96240E-001	5.80000E-004	1.89700E-002	1.74500E-002	0.00000E+000	5.10077E+001	5.10077E+001	1.65000E-002	0.00000E+000	5.14201E+001
Excavators	7.79000E-003	7.32200E-002	1.11240E-001	1.80000E-004	3.55000E-003	3.27000E-003	0.00000E+000	1.54280E+001	1.54280E+001	4.99000E-003	0.00000E+000	1.55528E+001
Forklifts	4.26600E-002	3.91330E-001	4.01150E-001	5.30000E-004	2.71600E-002	2.49800E-002	0.00000E+000	4.63305E+001	4.63305E+001	1.49800E-002	0.00000E+000	4.67051E+001
Generator Sets	3.99600E-002	3.54230E-001	4.23380E-001	7.60000E-004	1.84300E-002	1.84300E-002	0.00000E+000	6.49988E+001	6.49988E+001	3.23000E-003	0.00000E+000	6.50796E+001
Graders	1.81000E-003	2.37000E-002	7.07000E-003	3.00000E-005	7.50000E-004	6.90000E-004	0.00000E+000	2.32850E+000	2.32850E+000	7.50000E-004	0.00000E+000	2.34733E+000
Pavers	1.86000E-003	1.88900E-002	2.59600E-002	4.00000E-005	9.00000E-004	8.30000E-004	0.00000E+000	3.71702E+000	3.71702E+000	1.20000E-003	0.00000E+000	3.74708E+000
Paving Equipment	2.41000E-003	2.34600E-002	3.43700E-002	6.00000E-005	1.14000E-003	1.05000E-003	0.00000E+000	4.83105E+000	4.83105E+000	1.56000E-003	0.00000E+000	4.87011E+000
Rollers	2.24000E-003	2.33000E-002	2.51100E-002	4.00000E-005	1.34000E-003	1.24000E-003	0.00000E+000	3.11200E+000	3.11200E+000	1.01000E-003	0.00000E+000	3.13717E+000
Rubber Tired Dozers	3.29600E-002	3.45600E-001	1.27190E-001	2.70000E-004	1.67700E-002	1.54300E-002	0.00000E+000	2.36427E+001	2.36427E+001	7.65000E-003	0.00000E+000	2.38338E+001
Tractors/Loaders/Backhoes	5.96800E-002	6.05100E-001	7.49750E-001	1.03000E-003	3.46500E-002	3.18800E-002	0.00000E+000	9.09017E+001	9.09017E+001	2.94000E-002	0.00000E+000	9.16367E+001
Welders	3.37300E-002	1.71610E-001	1.96710E-001	2.90000E-004	8.10000E-003	8.10000E-003	0.00000E+000	2.16454E+001	2.16454E+001	2.74000E-003	0.00000E+000	2.17138E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.85723E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17629E-006	1.17629E-006	0.00000E+000	0.00000E+000	1.16686E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.29634E-006	1.29634E-006	0.00000E+000	0.00000E+000	1.28594E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.07920E-006	1.07920E-006	0.00000E+000	0.00000E+000	1.28466E-006
Generator Sets	0.00000E+000	2.82294E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23079E-006	1.23079E-006	0.00000E+000	0.00000E+000	1.07560E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.69032E-006	2.69032E-006	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.21336E-006	3.21336E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.26889E-006	1.26889E-006	0.00000E+000	0.00000E+000	8.39143E-007
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21010E-006	1.21010E-006	0.00000E+000	0.00000E+000	1.20039E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.23985E-007	9.23985E-007	0.00000E+000	0.00000E+000	9.21075E-007

**Fugitive Dust Mitigation**

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)

No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.08	0.02	0.08	0.02	0.00	0.00
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Fugitive Dust	0.03	0.01	0.03	0.01	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.05	0.02	0.05	0.02	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.11	0.33		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	250.00
No	Use Low VOC Paint (Residential Exterior)	250.00
Yes	Use Low VOC Paint (Non-residential Interior)	250.00
Yes	Use Low VOC Paint (Non-residential Exterior)	250.00
Yes	Use Low VOC Paint (Parking)	250.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

### Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

### Solid Waste Mitigation

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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