

## **Appendix H: CalEEMod Modeling**

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## **H.1 - Memorandum**

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## Memo

**Date:** July 24, 2018

**To:** County of San Bernardino, California  
Advance Planning Division  
Land Use Services Department

**From:** Jason Paukovits, Senior Air Quality/Greenhouse Gas Scientist, FirstCarbon Solutions

**Subject:** Moon Camp Air Quality Memorandum

### PROJECT ANALYSIS METHODOLOGY AND RESULTS

#### Regional Air Quality Significance Thresholds

The South Coast Air Quality Management District (SCAQMD) regional thresholds apply to all aspects of the project including construction and operations. The mass emission-based regional thresholds were established because a project’s emissions could potentially contribute to the basin’s regional emission burden and affect air quality many miles away from a project location. The SCAQMD recommends regional significance thresholds for volatile organic compounds (VOC), nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), carbon monoxide (CO), and particulate matter (PM<sub>10</sub>, and PM<sub>2.5</sub>). Any construction or operational-related emissions from the project in excess of any of the thresholds presented in Table 1 would be considered to result in a significant impact.

**Table 1: SCAQMD Regional Significance Thresholds**

Pollutant	Mass Daily Thresholds (lbs/day)	
	Construction	Operation
NO <sub>x</sub>	100	55
VOC	75	55
PM <sub>10</sub>	150	150
PM <sub>2.5</sub>	55	55
SO <sub>x</sub>	150	150
CO	550	550

Notes:  
From SCAQMD CEQA Handbook  
NO<sub>x</sub> = nitrogen oxides  
SO<sub>x</sub> = sulfur oxides



Pollutant	Mass Daily Thresholds (lbs/day)	
	Construction	Operation
VOC = Volatile Organic Compounds CO = carbon monoxide PM <sub>10</sub> = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; PM <sub>2.5</sub> = particulate matter with an aerodynamic resistance diameter of 2.5 micrometers		

## Local Air Quality Significance Thresholds (LSTs)

The SCAQMD has developed localized significance threshold (LST) methodology that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts. LSTs are only applicable to NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

The SCAQMD created a series of lookup tables that present the maximum emissions (i.e., LSTs) that a project can emit without contributing to an existing or new air quality standard exceedance. The latest version of threshold values was developed between 2006 and 2008. The value of the LST depends on the project location, size of the project area, and distance to the nearest sensitive receptor. The project is located within SRA 38 (East San Bernardino Mountains). The nearest sensitive receptors from the project site would be in the residential area located 25 meters. Therefore, on-site emissions from construction activities were compared with the 2006-2008 LSTs for a 5-acre site in SRA 38 at a distance of 25 meters to the nearest receptors.

## CalEEMod

The California Emissions Estimator Model (CalEEMod), developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with several California air districts, is a statewide land use emissions model designed to estimate air quality criteria pollutant emissions associated with construction and operations of a project. The latest version of CalEEMod, version 2016.3.2, incorporates the California Air Resources Board (CARB) OFFROAD and EMFAC 2014 emission factors, and the 2016 update to the Title 24, Part 6 standard (California Building Standards Code).

## Construction

The project consists of 50 single family houses and 4.24 acres of paved surfaces, which include parking lots and new roadways. The analysis assumes that project construction would start in January 2018 and would last for a year. Construction activities include grading, building construction, paving and architectural coating. There are no existing buildings or hardscape surfaces onsite. The cut and fill would

be balanced on-site. The construction emissions estimated using the latest CalEEMod model are provided in Table 2.

As noted from Table 2, with the exception of NO<sub>x</sub> emissions, the estimated construction emissions from the CalEEMod model are lower than the corresponding emissions shown in RRDEIR No.1. Further, none of the emissions estimated using the CalEEMod model exceed any of the regional or localized emission significance thresholds. The estimated emissions shown in RRDEIR No.1 (Table 4.2-6), however, exceed the SCAQMD's localized significance thresholds for PM<sub>10</sub> and PM<sub>2.5</sub> thereby requiring mitigation. After mitigation, as shown in Table 4.2-7 of the RRDEIR No.1 (page 4.2-32), the project's construction emissions would not exceed any SCAQMD's construction emission significance thresholds. This analysis demonstrates that the construction emissions contained in the RRDEIR No.1 provide a conservative emission estimate (in terms of overestimating construction emissions) when compared to those emissions calculated using the most up-to-date emissions estimating model, CalEEMod. Therefore, the project's construction emissions provided in the RRDEIR No.1 are sufficient in describing the impacts of the project's construction emissions.

**Table 2: Comparison of Project Emission—Construction (Unmitigated)**

Analysis	Construction Criteria Pollutants (pounds/day)				
	VOC	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
RRDEIR No.1 (Table 4.2-6)	69.3	53.3	68.7	43.5	10.5
CalEEMod (new) <sup>(1)</sup>	54.3	59.6	36.2	11.5	6.1
SCAQMD Regional Construction Threshold	75	100	550	150	55
Significant Impact?	No	No	No	No	No
Local Significant Threshold <sup>(2)</sup>	N/A	270	2,075	14	9
Significant Impact?		No	No	<b>Yes</b> in RRDEIR No. 1 No for CalEEMod	<b>Yes</b> for RRDEIR No. 1 No for CalEEMod

Notes:

- (1) Although the localized analysis is typically based on a comparison of on-site emissions to the LSTs, the table conservatively includes the total regional emissions compared to the LST.
  - (2) The localized significance thresholds were updated to the latest values shown in the SCAQMD's Mass Rate Emission Tables (2006-2008) for a 5-acre project, in Source Receptor Area 38 and a distance to sensitive receptor of 25 meters; website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-1st-look-up-tables.pdf>.
- N/A = the SCAQMD has not defined a localized threshold for VOC emissions  
 Source of CalEEMod emissions: See Appendix E of this FEIR

## Operations

Table 3 below shows the comparison of the long-term operational emissions between emissions in the RRDEIR No. 1 (Table 4.2-9 [page 4.2-34] and Table 4.2-10 [page 4.2-35]) and the long-term operational emissions estimated using the CalEEMod model.

As noted from Table 3, the CalEEMod update to the project’s long term operational emissions are lower than the corresponding emissions shown in the RRDEIR No.1 tables with the exception of NOx emissions. The operational emission estimates for both the RRDEIR No. 1 and CalEEMod are less than the SCAQMD’s regional operational emission significance thresholds. Therefore, the emissions shown in the RRDEIR No. 1 represent a conservative estimate of the project’s long-term operational emissions and are sufficient in describing the project’s long-term operational impacts.

**Table 3: Comparison of Long-Term Operational Project Emissions**

Analysis	Operational Criteria Pollutants (pounds/day)				
	VOC	NOx	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
RRDEIR No. 1 (Table 4.2-9 and Table 4.2-10) <sup>(1), (2)</sup>	36.8	8.8	104.8	12.6	7.4
CalEEMod <sup>(1),(2)</sup>	9.5	10.8	32.2	4.5	1.9
SCAQMD Regional Operational Threshold	55	55	550	150	55
Significant Impact?	No	No	No	No	No
Note: <sup>(1)</sup> The higher of the summer and winter emissions is listed for each pollutant <sup>(2)</sup> The pollutant emissions include the operation of personal watercraft, Table 4.2-9 of the RRDEIR Source: CalEEMod (Appendix E of this FEIR)					

## CONCLUSION

The conservative analysis of the construction and operational emissions provided in RRDEIR No. 1 is sufficient in describing the air quality impacts of the project.



## **H.2 - Data**

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Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Annual

**Moon Camp - CalEEMod Base Case 2018**  
**San Bernardino-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	4.24	Acre	4.24	184,694.40	0
Single Family Housing	50.00	Dwelling Unit	16.23	90,000.00	143

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2019
<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 - Parking includes approximately 4,400 feet of new roadways at a width of 42 feet.

Construction Phase - .

Woodstoves - All natural Gas fireplaces

Construction Off-road Equipment Mitigation -

## Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	11,082.00	6,534.00
tblAreaCoating	Area_Parking	11082	6534
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	370.00	200.00
tblConstructionPhase	NumDays	35.00	30.00
tblConstructionPhase	NumDays	20.00	10.00
tblFireplaces	FireplaceDayYear	25.00	365.00
tblFireplaces	FireplaceHourDay	3.00	6.00
tblFireplaces	NumberGas	42.50	52.00
tblFireplaces	NumberNoFireplace	5.00	0.00
tblFireplaces	NumberWood	2.50	0.00
tblTripsAndVMT	VendorTripNumber	36.00	23.00
tblTripsAndVMT	WorkerTripNumber	96.00	64.00
tblTripsAndVMT	WorkerTripNumber	19.00	13.00
tblWoodstoves	NumberCatalytic	2.50	0.00
tblWoodstoves	NumberNoncatalytic	2.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2018	3-31-2018	1.3080	1.3080
2	4-1-2018	6-30-2018	0.9648	0.9648
3	7-1-2018	9-30-2018	0.9754	0.9754
		Highest	1.3080	1.3080

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	0.4195	0.3209	0.6522	2.0400e-003		0.0283	0.0283		0.0283	0.0283	0.0000	365.4666	365.4666	7.8200e-003	6.6800e-003	367.6541
Energy	8.2500e-003	0.0705	0.0300	4.5000e-004		5.7000e-003	5.7000e-003		5.7000e-003	5.7000e-003	0.0000	241.0959	241.0959	8.1500e-003	2.8600e-003	242.1515
Mobile	0.1986	1.4652	2.5376	8.5300e-003	0.6147	8.9500e-003	0.6236	0.1648	8.4400e-003	0.1732	0.0000	788.3486	788.3486	0.0443	0.0000	789.4570
Waste						0.0000	0.0000		0.0000	0.0000	11.9014	0.0000	11.9014	0.7034	0.0000	29.4851
Water						0.0000	0.0000		0.0000	0.0000	1.0335	20.7856	21.8191	0.1070	2.6800e-003	25.2942
<b>Total</b>	<b>0.6264</b>	<b>1.8566</b>	<b>3.2198</b>	<b>0.0110</b>	<b>0.6147</b>	<b>0.0430</b>	<b>0.6576</b>	<b>0.1648</b>	<b>0.0424</b>	<b>0.2072</b>	<b>12.9349</b>	<b>1,415.6966</b>	<b>1,428.6315</b>	<b>0.8707</b>	<b>0.0122</b>	<b>1,454.0418</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	0.4195	0.3209	0.6522	2.0400e-003		0.0283	0.0283		0.0283	0.0283	0.0000	365.4666	365.4666	7.8200e-003	6.6800e-003	367.6541
Energy	8.2500e-003	0.0705	0.0300	4.5000e-004		5.7000e-003	5.7000e-003		5.7000e-003	5.7000e-003	0.0000	241.0959	241.0959	8.1500e-003	2.8600e-003	242.1515
Mobile	0.1986	1.4652	2.5376	8.5300e-003	0.6147	8.9500e-003	0.6236	0.1648	8.4400e-003	0.1732	0.0000	788.3486	788.3486	0.0443	0.0000	789.4570
Waste						0.0000	0.0000		0.0000	0.0000	11.9014	0.0000	11.9014	0.7034	0.0000	29.4851
Water						0.0000	0.0000		0.0000	0.0000	1.0335	20.7856	21.8191	0.1070	2.6800e-003	25.2942
<b>Total</b>	<b>0.6264</b>	<b>1.8566</b>	<b>3.2198</b>	<b>0.0110</b>	<b>0.6147</b>	<b>0.0430</b>	<b>0.6576</b>	<b>0.1648</b>	<b>0.0424</b>	<b>0.2072</b>	<b>12.9349</b>	<b>1,415.6966</b>	<b>1,428.6315</b>	<b>0.8707</b>	<b>0.0122</b>	<b>1,454.0418</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**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2018	2/9/2018	5	30	
2	Building Construction	Building Construction	2/24/2018	11/30/2018	5	200	
3	Paving	Paving	12/1/2018	12/15/2018	5	10	
4	Architectural Coating	Architectural Coating	12/16/2018	12/31/2018	5	11	

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

**Acres of Grading (Grading Phase): 75**

**Acres of Paving: 4.24**

**Residential Indoor: 182,250; Residential Outdoor: 60,750; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,534 (Architectural Coating – sqft)**

**OffRoad Equipment**



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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	64.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

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Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

**3.2 Grading - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0764	0.8928	0.5263	9.3000e-004		0.0395	0.0395		0.0364	0.0364	0.0000	84.9728	84.9728	0.0265	0.0000	85.6341
<b>Total</b>	<b>0.0764</b>	<b>0.8928</b>	<b>0.5263</b>	<b>9.3000e-004</b>	<b>0.1301</b>	<b>0.0395</b>	<b>0.1696</b>	<b>0.0540</b>	<b>0.0364</b>	<b>0.0903</b>	<b>0.0000</b>	<b>84.9728</b>	<b>84.9728</b>	<b>0.0265</b>	<b>0.0000</b>	<b>85.6341</b>

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**3.2 Grading - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	1.7700e-003	1.4900e-003	0.0146	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0127	3.0127	1.1000e-004	0.0000	3.0154
<b>Total</b>	<b>1.7700e-003</b>	<b>1.4900e-003</b>	<b>0.0146</b>	<b>3.0000e-005</b>	<b>3.2900e-003</b>	<b>2.0000e-005</b>	<b>3.3100e-003</b>	<b>8.7000e-004</b>	<b>2.0000e-005</b>	<b>9.0000e-004</b>	<b>0.0000</b>	<b>3.0127</b>	<b>3.0127</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>3.0154</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					0.0586	0.0000	0.0586	0.0243	0.0000	0.0243	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0764	0.8928	0.5263	9.3000e-004		0.0395	0.0395		0.0364	0.0364	0.0000	84.9727	84.9727	0.0265	0.0000	85.6340
<b>Total</b>	<b>0.0764</b>	<b>0.8928</b>	<b>0.5263</b>	<b>9.3000e-004</b>	<b>0.0586</b>	<b>0.0395</b>	<b>0.0981</b>	<b>0.0243</b>	<b>0.0364</b>	<b>0.0606</b>	<b>0.0000</b>	<b>84.9727</b>	<b>84.9727</b>	<b>0.0265</b>	<b>0.0000</b>	<b>85.6340</b>

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**3.2 Grading - 2018**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	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	1.7700e-003	1.4900e-003	0.0146	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0127	3.0127	1.1000e-004	0.0000	3.0154
<b>Total</b>	<b>1.7700e-003</b>	<b>1.4900e-003</b>	<b>0.0146</b>	<b>3.0000e-005</b>	<b>3.2900e-003</b>	<b>2.0000e-005</b>	<b>3.3100e-003</b>	<b>8.7000e-004</b>	<b>2.0000e-005</b>	<b>9.0000e-004</b>	<b>0.0000</b>	<b>3.0127</b>	<b>3.0127</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>3.0154</b>

**3.3 Building Construction - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2680	2.3390	1.7580	2.6900e-003		0.1500	0.1500		0.1410	0.1410	0.0000	237.7672	237.7672	0.0583	0.0000	239.2236
<b>Total</b>	<b>0.2680</b>	<b>2.3390</b>	<b>1.7580</b>	<b>2.6900e-003</b>		<b>0.1500</b>	<b>0.1500</b>		<b>0.1410</b>	<b>0.1410</b>	<b>0.0000</b>	<b>237.7672</b>	<b>237.7672</b>	<b>0.0583</b>	<b>0.0000</b>	<b>239.2236</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Annual

**3.3 Building Construction - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.4400e-003	0.2864	0.0651	6.3000e-004	0.0145	1.9700e-003	0.0165	4.1900e-003	1.8800e-003	6.0700e-003	0.0000	59.7300	59.7300	4.3500e-003	0.0000	59.8388
Worker	0.0378	0.0319	0.3118	7.1000e-004	0.0702	5.0000e-004	0.0707	0.0186	4.6000e-004	0.0191	0.0000	64.2704	64.2704	2.3400e-003	0.0000	64.3288
<b>Total</b>	<b>0.0472</b>	<b>0.3182</b>	<b>0.3768</b>	<b>1.3400e-003</b>	<b>0.0847</b>	<b>2.4700e-003</b>	<b>0.0871</b>	<b>0.0228</b>	<b>2.3400e-003</b>	<b>0.0252</b>	<b>0.0000</b>	<b>124.0004</b>	<b>124.0004</b>	<b>6.6900e-003</b>	<b>0.0000</b>	<b>124.1676</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	0.2680	2.3390	1.7580	2.6900e-003		0.1500	0.1500		0.1410	0.1410	0.0000	237.7670	237.7670	0.0583	0.0000	239.2233
<b>Total</b>	<b>0.2680</b>	<b>2.3390</b>	<b>1.7580</b>	<b>2.6900e-003</b>		<b>0.1500</b>	<b>0.1500</b>		<b>0.1410</b>	<b>0.1410</b>	<b>0.0000</b>	<b>237.7670</b>	<b>237.7670</b>	<b>0.0583</b>	<b>0.0000</b>	<b>239.2233</b>

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**3.3 Building Construction - 2018**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.4400e-003	0.2864	0.0651	6.3000e-004	0.0145	1.9700e-003	0.0165	4.1900e-003	1.8800e-003	6.0700e-003	0.0000	59.7300	59.7300	4.3500e-003	0.0000	59.8388
Worker	0.0378	0.0319	0.3118	7.1000e-004	0.0702	5.0000e-004	0.0707	0.0186	4.6000e-004	0.0191	0.0000	64.2704	64.2704	2.3400e-003	0.0000	64.3288
<b>Total</b>	<b>0.0472</b>	<b>0.3182</b>	<b>0.3768</b>	<b>1.3400e-003</b>	<b>0.0847</b>	<b>2.4700e-003</b>	<b>0.0871</b>	<b>0.0228</b>	<b>2.3400e-003</b>	<b>0.0252</b>	<b>0.0000</b>	<b>124.0004</b>	<b>124.0004</b>	<b>6.6900e-003</b>	<b>0.0000</b>	<b>124.1676</b>

**3.4 Paving - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2200e-003	0.0876	0.0740	1.1000e-004		4.7800e-003	4.7800e-003		4.4000e-003	4.4000e-003	0.0000	10.4058	10.4058	3.2400e-003	0.0000	10.4868
Paving	5.5500e-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>0.0138</b>	<b>0.0876</b>	<b>0.0740</b>	<b>1.1000e-004</b>		<b>4.7800e-003</b>	<b>4.7800e-003</b>		<b>4.4000e-003</b>	<b>4.4000e-003</b>	<b>0.0000</b>	<b>10.4058</b>	<b>10.4058</b>	<b>3.2400e-003</b>	<b>0.0000</b>	<b>10.4868</b>

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**3.4 Paving - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	3.7000e-004	3.6500e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7532	0.7532	3.0000e-005	0.0000	0.7539
<b>Total</b>	<b>4.4000e-004</b>	<b>3.7000e-004</b>	<b>3.6500e-003</b>	<b>1.0000e-005</b>	<b>8.2000e-004</b>	<b>1.0000e-005</b>	<b>8.3000e-004</b>	<b>2.2000e-004</b>	<b>1.0000e-005</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.7532</b>	<b>0.7532</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.7539</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	8.2200e-003	0.0876	0.0740	1.1000e-004		4.7800e-003	4.7800e-003		4.4000e-003	4.4000e-003	0.0000	10.4058	10.4058	3.2400e-003	0.0000	10.4868
Paving	5.5500e-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>0.0138</b>	<b>0.0876</b>	<b>0.0740</b>	<b>1.1000e-004</b>		<b>4.7800e-003</b>	<b>4.7800e-003</b>		<b>4.4000e-003</b>	<b>4.4000e-003</b>	<b>0.0000</b>	<b>10.4058</b>	<b>10.4058</b>	<b>3.2400e-003</b>	<b>0.0000</b>	<b>10.4868</b>

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**3.4 Paving - 2018**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	3.7000e-004	3.6500e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7532	0.7532	3.0000e-005	0.0000	0.7539
<b>Total</b>	<b>4.4000e-004</b>	<b>3.7000e-004</b>	<b>3.6500e-003</b>	<b>1.0000e-005</b>	<b>8.2000e-004</b>	<b>1.0000e-005</b>	<b>8.3000e-004</b>	<b>2.2000e-004</b>	<b>1.0000e-005</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.7532</b>	<b>0.7532</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.7539</b>

**3.5 Architectural Coating - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2967					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6400e-003	0.0110	0.0102	2.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	1.4043	1.4043	1.3000e-004	0.0000	1.4076
<b>Total</b>	<b>0.2984</b>	<b>0.0110</b>	<b>0.0102</b>	<b>2.0000e-005</b>		<b>8.3000e-004</b>	<b>8.3000e-004</b>		<b>8.3000e-004</b>	<b>8.3000e-004</b>	<b>0.0000</b>	<b>1.4043</b>	<b>1.4043</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.4076</b>



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**3.5 Architectural Coating - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	3.6000e-004	3.4800e-003	1.0000e-005	7.8000e-004	1.0000e-005	7.9000e-004	2.1000e-004	1.0000e-005	2.1000e-004	0.0000	0.7180	0.7180	3.0000e-005	0.0000	0.7187
<b>Total</b>	<b>4.2000e-004</b>	<b>3.6000e-004</b>	<b>3.4800e-003</b>	<b>1.0000e-005</b>	<b>7.8000e-004</b>	<b>1.0000e-005</b>	<b>7.9000e-004</b>	<b>2.1000e-004</b>	<b>1.0000e-005</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.7180</b>	<b>0.7180</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.7187</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	0.2967					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6400e-003	0.0110	0.0102	2.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	1.4043	1.4043	1.3000e-004	0.0000	1.4076
<b>Total</b>	<b>0.2984</b>	<b>0.0110</b>	<b>0.0102</b>	<b>2.0000e-005</b>		<b>8.3000e-004</b>	<b>8.3000e-004</b>		<b>8.3000e-004</b>	<b>8.3000e-004</b>	<b>0.0000</b>	<b>1.4043</b>	<b>1.4043</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.4076</b>

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**3.5 Architectural Coating - 2018**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	3.6000e-004	3.4800e-003	1.0000e-005	7.8000e-004	1.0000e-005	7.9000e-004	2.1000e-004	1.0000e-005	2.1000e-004	0.0000	0.7180	0.7180	3.0000e-005	0.0000	0.7187
<b>Total</b>	<b>4.2000e-004</b>	<b>3.6000e-004</b>	<b>3.4800e-003</b>	<b>1.0000e-005</b>	<b>7.8000e-004</b>	<b>1.0000e-005</b>	<b>7.9000e-004</b>	<b>2.1000e-004</b>	<b>1.0000e-005</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.7180</b>	<b>0.7180</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.7187</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1986	1.4652	2.5376	8.5300e-003	0.6147	8.9500e-003	0.6236	0.1648	8.4400e-003	0.1732	0.0000	788.3486	788.3486	0.0443	0.0000	789.4570
Unmitigated	0.1986	1.4652	2.5376	8.5300e-003	0.6147	8.9500e-003	0.6236	0.1648	8.4400e-003	0.1732	0.0000	788.3486	788.3486	0.0443	0.0000	789.4570

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Single Family Housing	476.00	495.50	431.00	1,614,116	1,614,116
Total	476.00	495.50	431.00	1,614,116	1,614,116

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163
Single Family Housing	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163

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**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	159.4595	159.4595	6.5800e-003	1.3600e-003	160.0300
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	159.4595	159.4595	6.5800e-003	1.3600e-003	160.0300
NaturalGas Mitigated	8.2500e-003	0.0705	0.0300	4.5000e-004		5.7000e-003	5.7000e-003		5.7000e-003	5.7000e-003	0.0000	81.6364	81.6364	1.5600e-003	1.5000e-003	82.1215
NaturalGas Unmitigated	8.2500e-003	0.0705	0.0300	4.5000e-004		5.7000e-003	5.7000e-003		5.7000e-003	5.7000e-003	0.0000	81.6364	81.6364	1.5600e-003	1.5000e-003	82.1215

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**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
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
Single Family Housing	1.52981e+006	8.2500e-003	0.0705	0.0300	4.5000e-004		5.7000e-003	5.7000e-003		5.7000e-003	5.7000e-003	0.0000	81.6364	81.6364	1.5600e-003	1.5000e-003	82.1215
<b>Total</b>		<b>8.2500e-003</b>	<b>0.0705</b>	<b>0.0300</b>	<b>4.5000e-004</b>		<b>5.7000e-003</b>	<b>5.7000e-003</b>		<b>5.7000e-003</b>	<b>5.7000e-003</b>	<b>0.0000</b>	<b>81.6364</b>	<b>81.6364</b>	<b>1.5600e-003</b>	<b>1.5000e-003</b>	<b>82.1215</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
Single Family Housing	1.52981e+006	8.2500e-003	0.0705	0.0300	4.5000e-004		5.7000e-003	5.7000e-003		5.7000e-003	5.7000e-003	0.0000	81.6364	81.6364	1.5600e-003	1.5000e-003	82.1215
<b>Total</b>		<b>8.2500e-003</b>	<b>0.0705</b>	<b>0.0300</b>	<b>4.5000e-004</b>		<b>5.7000e-003</b>	<b>5.7000e-003</b>		<b>5.7000e-003</b>	<b>5.7000e-003</b>	<b>0.0000</b>	<b>81.6364</b>	<b>81.6364</b>	<b>1.5600e-003</b>	<b>1.5000e-003</b>	<b>82.1215</b>

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**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	64643	20.5967	8.5000e-004	1.8000e-004	20.6703
Single Family Housing	435824	138.8629	5.7300e-003	1.1900e-003	139.3597
<b>Total</b>		<b>159.4595</b>	<b>6.5800e-003</b>	<b>1.3700e-003</b>	<b>160.0300</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	64643	20.5967	8.5000e-004	1.8000e-004	20.6703
Single Family Housing	435824	138.8629	5.7300e-003	1.1900e-003	139.3597
<b>Total</b>		<b>159.4595</b>	<b>6.5800e-003</b>	<b>1.3700e-003</b>	<b>160.0300</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4195	0.3209	0.6522	2.0400e-003		0.0283	0.0283		0.0283	0.0283	0.0000	365.4666	365.4666	7.8200e-003	6.6800e-003	367.6541
Unmitigated	0.4195	0.3209	0.6522	2.0400e-003		0.0283	0.0283		0.0283	0.0283	0.0000	365.4666	365.4666	7.8200e-003	6.6800e-003	367.6541

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	0.0297					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0368	0.3148	0.1340	2.0100e-003		0.0255	0.0255		0.0255	0.0255	0.0000	364.6242	364.6242	6.9900e-003	6.6800e-003	366.7910
Landscaping	0.0159	6.0000e-003	0.5182	3.0000e-005		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003	0.0000	0.8424	0.8424	8.3000e-004	0.0000	0.8631
<b>Total</b>	<b>0.4195</b>	<b>0.3208</b>	<b>0.6522</b>	<b>2.0400e-003</b>		<b>0.0283</b>	<b>0.0283</b>		<b>0.0283</b>	<b>0.0283</b>	<b>0.0000</b>	<b>365.4666</b>	<b>365.4666</b>	<b>7.8200e-003</b>	<b>6.6800e-003</b>	<b>367.6541</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0297					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0368	0.3148	0.1340	2.0100e-003		0.0255	0.0255		0.0255	0.0255	0.0000	364.6242	364.6242	6.9900e-003	6.6800e-003	366.7910
Landscaping	0.0159	6.0000e-003	0.5182	3.0000e-005		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003	0.0000	0.8424	0.8424	8.3000e-004	0.0000	0.8631
<b>Total</b>	<b>0.4195</b>	<b>0.3208</b>	<b>0.6522</b>	<b>2.0400e-003</b>		<b>0.0283</b>	<b>0.0283</b>		<b>0.0283</b>	<b>0.0283</b>	<b>0.0000</b>	<b>365.4666</b>	<b>365.4666</b>	<b>7.8200e-003</b>	<b>6.6800e-003</b>	<b>367.6541</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**



Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	21.8191	0.1070	2.6800e-003	25.2942
Unmitigated	21.8191	0.1070	2.6800e-003	25.2942

**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
Single Family Housing	3.2577 / 2.05377	21.8191	0.1070	2.6800e-003	25.2942
<b>Total</b>		<b>21.8191</b>	<b>0.1070</b>	<b>2.6800e-003</b>	<b>25.2942</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, 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
Single Family Housing	3.2577 / 2.05377	21.8191	0.1070	2.6800e-003	25.2942
<b>Total</b>		<b>21.8191</b>	<b>0.1070</b>	<b>2.6800e-003</b>	<b>25.2942</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	11.9014	0.7034	0.0000	29.4851
Unmitigated	11.9014	0.7034	0.0000	29.4851

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Annual

**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
Single Family Housing	58.63	11.9014	0.7034	0.0000	29.4851
<b>Total</b>		<b>11.9014</b>	<b>0.7034</b>	<b>0.0000</b>	<b>29.4851</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	58.63	11.9014	0.7034	0.0000	29.4851
<b>Total</b>		<b>11.9014</b>	<b>0.7034</b>	<b>0.0000</b>	<b>29.4851</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Annual

**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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Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Summer

**Moon Camp - CalEEMod Base Case 2018**  
**San Bernardino-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	4.24	Acre	4.24	184,694.40	0
Single Family Housing	50.00	Dwelling Unit	16.23	90,000.00	143

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2019
<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 - Parking includes approximately 4,400 feet of new roadways at a width of 42 feet.

Construction Phase - .

Woodstoves - All natural Gas fireplaces

Construction Off-road Equipment Mitigation -

## Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	11,082.00	6,534.00
tblAreaCoating	Area_Parking	11082	6534
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	370.00	200.00
tblConstructionPhase	NumDays	35.00	30.00
tblConstructionPhase	NumDays	20.00	10.00
tblFireplaces	FireplaceDayYear	25.00	365.00
tblFireplaces	FireplaceHourDay	3.00	6.00
tblFireplaces	NumberGas	42.50	52.00
tblFireplaces	NumberNoFireplace	5.00	0.00
tblFireplaces	NumberWood	2.50	0.00
tblTripsAndVMT	VendorTripNumber	36.00	23.00
tblTripsAndVMT	WorkerTripNumber	96.00	64.00
tblTripsAndVMT	WorkerTripNumber	19.00	13.00
tblWoodstoves	NumberCatalytic	2.50	0.00
tblWoodstoves	NumberNoncatalytic	2.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, 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	2.3388	1.7732	4.8801	0.0112		0.1622	0.1622		0.1622	0.1622	0.0000	2,209.7815	2,209.7815	0.0495	0.0404	2,223.0513
Energy	0.0452	0.3863	0.1644	2.4700e-003		0.0312	0.0312		0.0312	0.0312		493.0886	493.0886	9.4500e-003	9.0400e-003	496.0188
Mobile	1.3339	8.1855	16.1224	0.0524	3.6100	0.0514	3.6615	0.9662	0.0485	1.0147		5,327.5398	5,327.5398	0.2846		5,334.6535
<b>Total</b>	<b>3.7180</b>	<b>10.3449</b>	<b>21.1668</b>	<b>0.0661</b>	<b>3.6100</b>	<b>0.2449</b>	<b>3.8549</b>	<b>0.9662</b>	<b>0.2420</b>	<b>1.2081</b>	<b>0.0000</b>	<b>8,030.4099</b>	<b>8,030.4099</b>	<b>0.3435</b>	<b>0.0494</b>	<b>8,053.7236</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	2.3388	1.7732	4.8801	0.0112		0.1622	0.1622		0.1622	0.1622	0.0000	2,209.7815	2,209.7815	0.0495	0.0404	2,223.0513
Energy	0.0452	0.3863	0.1644	2.4700e-003		0.0312	0.0312		0.0312	0.0312		493.0886	493.0886	9.4500e-003	9.0400e-003	496.0188
Mobile	1.3339	8.1855	16.1224	0.0524	3.6100	0.0514	3.6615	0.9662	0.0485	1.0147		5,327.5398	5,327.5398	0.2846		5,334.6535
<b>Total</b>	<b>3.7180</b>	<b>10.3449</b>	<b>21.1668</b>	<b>0.0661</b>	<b>3.6100</b>	<b>0.2449</b>	<b>3.8549</b>	<b>0.9662</b>	<b>0.2420</b>	<b>1.2081</b>	<b>0.0000</b>	<b>8,030.4099</b>	<b>8,030.4099</b>	<b>0.3435</b>	<b>0.0494</b>	<b>8,053.7236</b>



## Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, 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

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2018	2/9/2018	5	30	
2	Building Construction	Building Construction	2/24/2018	11/30/2018	5	200	
3	Paving	Paving	12/1/2018	12/15/2018	5	10	
4	Architectural Coating	Architectural Coating	12/16/2018	12/31/2018	5	11	

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

**Acres of Grading (Grading Phase): 75**

**Acres of Paving: 4.24**

**Residential Indoor: 182,250; Residential Outdoor: 60,750; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,534 (Architectural Coating – sqft)**

#### OffRoad Equipment

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	64.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Summer

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

**3.2 Grading - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230		6,244.4284	6,244.4284	1.9440		6,293.0278
<b>Total</b>	<b>5.0901</b>	<b>59.5218</b>	<b>35.0894</b>	<b>0.0620</b>	<b>8.6733</b>	<b>2.6337</b>	<b>11.3071</b>	<b>3.5965</b>	<b>2.4230</b>	<b>6.0195</b>		<b>6,244.4284</b>	<b>6,244.4284</b>	<b>1.9440</b>		<b>6,293.0278</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Summer

**3.2 Grading - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.1305	0.0897	1.1246	2.4300e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		241.4857	241.4857	8.9000e-003		241.7082
<b>Total</b>	<b>0.1305</b>	<b>0.0897</b>	<b>1.1246</b>	<b>2.4300e-003</b>	<b>0.2236</b>	<b>1.5500e-003</b>	<b>0.2251</b>	<b>0.0593</b>	<b>1.4300e-003</b>	<b>0.0607</b>		<b>241.4857</b>	<b>241.4857</b>	<b>8.9000e-003</b>		<b>241.7082</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					3.9030	0.0000	3.9030	1.6184	0.0000	1.6184			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278
<b>Total</b>	<b>5.0901</b>	<b>59.5218</b>	<b>35.0894</b>	<b>0.0620</b>	<b>3.9030</b>	<b>2.6337</b>	<b>6.5367</b>	<b>1.6184</b>	<b>2.4230</b>	<b>4.0415</b>	<b>0.0000</b>	<b>6,244.4284</b>	<b>6,244.4284</b>	<b>1.9440</b>		<b>6,293.0278</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Summer

**3.2 Grading - 2018**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.1305	0.0897	1.1246	2.4300e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		241.4857	241.4857	8.9000e-003		241.7082
<b>Total</b>	<b>0.1305</b>	<b>0.0897</b>	<b>1.1246</b>	<b>2.4300e-003</b>	<b>0.2236</b>	<b>1.5500e-003</b>	<b>0.2251</b>	<b>0.0593</b>	<b>1.4300e-003</b>	<b>0.0607</b>		<b>241.4857</b>	<b>241.4857</b>	<b>8.9000e-003</b>		<b>241.7082</b>

**3.3 Building Construction - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
<b>Total</b>	<b>2.6795</b>	<b>23.3900</b>	<b>17.5804</b>	<b>0.0269</b>		<b>1.4999</b>	<b>1.4999</b>		<b>1.4099</b>	<b>1.4099</b>		<b>2,620.9351</b>	<b>2,620.9351</b>	<b>0.6421</b>		<b>2,636.9883</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Summer

**3.3 Building Construction - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0927	2.8191	0.6052	6.3500e-003	0.1473	0.0196	0.1669	0.0424	0.0187	0.0612		669.1297	669.1297	0.0459		670.2764
Worker	0.4175	0.2871	3.5987	7.7700e-003	0.7154	4.9700e-003	0.7203	0.1897	4.5800e-003	0.1943		772.7543	772.7543	0.0285		773.4662
<b>Total</b>	<b>0.5102</b>	<b>3.1061</b>	<b>4.2039</b>	<b>0.0141</b>	<b>0.8627</b>	<b>0.0246</b>	<b>0.8872</b>	<b>0.2321</b>	<b>0.0233</b>	<b>0.2555</b>		<b>1,441.8840</b>	<b>1,441.8840</b>	<b>0.0743</b>		<b>1,443.7426</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	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
<b>Total</b>	<b>2.6795</b>	<b>23.3900</b>	<b>17.5804</b>	<b>0.0269</b>		<b>1.4999</b>	<b>1.4999</b>		<b>1.4099</b>	<b>1.4099</b>	<b>0.0000</b>	<b>2,620.9351</b>	<b>2,620.9351</b>	<b>0.6421</b>		<b>2,636.9883</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Summer

**3.3 Building Construction - 2018**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0927	2.8191	0.6052	6.3500e-003	0.1473	0.0196	0.1669	0.0424	0.0187	0.0612		669.1297	669.1297	0.0459		670.2764
Worker	0.4175	0.2871	3.5987	7.7700e-003	0.7154	4.9700e-003	0.7203	0.1897	4.5800e-003	0.1943		772.7543	772.7543	0.0285		773.4662
<b>Total</b>	<b>0.5102</b>	<b>3.1061</b>	<b>4.2039</b>	<b>0.0141</b>	<b>0.8627</b>	<b>0.0246</b>	<b>0.8872</b>	<b>0.2321</b>	<b>0.0233</b>	<b>0.2555</b>		<b>1,441.8840</b>	<b>1,441.8840</b>	<b>0.0743</b>		<b>1,443.7426</b>

**3.4 Paving - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797		2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.1109					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.7546</b>	<b>17.5209</b>	<b>14.7964</b>	<b>0.0228</b>		<b>0.9561</b>	<b>0.9561</b>		<b>0.8797</b>	<b>0.8797</b>		<b>2,294.0887</b>	<b>2,294.0887</b>	<b>0.7142</b>		<b>2,311.9432</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Summer

**3.4 Paving - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0979	0.0673	0.8434	1.8200e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		181.1143	181.1143	6.6700e-003		181.2811
<b>Total</b>	<b>0.0979</b>	<b>0.0673</b>	<b>0.8434</b>	<b>1.8200e-003</b>	<b>0.1677</b>	<b>1.1600e-003</b>	<b>0.1688</b>	<b>0.0445</b>	<b>1.0700e-003</b>	<b>0.0455</b>		<b>181.1143</b>	<b>181.1143</b>	<b>6.6700e-003</b>		<b>181.2811</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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.1109					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.7546</b>	<b>17.5209</b>	<b>14.7964</b>	<b>0.0228</b>		<b>0.9561</b>	<b>0.9561</b>		<b>0.8797</b>	<b>0.8797</b>	<b>0.0000</b>	<b>2,294.0887</b>	<b>2,294.0887</b>	<b>0.7142</b>		<b>2,311.9432</b>



Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Summer

**3.4 Paving - 2018**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0979	0.0673	0.8434	1.8200e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		181.1143	181.1143	6.6700e-003		181.2811
<b>Total</b>	<b>0.0979</b>	<b>0.0673</b>	<b>0.8434</b>	<b>1.8200e-003</b>	<b>0.1677</b>	<b>1.1600e-003</b>	<b>0.1688</b>	<b>0.0445</b>	<b>1.0700e-003</b>	<b>0.0455</b>		<b>181.1143</b>	<b>181.1143</b>	<b>6.6700e-003</b>		<b>181.2811</b>

**3.5 Architectural Coating - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	53.9489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
<b>Total</b>	<b>54.2475</b>	<b>2.0058</b>	<b>1.8542</b>	<b>2.9700e-003</b>		<b>0.1506</b>	<b>0.1506</b>		<b>0.1506</b>	<b>0.1506</b>		<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.1171</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Summer

**3.5 Architectural Coating - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0848	0.0583	0.7310	1.5800e-003	0.1453	1.0100e-003	0.1463	0.0385	9.3000e-004	0.0395		156.9657	156.9657	5.7800e-003		157.1103
<b>Total</b>	<b>0.0848</b>	<b>0.0583</b>	<b>0.7310</b>	<b>1.5800e-003</b>	<b>0.1453</b>	<b>1.0100e-003</b>	<b>0.1463</b>	<b>0.0385</b>	<b>9.3000e-004</b>	<b>0.0395</b>		<b>156.9657</b>	<b>156.9657</b>	<b>5.7800e-003</b>		<b>157.1103</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	53.9489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
<b>Total</b>	<b>54.2475</b>	<b>2.0058</b>	<b>1.8542</b>	<b>2.9700e-003</b>		<b>0.1506</b>	<b>0.1506</b>		<b>0.1506</b>	<b>0.1506</b>	<b>0.0000</b>	<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.1171</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Summer

**3.5 Architectural Coating - 2018**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0848	0.0583	0.7310	1.5800e-003	0.1453	1.0100e-003	0.1463	0.0385	9.3000e-004	0.0395		156.9657	156.9657	5.7800e-003		157.1103
<b>Total</b>	<b>0.0848</b>	<b>0.0583</b>	<b>0.7310</b>	<b>1.5800e-003</b>	<b>0.1453</b>	<b>1.0100e-003</b>	<b>0.1463</b>	<b>0.0385</b>	<b>9.3000e-004</b>	<b>0.0395</b>		<b>156.9657</b>	<b>156.9657</b>	<b>5.7800e-003</b>		<b>157.1103</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, 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	1.3339	8.1855	16.1224	0.0524	3.6100	0.0514	3.6615	0.9662	0.0485	1.0147		5,327.5398	5,327.5398	0.2846		5,334.6535
Unmitigated	1.3339	8.1855	16.1224	0.0524	3.6100	0.0514	3.6615	0.9662	0.0485	1.0147		5,327.5398	5,327.5398	0.2846		5,334.6535

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Single Family Housing	476.00	495.50	431.00	1,614,116	1,614,116
Total	476.00	495.50	431.00	1,614,116	1,614,116

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163
Single Family Housing	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Summer

**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	0.0452	0.3863	0.1644	2.4700e-003		0.0312	0.0312		0.0312	0.0312		493.0886	493.0886	9.4500e-003	9.0400e-003	496.0188
NaturalGas Unmitigated	0.0452	0.3863	0.1644	2.4700e-003		0.0312	0.0312		0.0312	0.0312		493.0886	493.0886	9.4500e-003	9.0400e-003	496.0188

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, 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
Single Family Housing	4191.25	0.0452	0.3863	0.1644	2.4700e-003		0.0312	0.0312		0.0312	0.0312		493.0886	493.0886	9.4500e-003	9.0400e-003	496.0188
<b>Total</b>		<b>0.0452</b>	<b>0.3863</b>	<b>0.1644</b>	<b>2.4700e-003</b>		<b>0.0312</b>	<b>0.0312</b>		<b>0.0312</b>	<b>0.0312</b>		<b>493.0886</b>	<b>493.0886</b>	<b>9.4500e-003</b>	<b>9.0400e-003</b>	<b>496.0188</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
Single Family Housing	4.19125	0.0452	0.3863	0.1644	2.4700e-003		0.0312	0.0312		0.0312	0.0312		493.0886	493.0886	9.4500e-003	9.0400e-003	496.0188
<b>Total</b>		<b>0.0452</b>	<b>0.3863</b>	<b>0.1644</b>	<b>2.4700e-003</b>		<b>0.0312</b>	<b>0.0312</b>		<b>0.0312</b>	<b>0.0312</b>		<b>493.0886</b>	<b>493.0886</b>	<b>9.4500e-003</b>	<b>9.0400e-003</b>	<b>496.0188</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, 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	2.3388	1.7732	4.8801	0.0112		0.1622	0.1622		0.1622	0.1622	0.0000	2,209.7815	2,209.7815	0.0495	0.0404	2,223.0513
Unmitigated	2.3388	1.7732	4.8801	0.0112		0.1622	0.1622		0.1622	0.1622	0.0000	2,209.7815	2,209.7815	0.0495	0.0404	2,223.0513

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	0.1626					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8474					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2019	1.7252	0.7341	0.0110		0.1395	0.1395		0.1395	0.1395	0.0000	2,202.3529	2,202.3529	0.0422	0.0404	2,215.4404
Landscaping	0.1269	0.0480	4.1459	2.2000e-004		0.0227	0.0227		0.0227	0.0227		7.4285	7.4285	7.2900e-003		7.6109
<b>Total</b>	<b>2.3388</b>	<b>1.7732</b>	<b>4.8801</b>	<b>0.0112</b>		<b>0.1622</b>	<b>0.1622</b>		<b>0.1622</b>	<b>0.1622</b>	<b>0.0000</b>	<b>2,209.7815</b>	<b>2,209.7815</b>	<b>0.0495</b>	<b>0.0404</b>	<b>2,223.0513</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1626					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8474					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2019	1.7252	0.7341	0.0110		0.1395	0.1395		0.1395	0.1395	0.0000	2,202.3529	2,202.3529	0.0422	0.0404	2,215.4404
Landscaping	0.1269	0.0480	4.1459	2.2000e-004		0.0227	0.0227		0.0227	0.0227		7.4285	7.4285	7.2900e-003		7.6109
<b>Total</b>	<b>2.3388</b>	<b>1.7732</b>	<b>4.8801</b>	<b>0.0112</b>		<b>0.1622</b>	<b>0.1622</b>		<b>0.1622</b>	<b>0.1622</b>	<b>0.0000</b>	<b>2,209.7815</b>	<b>2,209.7815</b>	<b>0.0495</b>	<b>0.0404</b>	<b>2,223.0513</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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



Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Summer

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Winter

**Moon Camp - CalEEMod Base Case 2018**  
**San Bernardino-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	4.24	Acre	4.24	184,694.40	0
Single Family Housing	50.00	Dwelling Unit	16.23	90,000.00	143

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2019
<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 - Parking includes approximately 4,400 feet of new roadways at a width of 42 feet.

Construction Phase - .

Woodstoves - All natural Gas fireplaces

Construction Off-road Equipment Mitigation -

## Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	11,082.00	6,534.00
tblAreaCoating	Area_Parking	11082	6534
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	370.00	200.00
tblConstructionPhase	NumDays	35.00	30.00
tblConstructionPhase	NumDays	20.00	10.00
tblFireplaces	FireplaceDayYear	25.00	365.00
tblFireplaces	FireplaceHourDay	3.00	6.00
tblFireplaces	NumberGas	42.50	52.00
tblFireplaces	NumberNoFireplace	5.00	0.00
tblFireplaces	NumberWood	2.50	0.00
tblTripsAndVMT	VendorTripNumber	36.00	23.00
tblTripsAndVMT	WorkerTripNumber	96.00	64.00
tblTripsAndVMT	WorkerTripNumber	19.00	13.00
tblWoodstoves	NumberCatalytic	2.50	0.00
tblWoodstoves	NumberNoncatalytic	2.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, 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	2.3388	1.7732	4.8801	0.0112		0.1622	0.1622		0.1622	0.1622	0.0000	2,209.7815	2,209.7815	0.0495	0.0404	2,223.0513
Energy	0.0452	0.3863	0.1644	2.4700e-003		0.0312	0.0312		0.0312	0.0312		493.0886	493.0886	9.4500e-003	9.0400e-003	496.0188
Mobile	1.1707	8.2480	14.1386	0.0482	3.6100	0.0519	3.6620	0.9662	0.0490	1.0152		4,909.5719	4,909.5719	0.2857		4,916.7141
<b>Total</b>	<b>3.5548</b>	<b>10.4075</b>	<b>19.1830</b>	<b>0.0619</b>	<b>3.6100</b>	<b>0.2454</b>	<b>3.8554</b>	<b>0.9662</b>	<b>0.2424</b>	<b>1.2086</b>	<b>0.0000</b>	<b>7,612.4420</b>	<b>7,612.4420</b>	<b>0.3447</b>	<b>0.0494</b>	<b>7,635.7842</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	2.3388	1.7732	4.8801	0.0112		0.1622	0.1622		0.1622	0.1622	0.0000	2,209.7815	2,209.7815	0.0495	0.0404	2,223.0513
Energy	0.0452	0.3863	0.1644	2.4700e-003		0.0312	0.0312		0.0312	0.0312		493.0886	493.0886	9.4500e-003	9.0400e-003	496.0188
Mobile	1.1707	8.2480	14.1386	0.0482	3.6100	0.0519	3.6620	0.9662	0.0490	1.0152		4,909.5719	4,909.5719	0.2857		4,916.7141
<b>Total</b>	<b>3.5548</b>	<b>10.4075</b>	<b>19.1830</b>	<b>0.0619</b>	<b>3.6100</b>	<b>0.2454</b>	<b>3.8554</b>	<b>0.9662</b>	<b>0.2424</b>	<b>1.2086</b>	<b>0.0000</b>	<b>7,612.4420</b>	<b>7,612.4420</b>	<b>0.3447</b>	<b>0.0494</b>	<b>7,635.7842</b>

## Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, 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

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2018	2/9/2018	5	30	
2	Building Construction	Building Construction	2/24/2018	11/30/2018	5	200	
3	Paving	Paving	12/1/2018	12/15/2018	5	10	
4	Architectural Coating	Architectural Coating	12/16/2018	12/31/2018	5	11	

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

**Acres of Grading (Grading Phase): 75**

**Acres of Paving: 4.24**

**Residential Indoor: 182,250; Residential Outdoor: 60,750; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,534 (Architectural Coating – sqft)**

#### OffRoad Equipment

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	64.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Winter

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

**3.2 Grading - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230		6,244.4284	6,244.4284	1.9440		6,293.0278
<b>Total</b>	<b>5.0901</b>	<b>59.5218</b>	<b>35.0894</b>	<b>0.0620</b>	<b>8.6733</b>	<b>2.6337</b>	<b>11.3071</b>	<b>3.5965</b>	<b>2.4230</b>	<b>6.0195</b>		<b>6,244.4284</b>	<b>6,244.4284</b>	<b>1.9440</b>		<b>6,293.0278</b>



Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Winter

**3.2 Grading - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.1301	0.0945	0.9279	2.1800e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		216.6460	216.6460	7.8300e-003		216.8416
<b>Total</b>	<b>0.1301</b>	<b>0.0945</b>	<b>0.9279</b>	<b>2.1800e-003</b>	<b>0.2236</b>	<b>1.5500e-003</b>	<b>0.2251</b>	<b>0.0593</b>	<b>1.4300e-003</b>	<b>0.0607</b>		<b>216.6460</b>	<b>216.6460</b>	<b>7.8300e-003</b>		<b>216.8416</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					3.9030	0.0000	3.9030	1.6184	0.0000	1.6184			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278
<b>Total</b>	<b>5.0901</b>	<b>59.5218</b>	<b>35.0894</b>	<b>0.0620</b>	<b>3.9030</b>	<b>2.6337</b>	<b>6.5367</b>	<b>1.6184</b>	<b>2.4230</b>	<b>4.0415</b>	<b>0.0000</b>	<b>6,244.4284</b>	<b>6,244.4284</b>	<b>1.9440</b>		<b>6,293.0278</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Winter

**3.2 Grading - 2018**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	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	0.1301	0.0945	0.9279	2.1800e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		216.6460	216.6460	7.8300e-003		216.8416
<b>Total</b>	<b>0.1301</b>	<b>0.0945</b>	<b>0.9279</b>	<b>2.1800e-003</b>	<b>0.2236</b>	<b>1.5500e-003</b>	<b>0.2251</b>	<b>0.0593</b>	<b>1.4300e-003</b>	<b>0.0607</b>		<b>216.6460</b>	<b>216.6460</b>	<b>7.8300e-003</b>		<b>216.8416</b>

**3.3 Building Construction - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
<b>Total</b>	<b>2.6795</b>	<b>23.3900</b>	<b>17.5804</b>	<b>0.0269</b>		<b>1.4999</b>	<b>1.4999</b>		<b>1.4099</b>	<b>1.4099</b>		<b>2,620.9351</b>	<b>2,620.9351</b>	<b>0.6421</b>		<b>2,636.9883</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Winter

**3.3 Building Construction - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0970	2.8070	0.6889	6.1100e-003	0.1473	0.0198	0.1671	0.0424	0.0190	0.0614		643.6068	643.6068	0.0505		644.8684
Worker	0.4163	0.3025	2.9693	6.9700e-003	0.7154	4.9700e-003	0.7203	0.1897	4.5800e-003	0.1943		693.2671	693.2671	0.0250		693.8932
<b>Total</b>	<b>0.5133</b>	<b>3.1095</b>	<b>3.6582</b>	<b>0.0131</b>	<b>0.8627</b>	<b>0.0248</b>	<b>0.8875</b>	<b>0.2321</b>	<b>0.0236</b>	<b>0.2557</b>		<b>1,336.8739</b>	<b>1,336.8739</b>	<b>0.0755</b>		<b>1,338.7616</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	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
<b>Total</b>	<b>2.6795</b>	<b>23.3900</b>	<b>17.5804</b>	<b>0.0269</b>		<b>1.4999</b>	<b>1.4999</b>		<b>1.4099</b>	<b>1.4099</b>	<b>0.0000</b>	<b>2,620.9351</b>	<b>2,620.9351</b>	<b>0.6421</b>		<b>2,636.9883</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Winter

**3.3 Building Construction - 2018**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0970	2.8070	0.6889	6.1100e-003	0.1473	0.0198	0.1671	0.0424	0.0190	0.0614		643.6068	643.6068	0.0505		644.8684
Worker	0.4163	0.3025	2.9693	6.9700e-003	0.7154	4.9700e-003	0.7203	0.1897	4.5800e-003	0.1943		693.2671	693.2671	0.0250		693.8932
<b>Total</b>	<b>0.5133</b>	<b>3.1095</b>	<b>3.6582</b>	<b>0.0131</b>	<b>0.8627</b>	<b>0.0248</b>	<b>0.8875</b>	<b>0.2321</b>	<b>0.0236</b>	<b>0.2557</b>		<b>1,336.8739</b>	<b>1,336.8739</b>	<b>0.0755</b>		<b>1,338.7616</b>

**3.4 Paving - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797		2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.1109					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.7546</b>	<b>17.5209</b>	<b>14.7964</b>	<b>0.0228</b>		<b>0.9561</b>	<b>0.9561</b>		<b>0.8797</b>	<b>0.8797</b>		<b>2,294.0887</b>	<b>2,294.0887</b>	<b>0.7142</b>		<b>2,311.9432</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Winter

**3.4 Paving - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0976	0.0709	0.6959	1.6300e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		162.4845	162.4845	5.8700e-003		162.6312
<b>Total</b>	<b>0.0976</b>	<b>0.0709</b>	<b>0.6959</b>	<b>1.6300e-003</b>	<b>0.1677</b>	<b>1.1600e-003</b>	<b>0.1688</b>	<b>0.0445</b>	<b>1.0700e-003</b>	<b>0.0455</b>		<b>162.4845</b>	<b>162.4845</b>	<b>5.8700e-003</b>		<b>162.6312</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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432
Paving	1.1109					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.7546</b>	<b>17.5209</b>	<b>14.7964</b>	<b>0.0228</b>		<b>0.9561</b>	<b>0.9561</b>		<b>0.8797</b>	<b>0.8797</b>	<b>0.0000</b>	<b>2,294.0887</b>	<b>2,294.0887</b>	<b>0.7142</b>		<b>2,311.9432</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Winter

**3.4 Paving - 2018**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0976	0.0709	0.6959	1.6300e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		162.4845	162.4845	5.8700e-003		162.6312
<b>Total</b>	<b>0.0976</b>	<b>0.0709</b>	<b>0.6959</b>	<b>1.6300e-003</b>	<b>0.1677</b>	<b>1.1600e-003</b>	<b>0.1688</b>	<b>0.0445</b>	<b>1.0700e-003</b>	<b>0.0455</b>		<b>162.4845</b>	<b>162.4845</b>	<b>5.8700e-003</b>		<b>162.6312</b>

**3.5 Architectural Coating - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	53.9489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
<b>Total</b>	<b>54.2475</b>	<b>2.0058</b>	<b>1.8542</b>	<b>2.9700e-003</b>		<b>0.1506</b>	<b>0.1506</b>		<b>0.1506</b>	<b>0.1506</b>		<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.1171</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Winter

**3.5 Architectural Coating - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0846	0.0614	0.6031	1.4200e-003	0.1453	1.0100e-003	0.1463	0.0385	9.3000e-004	0.0395		140.8199	140.8199	5.0900e-003		140.9471
<b>Total</b>	<b>0.0846</b>	<b>0.0614</b>	<b>0.6031</b>	<b>1.4200e-003</b>	<b>0.1453</b>	<b>1.0100e-003</b>	<b>0.1463</b>	<b>0.0385</b>	<b>9.3000e-004</b>	<b>0.0395</b>		<b>140.8199</b>	<b>140.8199</b>	<b>5.0900e-003</b>		<b>140.9471</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	53.9489					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
<b>Total</b>	<b>54.2475</b>	<b>2.0058</b>	<b>1.8542</b>	<b>2.9700e-003</b>		<b>0.1506</b>	<b>0.1506</b>		<b>0.1506</b>	<b>0.1506</b>	<b>0.0000</b>	<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.1171</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Winter

**3.5 Architectural Coating - 2018**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0846	0.0614	0.6031	1.4200e-003	0.1453	1.0100e-003	0.1463	0.0385	9.3000e-004	0.0395		140.8199	140.8199	5.0900e-003		140.9471
<b>Total</b>	<b>0.0846</b>	<b>0.0614</b>	<b>0.6031</b>	<b>1.4200e-003</b>	<b>0.1453</b>	<b>1.0100e-003</b>	<b>0.1463</b>	<b>0.0385</b>	<b>9.3000e-004</b>	<b>0.0395</b>		<b>140.8199</b>	<b>140.8199</b>	<b>5.0900e-003</b>		<b>140.9471</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**



Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, 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	1.1707	8.2480	14.1386	0.0482	3.6100	0.0519	3.6620	0.9662	0.0490	1.0152		4,909.5719	4,909.5719	0.2857		4,916.7141
Unmitigated	1.1707	8.2480	14.1386	0.0482	3.6100	0.0519	3.6620	0.9662	0.0490	1.0152		4,909.5719	4,909.5719	0.2857		4,916.7141

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Single Family Housing	476.00	495.50	431.00	1,614,116	1,614,116
Total	476.00	495.50	431.00	1,614,116	1,614,116

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163
Single Family Housing	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Winter

**5.0 Energy Detail**

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Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0452	0.3863	0.1644	2.4700e-003		0.0312	0.0312		0.0312	0.0312		493.0886	493.0886	9.4500e-003	9.0400e-003	496.0188
NaturalGas Unmitigated	0.0452	0.3863	0.1644	2.4700e-003		0.0312	0.0312		0.0312	0.0312		493.0886	493.0886	9.4500e-003	9.0400e-003	496.0188

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, 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
Single Family Housing	4191.25	0.0452	0.3863	0.1644	2.4700e-003		0.0312	0.0312		0.0312	0.0312		493.0886	493.0886	9.4500e-003	9.0400e-003	496.0188
<b>Total</b>		<b>0.0452</b>	<b>0.3863</b>	<b>0.1644</b>	<b>2.4700e-003</b>		<b>0.0312</b>	<b>0.0312</b>		<b>0.0312</b>	<b>0.0312</b>		<b>493.0886</b>	<b>493.0886</b>	<b>9.4500e-003</b>	<b>9.0400e-003</b>	<b>496.0188</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
Single Family Housing	4.19125	0.0452	0.3863	0.1644	2.4700e-003		0.0312	0.0312		0.0312	0.0312		493.0886	493.0886	9.4500e-003	9.0400e-003	496.0188
<b>Total</b>		<b>0.0452</b>	<b>0.3863</b>	<b>0.1644</b>	<b>2.4700e-003</b>		<b>0.0312</b>	<b>0.0312</b>		<b>0.0312</b>	<b>0.0312</b>		<b>493.0886</b>	<b>493.0886</b>	<b>9.4500e-003</b>	<b>9.0400e-003</b>	<b>496.0188</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, 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	2.3388	1.7732	4.8801	0.0112		0.1622	0.1622		0.1622	0.1622	0.0000	2,209.7815	2,209.7815	0.0495	0.0404	2,223.0513
Unmitigated	2.3388	1.7732	4.8801	0.0112		0.1622	0.1622		0.1622	0.1622	0.0000	2,209.7815	2,209.7815	0.0495	0.0404	2,223.0513

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	0.1626					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8474					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2019	1.7252	0.7341	0.0110		0.1395	0.1395		0.1395	0.1395	0.0000	2,202.3529	2,202.3529	0.0422	0.0404	2,215.4404
Landscaping	0.1269	0.0480	4.1459	2.2000e-004		0.0227	0.0227		0.0227	0.0227		7.4285	7.4285	7.2900e-003		7.6109
<b>Total</b>	<b>2.3388</b>	<b>1.7732</b>	<b>4.8801</b>	<b>0.0112</b>		<b>0.1622</b>	<b>0.1622</b>		<b>0.1622</b>	<b>0.1622</b>	<b>0.0000</b>	<b>2,209.7815</b>	<b>2,209.7815</b>	<b>0.0495</b>	<b>0.0404</b>	<b>2,223.0513</b>

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Winter

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1626					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8474					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2019	1.7252	0.7341	0.0110		0.1395	0.1395		0.1395	0.1395	0.0000	2,202.3529	2,202.3529	0.0422	0.0404	2,215.4404
Landscaping	0.1269	0.0480	4.1459	2.2000e-004		0.0227	0.0227		0.0227	0.0227		7.4285	7.4285	7.2900e-003		7.6109
<b>Total</b>	<b>2.3388</b>	<b>1.7732</b>	<b>4.8801</b>	<b>0.0112</b>		<b>0.1622</b>	<b>0.1622</b>		<b>0.1622</b>	<b>0.1622</b>	<b>0.0000</b>	<b>2,209.7815</b>	<b>2,209.7815</b>	<b>0.0495</b>	<b>0.0404</b>	<b>2,223.0513</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

Moon Camp - CalEEMod Base Case 2018 - San Bernardino-South Coast County, Winter

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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