



Technical Memorandum

To: Erin Opliger, District Planner

From: Eliza Laws, Senior Environmental Analyst
Noemi Avila, Assistant Environmental Analyst

Date: July 5, 2018

Re: Air Quality/Greenhouse Gas Analysis for Snow Drop Road Street Improvement Project

The following air quality assessment was prepared to evaluate whether the expected criteria air pollutant emissions generated as a result of construction and operation of the proposed Project would cause exceedances of the South Coast Air Quality Management District's (SCAQMD) thresholds for air quality in the Project area. The greenhouse gas (GHG) assessment was prepared to evaluate whether the expected criteria GHG emissions generated as a result of construction and operation of the proposed Project would exceed the SCAQMD draft screening significance thresholds. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000 *et seq.*). The methodology follows the *CEQA Air Quality Handbook* prepared by the SCAQMD for quantification of emissions and evaluation of potential impacts to air resources. As recommended by SCAQMD staff, the **California Emissions Estimator Model** version 2016.3.2 (CalEEMod) was used to quantify Project-related emissions.

The proposed Project consists of improvements to approximately 3.1 miles of roadway and associated drainage improvements. These improvements will be to Snow Drop Road from Archibald Avenue to the west and Haven Avenue to the east and portions of Haven and Archibald Avenues south of Snow Drop Road within the County of San Bernardino, California. Currently, portions of the existing roadway are partially paved. The purpose of the Project is to improve the conditions of these roadway segments in order to provide adequate access for the residents in the Project vicinity. Improvements involve paving or repaving within the Project roadway segments (up to 26 feet wide), installation of metal guard rails along portions of the Project roadway, and installation of drainage culverts to convey storm water under the roadway.

▪ Regional Significance Thresholds

The thresholds contained in the *SCAQMD CEQA Air Quality Handbook*¹ (SCAQMD 1993) are considered regional thresholds and are shown in **Table 1 – SCAQMD CEQA Daily Regional Significance Thresholds**, below. These regional thresholds were developed based on the SCAQMD's treatment of a major stationary source.

¹ South Coast Air Quality Management District, *CEQA Air Quality Handbook*, November 1993. (Available at SCAQMD.)

Table 1 – SCAQMD CEQA Daily Regional Significance Thresholds

Emission Threshold	Units	VOC	NO_x	CO	SO_x	PM-10	PM-2.5
Construction	lbs/day	75	100	550	150	150	55
Operation ¹	lbs/day	55	55	550	150	150	55

Air quality impacts can be described in a short- and long-term perspective. Short-term impacts occur during site grading and Project construction and consist of fugitive dust and other particulate matter, as well as exhaust emissions generated by construction-related vehicles. Long-term air quality impacts occur once the Project is in operation. The Project consists of roadway and drainage improvements. Operational emissions would be from the infrequent visits by vehicles driven by maintenance personnel and are considered negligible; therefore, only short-term impacts were quantified.

The Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. In addition, projects that disturb 50 or more acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of this Project’s disturbance area (approximately 16.82 acres) a Fugitive Dust Control Plan or a Large Operation Notification Form would not be required.

Short-Term Analysis

Short-term emissions from storm drain construction were evaluated using the CalEEMod version 2016.3.2 program. The total construction period estimated for the proposed Project is approximately nine months, beginning no sooner than January 2019. The default parameters within CalEEMod were used and these default values reflect a worst-case scenario, which means that Project emissions are expected to be equal to or less than the estimated emissions. In addition to the default values used, assumptions relevant to model inputs for short-term construction emission estimates used are:

- Construction is anticipated to begin in January 2019 and end in October 2019. The modeled schedule for each activity is shown below:

Construction Activity	Start Date	End Date	Total Working Days
Grading/Construction	1/1/2019	10/1/2019	196 days
Paving	1/1/2019	10/1/2019	196 days

- The off-road equipment to be used for each activity is shown below. Each piece of equipment is assumed to operate 8 hours per day:

Activity	Off-Road Equipment	Unit Amount
Grading/Construction	Grader	1
	Rubber Tired Dozer	1
	Tractor/Loader/Backhoe	1
Paving	Crushing/processing Equipment	1
	Pavers	1
	Paving Equipment	1
	Rollers	1

- The CalEEMod default value for daily construction worker trips was used. Two (2) one-way vendor trips were added to each activity to account for water truck trips.
- Four (4) one way vendor trips per day were added for material delivery.
- Four (4) one way hauling trips per day were added for soil import using default trip length.
- To evaluate Project compliance with SCAQMD Rule 403 for fugitive dust control, the Project utilized the mitigation option of watering the Project site three times daily which achieves a control efficiency of 61 percent for PM-10 and PM-2.5 emissions.

The results of this analysis are summarized below.

Table 2 –Estimated Maximum Daily Construction Emissions

Construction Activity	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Construction Thresholds	75	100	550	150	150	55
Grading/Construction	2.57	26.92	13.59	0.03	3.97	2.54
Paving	1.02	8.34	7.87	0.01	0.55	0.42
Maximum	3.59	35.27	21.46	0.05	4.52	2.96
Exceeds Threshold?	No	No	No	No	No	No

As shown in the table above, the emissions from construction of the Project are below the SCAQMD Daily Construction Thresholds for all criteria pollutants.

▪ Localized Significance Threshold Analysis

Background

As part of the SCAQMD’s environmental justice program, attention has been focused on localized effects of air quality. Staff at SCAQMD has developed localized significance threshold (LST) methodology² that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts (both short- and long-term). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The Project is located within SRA 36.

Short-Term Analysis

According to the LST methodology, only on-site emissions need to be analyzed. Emissions associated with vendor and worker trips are mobile source emissions that occur off site. The emissions analyzed under the LST methodology are NO₂, CO, PM-10, and PM-2.5. SCAQMD has provided LST lookup tables to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller. Although the Project disturbs approximately 17 acres, the Project is linear and will progress in a linear fashion and disturb a much smaller area per day. Based on SCAQMD guidance, it is assumed that the

² South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, Revised July 2008. (Available at <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>, accessed August 2017.)

Project will disturb approximately one acre per day.³ Therefore, the one-acre LST lookup tables were utilized to estimate the construction emissions.

The LST thresholds are estimated using the maximum daily disturbed area (in acres) and the distance of the Project to the nearest sensitive receptors (in meters). The closest sensitive receptors are the scattered residences adjacent to the Project roadway segments. The closest receptor on the LST lookup tables is 25 meters. According to LST methodology, projects with boundaries closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. Therefore, a receptor distance of 25 meters (85 feet) was used. The results are summarized below.

Table 3 – LST Results for Daily Construction Emissions

Pollutant	Peak Daily Emissions (lb/day)			
	NO _x	CO	PM-10	PM-2.5
LST Threshold for 1-acres at 25 meters	118	863	5	4
Grading/Construction	25.1	12.8	3.7	2.5
Paving	7.6	7.3	0.4	0.4
Maximum¹	32.7	20.1	4.1	2.9
Exceeds Threshold?	No	No	No	No

Note: ¹ Maximum equals the sum of Grading/Construction and Paving since these activities overlap

Emissions from construction of the Project will be below the LST established by SCAQMD for the Project.

Long-Term Analysis

This Project involves the construction of roadway and drainage improvements. The long-term emissions, as discussed previously, are primarily in the form of mobile source emissions, with no stationary sources of emission present. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site; such as warehouse/transfer facilities. The proposed Project does not include such uses. Therefore, due to the lack of stationary source emissions, no long-term LST analysis is needed.

Greenhouse Gas Analysis

Greenhouse gases (GHG) are not presented in lbs/day like criteria pollutants; they are typically evaluated on an annual basis using the metric system. Additionally, unlike the criteria pollutants, GHG do not have adopted significance thresholds associated with them at this time. Several agencies, at various levels, have proposed draft GHG significance thresholds for use in CEQA documents. SCAQMD has been working on GHG thresholds for development projects. The most recent draft proposal was in September 2010⁴ and included significance thresholds for residential, commercial, and mixed-use projects at 3,500, 1,400, and 3,000 metric tonnes per year of carbon dioxide equivalents (MTCO₂E/yr), respectively. Alternatively, a lead agency has the option to use 3,000 MTCO₂E/yr as a threshold for all non-industrial projects. Although both options are recommended by SCAQMD, a lead agency is advised to use only one option and to use it consistently. In December 2008, the SCAQMD adopted a threshold of 10,000

³ <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>

⁴ [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2)

MTCO₂E/yr for stationary source projects where SCAQMD is the lead agency. The SCAQMD significance thresholds evaluate construction emissions by amortizing them over an expected project life of 30 years.

The CalEEMod output results for construction-related GHG emissions present the GHG emissions estimates for the Project for CO₂, methane (CH₄), nitrous oxide (N₂O), and CO₂E.⁵

Short-Term Analysis

Construction Related Emissions

The CalEEMod model calculates GHG emissions from fuel usage by construction equipment and construction-related activities, like construction worker trips, for the Project. The CalEEMod estimate does not analyze emissions from construction-related electricity or natural gas. Construction-related electricity and natural gas emissions vary based on the amount of electric power used during construction and other unknown factors which make them too speculative to quantify.

Table 4 – Project Construction Equipment GHG Emissions

Year	Metric Tons per year (MT/yr)			
	Total CO ₂	Total CH ₄	Total N ₂ O	Total CO ₂ E
2019	397.31	0.09	0.00	399.61
			Amortized	13.32

Evaluation of the table above indicates that an estimated 399.61 MTCO₂E will occur from Project construction equipment over the course of the estimated construction period.

The proposed Project does not fit into the categories provided (industrial, commercial, and residential) in either the draft thresholds from CARB and SCAQMD. The Project's GHG emissions will be compared to the lowest SCAQMD recommended screening level of 1,400 MTCO₂E/yr for commercial projects. Due to the lack of adopted emissions thresholds, the estimated amount of emissions from Project construction, and negligible operational emissions from infrequent maintenance vehicles, the proposed Project will not generate GHG emissions that exceed the draft screening threshold.

Conclusion

The conclusion of this analysis indicates that the proposed Project's construction emissions will not exceed criteria pollutant thresholds established by SCAQMD on a regional or localized level. The Project will also not generate GHG emissions that exceed the GHG screening threshold recommended by SCAQMD.

Should you have any questions, please contact me at (951) 686-1070.

⁵ CO₂E is the sum of CO₂ emissions estimated plus the sum of CH₄ and N₂O emissions estimated multiplied by their respective global warming potential (GWP).

CALEEMOD OUTPUT FILES

Snow Drop Rd. Improvements - San Bernardino-South Coast County, Summer

Snow Drop Rd. Improvements
San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	10.12	Acre	10.12	440,827.20	0
Parking Lot	6.70	Acre	6.70	291,852.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10	Operational Year	2019		
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per engineer

Off-road Equipment - Per Engineer

Off-road Equipment - per engineer

Trips and VMT - water truck trips and material delivery trips are vendor trips. Hauling trips are soil import.

Construction Off-road Equipment Mitigation - Per Rule 403

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	196.00
tblConstructionPhase	NumDays	20.00	196.00
tblGrading	AcresOfGrading	98.00	75.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	784.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2019	10/1/2019	5	196	
2	Paving	Paving	1/1/2019	10/1/2019	5	196	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 16.82

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Crushing/Proc. Equipment	1	8.00	85	0.78
Grading	Excavators	0	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	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	4	10.00	6.00	784.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4279	0.0000	6.4279	3.3540	0.0000	3.3540			0.0000			0.0000
Off-Road	2.4610	25.1355	12.7970	0.0253		1.2378	1.2378		1.1613	1.1613		2,475.1276	2,475.1276	0.6266		2,490.7937
Total	2.4610	25.1355	12.7970	0.0253	6.4279	1.2378	7.6656	3.3540	1.1613	4.5153		2,475.1276	2,475.1276	0.6266		2,490.7937

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	0.0268	1.0563	0.1529	3.1700e-003	0.0700	3.5400e-003	0.0736	0.0192	3.3900e-003	0.0226		336.5012	336.5012	0.0185		336.9633
Vendor	0.0215	0.6909	0.1405	1.6400e-003	0.0384	4.3200e-003	0.0428	0.0111	4.1300e-003	0.0152		172.8286	172.8286	0.0117		173.1208
Worker	0.0593	0.0394	0.4985	1.1700e-003	0.1118	7.5000e-004	0.1125	0.0296	6.9000e-004	0.0303		116.6416	116.6416	3.9100e-003		116.7394
Total	0.1076	1.7866	0.7919	5.9800e-003	0.2202	8.6100e-003	0.2288	0.0599	8.2100e-003	0.0681		625.9714	625.9714	0.0341		626.8235

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					2.5069	0.0000	2.5069	1.3081	0.0000	1.3081			0.0000			0.0000
Off-Road	2.4610	25.1355	12.7970	0.0253		1.2378	1.2378		1.1613	1.1613	0.0000	2,475.1276	2,475.1276	0.6266		2,490.7937
Total	2.4610	25.1355	12.7970	0.0253	2.5069	1.2378	3.7446	1.3081	1.1613	2.4694	0.0000	2,475.1276	2,475.1276	0.6266		2,490.7937

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	0.0268	1.0563	0.1529	3.1700e-003	0.0700	3.5400e-003	0.0736	0.0192	3.3900e-003	0.0226		336.5012	336.5012	0.0185		336.9633
Vendor	0.0215	0.6909	0.1405	1.6400e-003	0.0384	4.3200e-003	0.0428	0.0111	4.1300e-003	0.0152		172.8286	172.8286	0.0117		173.1208
Worker	0.0593	0.0394	0.4985	1.1700e-003	0.1118	7.5000e-004	0.1125	0.0296	6.9000e-004	0.0303		116.6416	116.6416	3.9100e-003		116.7394
Total	0.1076	1.7866	0.7919	5.9800e-003	0.2202	8.6100e-003	0.2288	0.0599	8.2100e-003	0.0681		625.9714	625.9714	0.0341		626.8235

3.3 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7272	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793		1,128.5012	1,128.5012	0.3571		1,137.4274
Paving	0.2248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9521	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793		1,128.5012	1,128.5012	0.3571		1,137.4274

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	0.0215	0.6909	0.1405	1.6400e-003	0.0384	4.3200e-003	0.0428	0.0111	4.1300e-003	0.0152		172.8286	172.8286	0.0117		173.1208
Worker	0.0474	0.0316	0.3988	9.4000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		93.3133	93.3133	3.1300e-003		93.3915
Total	0.0690	0.7224	0.5393	2.5800e-003	0.1279	4.9200e-003	0.1328	0.0348	4.6800e-003	0.0395		266.1419	266.1419	0.0148		266.5123

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	0.7272	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793	0.0000	1,128.5012	1,128.5012	0.3571		1,137.4274
Paving	0.2248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9521	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793	0.0000	1,128.5012	1,128.5012	0.3571		1,137.4274

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	0.0215	0.6909	0.1405	1.6400e-003	0.0384	4.3200e-003	0.0428	0.0111	4.1300e-003	0.0152		172.8286	172.8286	0.0117		173.1208
Worker	0.0474	0.0316	0.3988	9.4000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		93.3133	93.3133	3.1300e-003		93.3915
Total	0.0690	0.7224	0.5393	2.5800e-003	0.1279	4.9200e-003	0.1328	0.0348	4.6800e-003	0.0395		266.1419	266.1419	4.0148		266.5123

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	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
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

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3155	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.6800e-003	3.6800e-003	1.0000e-005		3.9300e-003
Unmitigated	0.3155	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.6800e-003	3.6800e-003	1.0000e-005		3.9300e-003

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	0.0558					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2595					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.6800e-003	3.6800e-003	1.0000e-005		3.9300e-003
Total	0.3155	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.6800e-003	3.6800e-003	1.0000e-005		3.9300e-003

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	0.0558					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2595					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.6800e-003	3.6800e-003	1.0000e-005		3.9300e-003
Total	0.3155	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.6800e-003	3.6800e-003	1.0000e-005		3.9300e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Snow Drop Rd. Improvements - San Bernardino-South Coast County, Summer

Snow Drop Rd. Improvements
San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	10.12	Acre	10.12	440,827.20	0
Parking Lot	6.70	Acre	6.70	291,852.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10	Operational Year	2019		
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per engineer

Off-road Equipment - Per Engineer

Off-road Equipment - per engineer

Trips and VMT - water truck trips and material delivery trips are vendor trips. Hauling trips are soil import.

Construction Off-road Equipment Mitigation - Per Rule 403

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	196.00
tblConstructionPhase	NumDays	20.00	196.00
tblGrading	AcresOfGrading	98.00	75.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	784.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2019	10/1/2019	5	196	
2	Paving	Paving	1/1/2019	10/1/2019	5	196	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 16.82

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Crushing/Proc. Equipment	1	8.00	85	0.78
Grading	Excavators	0	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	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	4	10.00	6.00	784.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4279	0.0000	6.4279	3.3540	0.0000	3.3540			0.0000			0.0000
Off-Road	2.4610	25.1355	12.7970	0.0253		1.2378	1.2378		1.1613	1.1613		2,475.1276	2,475.1276	0.6266		2,490.7937
Total	2.4610	25.1355	12.7970	0.0253	6.4279	1.2378	7.6656	3.3540	1.1613	4.5153		2,475.1276	2,475.1276	0.6266		2,490.7937

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	0.0268	1.0563	0.1529	3.1700e-003	0.0700	3.5400e-003	0.0736	0.0192	3.3900e-003	0.0226		336.5012	336.5012	0.0185		336.9633
Vendor	0.0215	0.6909	0.1405	1.6400e-003	0.0384	4.3200e-003	0.0428	0.0111	4.1300e-003	0.0152		172.8286	172.8286	0.0117		173.1208
Worker	0.0593	0.0394	0.4985	1.1700e-003	0.1118	7.5000e-004	0.1125	0.0296	6.9000e-004	0.0303		116.6416	116.6416	3.9100e-003		116.7394
Total	0.1076	1.7866	0.7919	5.9800e-003	0.2202	8.6100e-003	0.2288	0.0599	8.2100e-003	0.0681		625.9714	625.9714	0.0341		626.8235

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					2.5069	0.0000	2.5069	1.3081	0.0000	1.3081			0.0000				0.0000
Off-Road	2.4610	25.1355	12.7970	0.0253		1.2378	1.2378		1.1613	1.1613	0.0000	2,475.1276	2,475.1276	0.6266			2,490.7937
Total	2.4610	25.1355	12.7970	0.0253	2.5069	1.2378	3.7446	1.3081	1.1613	2.4694	0.0000	2,475.1276	2,475.1276	0.6266			2,490.7937

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	0.0268	1.0563	0.1529	3.1700e-003	0.0700	3.5400e-003	0.0736	0.0192	3.3900e-003	0.0226		336.5012	336.5012	0.0185			336.9633
Vendor	0.0215	0.6909	0.1405	1.6400e-003	0.0384	4.3200e-003	0.0428	0.0111	4.1300e-003	0.0152		172.8286	172.8286	0.0117			173.1208
Worker	0.0593	0.0394	0.4985	1.1700e-003	0.1118	7.5000e-004	0.1125	0.0296	6.9000e-004	0.0303		116.6416	116.6416	3.9100e-003			116.7394
Total	0.1076	1.7866	0.7919	5.9800e-003	0.2202	8.6100e-003	0.2288	0.0599	8.2100e-003	0.0681		625.9714	625.9714	0.0341			626.8235

3.3 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7272	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793		1,128.5012	1,128.5012	0.3571		1,137.4274
Paving	0.2248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9521	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793		1,128.5012	1,128.5012	0.3571		1,137.4274

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	0.0215	0.6909	0.1405	1.6400e-003	0.0384	4.3200e-003	0.0428	0.0111	4.1300e-003	0.0152		172.8286	172.8286	0.0117		173.1208
Worker	0.0474	0.0316	0.3988	9.4000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		93.3133	93.3133	3.1300e-003		93.3915
Total	0.0690	0.7224	0.5393	2.5800e-003	0.1279	4.9200e-003	0.1328	0.0348	4.6800e-003	0.0395		266.1419	266.1419	0.0148		266.5123

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	0.7272	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793	0.0000	1,128.5012	1,128.5012	0.3571		1,137.4274
Paving	0.2248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9521	7.6220	7.3324	0.0114		0.4123	0.4123		0.3793	0.3793	0.0000	1,128.5012	1,128.5012	0.3571		1,137.4274

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	0.0215	0.6909	0.1405	1.6400e-003	0.0384	4.3200e-003	0.0428	0.0111	4.1300e-003	0.0152		172.8286	172.8286	0.0117		173.1208
Worker	0.0474	0.0316	0.3988	9.4000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		93.3133	93.3133	3.1300e-003		93.3915
Total	0.0690	0.7224	0.5393	2.5800e-003	0.1279	4.9200e-003	0.1328	0.0348	4.6800e-003	0.0395		266.1419	266.1419	0.0148		266.5123

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	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
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

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3155	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.6800e-003	3.6800e-003	1.0000e-005		3.9300e-003
Unmitigated	0.3155	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.6800e-003	3.6800e-003	1.0000e-005		3.9300e-003

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	0.0558					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2595					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.6800e-003	3.6800e-003	1.0000e-005		3.9300e-003
Total	0.3155	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.6800e-003	3.6800e-003	1.0000e-005		3.9300e-003

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	0.0558					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2595					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.6800e-003	3.6800e-003	1.0000e-005		3.9300e-003
Total	0.3155	2.0000e-005	1.7300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.6800e-003	3.6800e-003	1.0000e-005		3.9300e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Snow Drop Rd. Improvements - San Bernardino-South Coast County, Annual

Snow Drop Rd. Improvements
San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	10.12	Acre	10.12	440,827.20	0
Parking Lot	6.70	Acre	6.70	291,852.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per engineer

Off-road Equipment - Per Engineer

Off-road Equipment - per engineer

Trips and VMT - water truck trips and material delivery trips are vendor trips. Hauling trips are soil import.

Construction Off-road Equipment Mitigation - Per Rule 403

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	196.00
tblConstructionPhase	NumDays	20.00	196.00
tblGrading	AcresOfGrading	98.00	75.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	784.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3509	3.4616	2.0944	4.4100e-003	0.6634	0.1630	0.8265	0.3378	0.1523	0.4901	0.0000	397.3145	397.3145	0.0919	0.0000	399.6120
Maximum	0.3509	3.4616	2.0944	4.4100e-003	0.6634	0.1630	0.8265	0.3378	0.1523	0.4901	0.0000	397.3145	397.3145	0.0919	0.0000	399.6120

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3509	3.4616	2.0944	4.4100e-003	0.2792	0.1630	0.4422	0.1373	0.1523	0.2896	0.0000	397.3141	397.3141	0.0919	0.0000	399.6116
Maximum	0.3509	3.4616	2.0944	4.4100e-003	0.2792	0.1630	0.4422	0.1373	0.1523	0.2896	0.0000	397.3141	397.3141	0.0919	0.0000	399.6116

	ROG	NOx	CO	SO2	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	57.92	0.00	46.49	59.35	0.00	40.91	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	1.2491	1.2491
2	4-1-2019	6-30-2019	1.2628	1.2628
3	7-1-2019	9-30-2019	1.2767	1.2767
		Highest	1.2767	1.2767

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2019	10/1/2019	5	196	
2	Paving	Paving	1/1/2019	10/1/2019	5	196	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 16.82

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Crushing/Proc. Equipment	1	8.00	85	0.78
Grading	Excavators	0	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	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	4	10.00	6.00	784.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.6299	0.0000	0.6299	0.3287	0.0000	0.3287	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2412	2.4633	1.2541	2.4800e-003		0.1213	0.1213		0.1138	0.1138	0.0000	220.0490	220.0490	0.0557	0.0000	221.4418
Total	0.2412	2.4633	1.2541	2.4800e-003	0.6299	0.1213	0.7512	0.3287	0.1138	0.4425	0.0000	220.0490	220.0490	0.0557	0.0000	221.4418

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	2.6800e-003	0.1063	0.0160	3.1000e-004	6.7500e-003	3.5000e-004	7.1000e-003	1.8500e-003	3.3000e-004	2.1900e-003	0.0000	29.5921	29.5921	1.7100e-003	0.0000	29.6348
Vendor	2.1500e-003	0.0687	0.0149	1.6000e-004	3.7100e-003	4.3000e-004	4.1300e-003	1.0700e-003	4.1000e-004	1.4800e-003	0.0000	15.1165	15.1165	1.0900e-003	0.0000	15.1437
Worker	5.2600e-003	4.2900e-003	0.0422	1.1000e-004	0.0108	7.0000e-005	0.0108	2.8500e-003	7.0000e-005	2.9200e-003	0.0000	9.5066	9.5066	3.1000e-004	0.0000	9.5145
Total	0.0101	0.1792	0.0731	5.8000e-004	0.0212	8.5000e-004	0.0221	5.7700e-003	8.1000e-004	6.5900e-003	0.0000	54.2153	54.2153	3.1100e-003	0.0000	54.2930

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					0.2457	0.0000	0.2457	0.1282	0.0000	0.1282	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2412	2.4633	1.2541	2.4800e-003		0.1213	0.1213		0.1138	0.1138	0.0000	220.0487	220.0487	0.0557	0.0000	221.4415
Total	0.2412	2.4633	1.2541	2.4800e-003	0.2457	0.1213	0.3670	0.1282	0.1138	0.2420	0.0000	220.0487	220.0487	0.0557	0.0000	221.4415

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	2.6800e-003	0.1063	0.0160	3.1000e-004	6.7500e-003	3.5000e-004	7.1000e-003	1.8500e-003	3.3000e-004	2.1900e-003	0.0000	29.5921	29.5921	1.7100e-003	0.0000	29.6348
Vendor	2.1500e-003	0.0687	0.0149	1.6000e-004	3.7100e-003	4.3000e-004	4.1300e-003	1.0700e-003	4.1000e-004	1.4800e-003	0.0000	15.1165	15.1165	1.0900e-003	0.0000	15.1437
Worker	5.2600e-003	4.2900e-003	0.0422	1.1000e-004	0.0108	7.0000e-005	0.0108	2.8500e-003	7.0000e-005	2.9200e-003	0.0000	9.5066	9.5066	3.1000e-004	0.0000	9.5145
Total	0.0101	0.1792	0.0731	5.8000e-004	0.0212	8.5000e-004	0.0221	5.7700e-003	8.1000e-004	6.5900e-003	0.0000	54.2153	54.2153	3.1100e-003	0.0000	54.2930

3.3 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0713	0.7470	0.7186	1.1200e-003		0.0404	0.0404		0.0372	0.0372	0.0000	100.3284	100.3284	0.0317	0.0000	101.1220
Paving	0.0220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0933	0.7470	0.7186	1.1200e-003		0.0404	0.0404		0.0372	0.0372	0.0000	100.3284	100.3284	0.0317	0.0000	101.1220

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	2.1500e-003	0.0687	0.0149	1.6000e-004	3.7100e-003	4.3000e-004	4.1300e-003	1.0700e-003	4.1000e-004	1.4800e-003	0.0000	15.1165	15.1165	1.0900e-003	0.0000	15.1437
Worker	4.2000e-003	3.4300e-003	0.0338	8.0000e-005	8.6000e-003	6.0000e-005	8.6600e-003	2.2800e-003	5.0000e-005	2.3400e-003	0.0000	7.6053	7.6053	2.5000e-004	0.0000	7.6116
Total	6.3500e-003	0.0721	0.0487	2.4000e-004	0.0123	4.9000e-004	0.0128	3.3500e-003	4.6000e-004	3.8200e-003	0.0000	22.7218	22.7218	1.3400e-003	0.0000	22.7553

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	0.0713	0.7470	0.7186	1.1200e-003		0.0404	0.0404		0.0372	0.0372	0.0000	100.3283	100.3283	0.0317	0.0000	101.1218
Paving	0.0220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0933	0.7470	0.7186	1.1200e-003		0.0404	0.0404		0.0372	0.0372	0.0000	100.3283	100.3283	0.0317	0.0000	101.1218

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	2.1500e-003	0.0687	0.0149	1.6000e-004	3.7100e-003	4.3000e-004	4.1300e-003	1.0700e-003	4.1000e-004	1.4800e-003	0.0000	15.1165	15.1165	1.0900e-003	0.0000	15.1437
Worker	4.2000e-003	3.4300e-003	0.0338	8.0000e-005	8.6000e-003	6.0000e-005	8.6600e-003	2.2800e-003	5.0000e-005	2.3400e-003	0.0000	7.6053	7.6053	2.5000e-004	0.0000	7.6116
Total	6.3500e-003	0.0721	0.0487	2.4000e-004	0.0123	4.9000e-004	0.0128	3.3500e-003	4.6000e-004	3.8200e-003	0.0000	22.7218	22.7218	1.3400e-003	0.0000	22.7553

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	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
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

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	102148	32.5466	1.3400e-003	2.8000e-004	32.6630
Total		32.5466	1.3400e-003	2.8000e-004	32.6630

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	102148	32.5466	1.3400e-003	2.8000e-004	32.6630
Total		32.5466	1.3400e-003	2.8000e-004	32.6630

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0576	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Unmitigated	0.0576	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004

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	0.0102					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0474					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Total	0.0576	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004

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	0.0102					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0474					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Total	0.0576	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation
