Memorandum

Date: July 20, 2017

To: Ms. Rebecca Mitchell, Mt. San Antonio College

From: Fred Greve, Greve & Associates, LLC

Subject: West Parcel Solar Project – Truck Haul Plan (Report #17-041a)

The truck haul assumptions used in the previous analysis for the West Parcel Solar Project ("West Parcel Solar Project – Air Quality Construction Analysis," Report #15-104C, by Greve and Associates, August 30, 2015) have been revised. Updated truck traffic are provided in the "West Parcel Solar CEQA Initial Study (Truck Haul Plan)," by Iteris, July 11, 2017. This report looks at potential changes in impacts for air quality, greenhouse gas, and noise.

AIR QUALITY

In general, truck hauling was reduced to 139,000 cubic yards of dirt, 9,929 truck loads, and 160 truck loads per day. The grading with import period was reduced to 62 days, down from an estimated 130 days previously. Since the air quality analysis focus is on peak daily emissions, shortening the work period can increase daily emissions.

It should be noted that the project will need to comply with the air quality measures adopted in the 2016 Mitigation Monitoring Program (MMP) for the 2015 Facilities Master Plan/PEP Final EIR. Measures 3a through 3j of the MMP identify a spectrum of air quality mitigation with Measures 3a, 3b, 3c, 3f, 3g, 3h, and 3i are aimed specifically at reducing quality emissions. Most significant are the requirements to use Tier IV construction equipment and to water the site three times per day during grading activities.

In their "1993 CEQA Air Quality Handbook", the South Coast Air Quality Management District (SCAQMD) established significance thresholds to assess the impact of project related air pollutant emissions. Table 1 presents the significance thresholds for construction. There are separate thresholds for short-term construction and long-term operational emissions. A

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project with daily emission rates below these thresholds are considered to have a less than significant effect on regional air quality.

Table 1 Regional Pollutant Emission Thresholds of Significance

	Pollutant Emissions (lbs./day)					
	CO	**VOC**	**NOx**	**PM10**	**PM2.5**	**SOx**
Construction	550	75	100	150	55	150

Emissions during all phases of construction were calculated using the California Emissions Estimator Model (CalEEMod). CalEEMod is a computer program developed by the SCAQMD in conjunction with the California Air Resources Board (CARB). The model calculates emissions for construction and operation of various projects. The previous analysis used version CalEEMod 2013.2.2. Since that time CalEEMod 2016.3.1 was released and contains new features including revised construction equipment emission rates. The newer version of CalEEMod was used for this analysis. CalEEMod printouts are included in the Appendix.

Two tables are presented below. Table 2 presents the results for the unmitigated case, and Table 3 presents the results for the mitigated situation. Specifically, use of Tier IV equipment and watering during grading were included in the calculations.

Table 2 Peak Construction Emissions – Not Mitigated

	Pollutant Emissions (lbs./day)					
Activity	**ROG**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Collection, Clear & Grub	5.4	54.6	26.4	0.0	21.3	12.8
Grading with Import	6.7	98.2	46.9	0.1	15.9	7.2
Final Grading	6.4	76.5	42.1	0.1	11.9	6.5
Solar Installation	0.3	2.6	2.3	0.0	0.2	0.2
Restoration	0.2	1.5	1.4	0.0	0.1	0.1
Landscaping	0.2	1.5	1.4	0.0	1.4	0.3
Solar Install+Restoration +Landscaping	0.6	5.6	5.0	0.0	1.8	0.5
SCQAMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Exceed Threshold?	***No***	***No***	***No***	***No***	***No***	***No***

Table 3 Peak Construction Emissions – With Required Mitigation

	Pollutant Emissions (lbs./day)					
Activity	**ROG**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Collection, Clear & Grub	0.6	2.2	23.7	0.0	18.4	10.1
Grading with Import	1.4	29.0	35.2	0.1	12.7	4.3
Final Grading	1.0	4.1	34.8	0.1	9.0	3.8
Solar Installation	0.1	0.4	2.3	0.0	0.1	0.0
Restoration	0.0	0.1	1.3	0.0	0.0	0.0
Landscaping	0.0	0.1	1.3	0.0	1.3	0.2
Solar Install+Restoration +Landscaping	0.1	0.6	5.0	0.0	1.4	0.2
SCQAMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Exceed Threshold?	***No***	***No***	***No***	***No***	***No***	***No***

The NOx emissions for grading with import and for final grading are just below the significance threshold for the unmitigated case, but are well below the significance threshold with the required mitigation. All projected construction emissions are below the significance thresholds established by the SCAQMD. In all cases the peak daily emissions with require mitigation are well below the thresholds.

Roads with substantial diesel truck volumes have the potential to result in particulate hot spots. The FHWA has published guidance on performing a qualitative analysis of particulate hot spots and established a screening threshold for potential impacts. The FHWA guidance suggests that a road with an average daily diesel truck volume of 10,000 or less does not have the potential to result in a particulate hot-spot.

None of the roadways in the project area will have close to 10,000 trucks per day. There are no truck counts for the roadways of concern. However, the roadways in the area; specifically Temple Avenue, Grand Avenue, and Valley Boulevard, have typical levels of heavy truck traffic which generally runs around 0.74% of total traffic. The arterial traffic distribution estimate used for the roadways was compiled by the Orange County Environmental Management Agency, and is based on traffic counts at 31 intersections throughout the Orange County area. Arterial traffic distribution estimates can be considered typical for arterials in Southern California. Therefore, the heavy truck traffic on Temple Avenue, Grand Avenue, and Valley Boulevard would be expected to be roughly 196, 271, and 248 per day, respectively. The proposed project would add 160 heavy trucks per day, and the combined

total is well below the guidance of 10,000 trucks per day provided by the FHWA. Therefore, the project will not result in a significant impact due to particulate hotspots and would not significantly increase the health risk.

GREENHOUSE GAS

The SCAQMD has not officially adopted significance thresholds for greenhouse gas emissions. However, their draft recommendations use a 3,500 MT CO_2EQ/yr. threshold for residential projects, a 1,400 MT CO_2EQ/yr. (metric ton of equivalent carbon dioxide per year) threshold for commercial projects, and a 3,000 MT CO_2 EQ/yr. for mixed-use projects. This project does not fall into any of these categories.

Construction emissions are amortized over the life of the project, defined by SCAQMD as 30 years, and are added to the annual operation emissions. The greenhouse gas emissions for construction are very small when amortized over a 30 year period. The CalEEMod analysis (see Appendix) shows that the total greenhouse gas emissions from the project will be 480 metric tons equivalent carbon dioxide (MTCO2EQ), or amortized over 30 years it is 16 MTCO2EQ per year. The construction emissions are well below any SCAQMD recommended threshold. Since the project will generate electricity from solar power, it will reduce GHG emissions during the operational phase. Therefore, the project will not have a significant impact on greenhouse gas emissions.

NOISE

The haul trucks will travel on Temple Avenue, Grand Avenue, and Valley Boulevard. Peak hour traffic data was provided in the traffic report referenced above. The p.m. peak hour traffic data was assumed to be 8% of the daily traffic. The values in Table 4 below represent the noise level at 50 feet from the roadway centerline with and without the truck traffic. The difference between the two conditions will be the same for any distance from the roadway. (Spreadsheets provided in the Appendix.)

Table 4 CNEL Noise Level With and Without Haul Trucks at 50 Feet

Roadway	No Haul Trucks	With Haul Trucks	Difference
Temple Avenue	70.8	71.0	0.2
Grand Avenue	72.2	72.3	0.1
Valley Boulevard	71.8	72.0	0.2

The noise increase due to truck hauling for export of earth from the stadium site to the West Parcel along the affected roadways range from 0.1 to 0.2 dB. This level of increase is not

perceptible. Since the truck traffic will occur during daytime hours, there will not be any sleep disturbance for normal nighttime sleepers.

Appendix

CalEEMod Output for Winter

CalEEMod Output for Annual

Haul Route Noise Calculations

West Parcel Solar With New Truck Haul Plan

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	10.00	1000sqft	17.70	10,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**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 - Acreage of site.

Construction Phase - Based on construction schedule provided.

Off-road Equipment - Equipment provided.

Off-road Equipment - Equipment provided.

Off-road Equipment - Equipment provided

Off-road Equipment - Equipment provided.

Off-road Equipment - Equipment provided.

Off-road Equipment - Equipment provided.

Trips and VMT - Haul trips from Iteris report.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Construction Off-road Equipment Mitigation - Tier IV required mitigation.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	300.00	76.00

tblConstructionPhase	NumDays	30.00	62.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	10.00	62.00
tblConstructionPhase	NumDays	10.00	62.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	PhaseEndDate	11/7/2018	3/30/2018
tblConstructionPhase	PhaseEndDate	7/18/2018	12/6/2017
tblConstructionPhase	PhaseEndDate	8/10/2018	12/29/2017
tblConstructionPhase	PhaseEndDate	12/6/2017	3/14/2018
tblConstructionPhase	PhaseEndDate	2/16/2018	3/14/2018
tblConstructionPhase	PhaseStartDate	8/11/2018	1/2/2018
tblConstructionPhase	PhaseStartDate	2/17/2018	9/26/2017
tblConstructionPhase	PhaseStartDate	7/19/2018	12/7/2017
tblConstructionPhase	PhaseStartDate	9/26/2017	1/2/2018
tblConstructionPhase	PhaseStartDate	12/7/2017	1/2/2018
tblGrading	AcresOfGrading	186.00	325.00
tblGrading	AcresOfGrading	90.00	50.00
tblGrading	AcresOfGrading	0.00	75.00
tblLandUse	LotAcreage	0.23	17.70
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripLength	20.00	6.60
tblTripsAndVMT	HaulingTripNumber	0.00	9,929.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	7.1482	98.2059	48.8348	0.1140	18.2898	3.5622	21.3436	9.9900	3.2772	12.8133	0.0000	11,931.6746	11,931.6746	2.5015	0.0000	11,994.2120

2018	0.5664	5.2158	4.9025	7.4700e-003	1.4074	0.3520	1.7594	0.1719	0.3239	0.4958	0.0000	754.6741	754.6741	0.1906	0.0000	759.4376
Maximum	**7.1482**	**98.2059**	**48.8348**	**0.1140**	**18.2898**	**3.5622**	**21.3436**	**9.9900**	**3.2772**	**12.8133**	**0.0000**	**11,931.6746**	**11,931.6746**	**2.5015**	**0.0000**	**11,994.2120**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.3692	28.9725	35.2158	0.1140	18.2898	0.0333	17.8750	9.9900	0.0429	9.6145	0.0000	11,931.6746	11,931.6746	2.5015	0.0000	11,994.2120
2018	0.0916	0.1664	4.9136	7.4700e-003	1.4074	-0.0109	1.3822	0.1719	-0.0095	0.1496	0.0000	754.6741	754.6741	0.1906	0.0000	759.4376
Maximum	**1.3692**	**28.9725**	**35.2158**	**0.1140**	**18.2898**	**0.0333**	**17.8750**	**9.9900**	**0.0429**	**9.6145**	**0.0000**	**11,931.6746**	**11,931.6746**	**2.5015**	**0.0000**	**11,994.2120**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**81.06**	**71.83**	**25.32**	**0.00**	**0.00**	**99.43**	**16.65**	**0.00**	**99.07**	**26.64**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2235	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-003

Energy	5.3700e-003	0.0488	0.0410	2.9000e-004		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003		58.5334	58.5334	1.1200e-003	1.0700e-003	58.8813
Mobile	0.1663	0.9398	2.4108	8.0800e-003	0.6563	9.4900e-003	0.6658	0.1756	8.9400e-003	0.1846		820.1193	820.1193	0.0433		821.2007
Total	**0.3951**	**0.9886**	**2.4528**	**8.3700e-003**	**0.6563**	**0.0132**	**0.6695**	**0.1756**	**0.0127**	**0.1883**		**878.6549**	**878.6549**	**0.0444**	**1.0700e-003**	**880.0843**

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	0.2235	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-003
Energy	5.3700e-003	0.0488	0.0410	2.9000e-004		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003		58.5334	58.5334	1.1200e-003	1.0700e-003	58.8813
Mobile	0.1663	0.9398	2.4108	8.0800e-003	0.6563	9.4900e-003	0.6658	0.1756	8.9400e-003	0.1846		820.1193	820.1193	0.0433		821.2007
Total	**0.3951**	**0.9886**	**2.4528**	**8.3700e-003**	**0.6563**	**0.0132**	**0.6695**	**0.1756**	**0.0127**	**0.1883**		**878.6549**	**878.6549**	**0.0444**	**1.0700e-003**	**880.0843**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Prep	Site Preparation	9/1/2017	9/25/2017	6	21	
2	Landscaping	Site Preparation	1/2/2018	3/14/2018	6	62	
3	Restoration	Site Preparation	1/2/2018	3/14/2018	6	62	

4	Grading Including Import	Grading	9/26/2017	12/6/2017	6	62	
5	Finish Grading	Grading	12/7/2017	12/29/2017	6	20	
6	Solar Panel Installation	Building Construction	1/2/2018	3/30/2018	6	76	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Prep	Air Compressors	1	6.00	78	0.48
Site Prep	Rubber Tired Dozers	3	8.00	247	0.40
Site Prep	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading Including Import	Cranes	0	7.00	231	0.29
Grading Including Import	Excavators	0	8.00	158	0.38
Grading Including Import	Forklifts	0	8.00	89	0.20
Grading Including Import	Generator Sets	0	8.00	84	0.74
Grading Including Import	Graders	0	8.00	187	0.41
Grading Including Import	Rubber Tired Dozers	1	8.00	247	0.40
Grading Including Import	Scrapers	3	8.00	367	0.48
Grading Including Import	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading Including Import	Welders	0	8.00	46	0.45
Finish Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Finish Grading	Excavators	0	8.00	158	0.38
Finish Grading	Graders	1	8.00	187	0.41
Finish Grading	Rubber Tired Dozers	1	8.00	247	0.40
Finish Grading	Scrapers	4	8.00	367	0.48

Finish Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Landscaping	Excavators	0	8.00	158	0.38
Landscaping	Graders	0	8.00	187	0.41
Landscaping	Rubber Tired Dozers	0	8.00	247	0.40
Landscaping	Scrapers	0	8.00	367	0.48
Landscaping	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Restoration	Pavers	0	8.00	130	0.42
Restoration	Paving Equipment	0	8.00	132	0.36
Restoration	Rollers	0	8.00	80	0.38
Restoration	Rubber Tired Dozers	0	8.00	247	0.40
Restoration	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Solar Panel Installation	Cranes	0	7.00	231	0.29
Solar Panel Installation	Forklifts	0	8.00	89	0.20
Solar Panel Installation	Generator Sets	0	8.00	84	0.74
Solar Panel Installation	Rubber Tired Dozers	0	8.00	247	0.40
Solar Panel Installation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Solar Panel Installation	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Prep	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading Including Import	6	15.00	0.00	9,929.00	14.70	6.90	6.60	LD_Mix	HDT_Mix	HHDT
Finish Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Landscaping	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Restoration	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Solar Panel Installation	1	4.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Site Prep - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2931	54.4604	25.3235	0.0410		3.0519	3.0519		2.8216	2.8216		4,176.3981	4,176.3981	1.2231		4,206.9761
Total	**5.2931**	**54.4604**	**25.3235**	**0.0410**	**18.0663**	**3.0519**	**21.1182**	**9.9307**	**2.8216**	**12.7523**		**4,176.3981**	**4,176.3981**	**1.2231**		**4,206.9761**

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	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610		234.7296	234.7296	8.8800e-003		234.9514
Total	**0.1316**	**0.0972**	**1.0367**	**2.3600e-003**	**0.2236**	**1.8400e-003**	**0.2254**	**0.0593**	**1.7000e-003**	**0.0610**		**234.7296**	**234.7296**	**8.8800e-003**		**234.9514**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	-0.3034	-6.8688	22.2028	0.0410		-0.4167	-0.4167		-0.3772	-0.3772	0.0000	4,176.3981	4,176.3981	1.2231		4,206.9761
Total	**-0.3034**	**-6.8688**	**22.2028**	**0.0410**	**18.0663**	**-0.4167**	**17.6496**	**9.9307**	**-0.3772**	**9.5535**	**0.0000**	**4,176.3981**	**4,176.3981**	**1.2231**		**4,206.9761**

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	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610		234.7296	234.7296	8.8800e-003		234.9514
Total	**0.1316**	**0.0972**	**1.0367**	**2.3600e-003**	**0.2236**	**1.8400e-003**	**0.2254**	**0.0593**	**1.7000e-003**	**0.0610**		**234.7296**	**234.7296**	**8.8800e-003**		**234.9514**

3.3 Landscaping - 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					1.2829	0.0000	1.2829	0.1385	0.0000	0.1385			0.0000			0.0000
Off-Road	0.1331	1.3149	1.1684	1.5500e-003		0.0932	0.0932		0.0857	0.0857		156.3880	156.3880	0.0487		157.6051
Total	**0.1331**	**1.3149**	**1.1684**	**1.5500e-003**	**1.2829**	**0.0932**	**1.3760**	**0.1385**	**0.0857**	**0.2242**		**156.3880**	**156.3880**	**0.0487**		**157.6051**

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	0.0176	0.0127	0.1362	3.4000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		34.2204	34.2204	1.1700e-003		34.2496
Total	**0.0176**	**0.0127**	**0.1362**	**3.4000e-004**	**0.0335**	**2.7000e-004**	**0.0338**	**8.8900e-003**	**2.5000e-004**	**9.1400e-003**		**34.2204**	**34.2204**	**1.1700e-003**		**34.2496**

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					1.2829	0.0000	1.2829	0.1385	0.0000	0.1385			0.0000			0.0000
Off-Road	6.4400e-003	-0.0533	1.1713	1.5500e-003		-0.0074	-0.0074		-0.0066	-0.0066	0.0000	156.3880	156.3880	0.0487		157.6051
Total	**6.4400e-003**	**-0.0533**	**1.1713**	**1.5500e-003**	**1.2829**	**-0.0074**	**1.2754**	**0.1385**	**-0.0066**	**0.1319**	**0.0000**	**156.3880**	**156.3880**	**0.0487**		**157.6051**

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	0.0176	0.0127	0.1362	3.4000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		34.2204	34.2204	1.1700e-003		34.2496
Total	**0.0176**	**0.0127**	**0.1362**	**3.4000e-004**	**0.0335**	**2.7000e-004**	**0.0338**	**8.8900e-003**	**2.5000e-004**	**9.1400e-003**		**34.2204**	**34.2204**	**1.1700e-003**		**34.2496**

3.4 Restoration - 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1331	1.3149	1.1684	1.5500e-003		0.0932	0.0932		0.0857	0.0857		156.3880	156.3880	0.0487		157.6051

Total	**0.1331**	**1.3149**	**1.1684**	**1.5500e-003**	**0.0000**	**0.0932**	**0.0932**	**0.0000**	**0.0857**	**0.0857**		**156.3880**	**156.3880**	**0.0487**		**157.6051**

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	0.0176	0.0127	0.1362	3.4000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		34.2204	34.2204	1.1700e-003		34.2496
Total	**0.0176**	**0.0127**	**0.1362**	**3.4000e-004**	**0.0335**	**2.7000e-004**	**0.0338**	**8.8900e-003**	**2.5000e-004**	**9.1400e-003**		**34.2204**	**34.2204**	**1.1700e-003**		**34.2496**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	6.4400e-003	-0.0533	1.1713	1.5500e-003		-0.0074	-0.0074		-0.0066	-0.0066	0.0000	156.3880	156.3880	0.0487		157.6051
Total	**6.4400e-003**	**-0.0533**	**1.1713**	**1.5500e-003**	**0.0000**	**-0.0074**	**-0.0074**	**0.0000**	**-0.0066**	**-0.0066**	**0.0000**	**156.3880**	**156.3880**	**0.0487**		**157.6051**

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	0.0176	0.0127	0.1362	3.4000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		34.2204	34.2204	1.1700e-003		34.2496
Total	**0.0176**	**0.0127**	**0.1362**	**3.4000e-004**	**0.0335**	**2.7000e-004**	**0.0338**	**8.8900e-003**	**2.5000e-004**	**9.1400e-003**		**34.2204**	**34.2204**	**1.1700e-003**		**34.2496**

3.5 Grading Including Import - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					11.5812	0.0000	11.5812	3.9105	0.0000	3.9105			0.0000			0.0000
Off-Road	5.8268	69.2229	40.5178	0.0602		3.1093	3.1093		2.8605	2.8605		6,156.5082	6,156.5082	1.8863		6,203.6668
Total	**5.8268**	**69.2229**	**40.5178**	**0.0602**	**11.5812**	**3.1093**	**14.6905**	**3.9105**	**2.8605**	**6.7710**		**6,156.5082**	**6,156.5082**	**1.8863**		**6,203.6668**

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	0.8175	28.9102	5.5848	0.0521	0.9258	0.1106	1.0364	0.2539	0.1058	0.3597		5,599.1192	5,599.1192	0.6085		5,614.3316
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	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.9161**	**28.9831**	**6.3623**	**0.0538**	**1.0935**	**0.1120**	**1.2055**	**0.2984**	**0.1071**	**0.4055**		**5,775.1664**	**5,775.1664**	**0.6152**		**5,790.5452**

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					11.5812	0.0000	11.5812	3.9105	0.0000	3.9105			0.0000			0.0000
Off-Road	0.4531	-0.0105	28.8534	0.0602		-0.0787	-0.0787		-0.0642	-0.0642	0.0000	6,156.5082	6,156.5082	1.8863		6,203.6668
Total	**0.4531**	**-0.0105**	**28.8534**	**0.0602**	**11.5812**	**-0.0787**	**11.5025**	**3.9105**	**-0.0642**	**3.8463**	**0.0000**	**6,156.5082**	**6,156.5082**	**1.8863**		**6,203.6668**

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	0.8175	28.9102	5.5848	0.0521	0.9258	0.1106	1.0364	0.2539	0.1058	0.3597		5,599.1192	5,599.1192	0.6085		5,614.3316
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	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.9161**	**28.9831**	**6.3623**	**0.0538**	**1.0935**	**0.1120**	**1.2055**	**0.2984**	**0.1071**	**0.4055**		**5,775.1664**	**5,775.1664**	**0.6152**		**5,790.5452**

3.6 Finish Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	7.0496	87.1955	48.0573	0.0758		3.5608	3.5608		3.2759	3.2759		7,749.9052	7,749.9052	2.3746		7,809.2691
Total	**7.0496**	**87.1955**	**48.0573**	**0.0758**	**8.6733**	**3.5608**	**12.2341**	**3.5965**	**3.2759**	**6.8724**		**7,749.9052**	**7,749.9052**	**2.3746**		**7,809.2691**

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	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	0.7060	1.4531	33.9908	0.0758		-0.0039	-0.0039		6.5800e-003	6.5800e-003	0.0000	7,749.9052	7,749.9052	2.3746		7,809.2691
Total	**0.7060**	**1.4531**	**33.9908**	**0.0758**	**8.6733**	**-0.0039**	**8.6695**	**3.5965**	**6.5800e-003**	**3.6031**	**0.0000**	**7,749.9052**	**7,749.9052**	**2.3746**		**7,809.2691**

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	0.0987	0.0729	0.7775	1.7700e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		176.0472	176.0472	6.6600e-003		176.2136
Total	**0.0987**	**0.0729**	**0.7775**	**1.7700e-003**	**0.1677**	**1.3800e-003**	**0.1691**	**0.0445**	**1.2800e-003**	**0.0457**		**176.0472**	**176.0472**	**6.6600e-003**		**176.2136**

3.7 Solar Panel Installation - 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	0.2328	2.3010	2.0446	2.7200e-003		0.1630	0.1630		0.1500	0.1500		273.6790	273.6790	0.0852		275.8090
Total	**0.2328**	**2.3010**	**2.0446**	**2.7200e-003**		**0.1630**	**0.1630**		**0.1500**	**0.1500**		**273.6790**	**273.6790**	**0.0852**		**275.8090**

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	8.8800e-003	0.2428	0.0670	5.1000e-004	0.0128	1.8000e-003	0.0146	3.6900e-003	1.7200e-003	5.4100e-003		54.1513	54.1513	4.0700e-003		54.2532
Worker	0.0234	0.0169	0.1816	4.6000e-004	0.0447	3.6000e-004	0.0451	0.0119	3.3000e-004	0.0122		45.6272	45.6272	1.5600e-003		45.6661
Total	**0.0323**	**0.2597**	**0.2486**	**9.7000e-004**	**0.0575**	**2.1600e-003**	**0.0597**	**0.0156**	**2.0500e-003**	**0.0176**		**99.7785**	**99.7785**	**5.6300e-003**		**99.9193**

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	0.0113	-0.0933	2.0498	2.7200e-003		-0.0130	-0.0130		-0.0116	-0.0116	0.0000	273.6790	273.6790	0.0852		275.8090
Total	**0.0113**	**-0.0933**	**2.0498**	**2.7200e-003**		**-0.0130**	**-0.0130**		**-0.0116**	**-0.0116**	**0.0000**	**273.6790**	**273.6790**	**0.0852**		**275.8090**

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	8.8800e-003	0.2428	0.0670	5.1000e-004	0.0128	1.8000e-003	0.0146	3.6900e-003	1.7200e-003	5.4100e-003		54.1513	54.1513	4.0700e-003		54.2532
Worker	0.0234	0.0169	0.1816	4.6000e-004	0.0447	3.6000e-004	0.0451	0.0119	3.3000e-004	0.0122		45.6272	45.6272	1.5600e-003		45.6661
Total	**0.0323**	**0.2597**	**0.2486**	**9.7000e-004**	**0.0575**	**2.1600e-003**	**0.0597**	**0.0156**	**2.0500e-003**	**0.0176**		**99.7785**	**99.7785**	**5.6300e-003**		**99.9193**

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	0.1663	0.9398	2.4108	8.0800e-003	0.6563	9.4900e-003	0.6658	0.1756	8.9400e-003	0.1846		820.1193	820.1193	0.0433		821.2007
Unmitigated	0.1663	0.9398	2.4108	8.0800e-003	0.6563	9.4900e-003	0.6658	0.1756	8.9400e-003	0.1846		820.1193	820.1193	0.0433		821.2007

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	69.70	13.20	6.80	233,117	233,117
Total	69.70	13.20	6.80	233,117	233,117

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	5.3700e-003	0.0488	0.0410	2.9000e-004		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003		58.5334	58.5334	1.1200e-003	1.0700e-003	58.8813
NaturalGas Unmitigated	5.3700e-003	0.0488	0.0410	2.9000e-004		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003		58.5334	58.5334	1.1200e-003	1.0700e-003	58.8813

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					
General Light Industry	497.534	5.3700e-003	0.0488	0.0410	2.9000e-004		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003		58.5334	58.5334	1.1200e-003	1.0700e-003	58.8813
Total		**5.3700e-003**	**0.0488**	**0.0410**	**2.9000e-004**		**3.7100e-003**	**3.7100e-003**		**3.7100e-003**	**3.7100e-003**		**58.5334**	**58.5334**	**1.1200e-003**	**1.0700e-003**	**58.8813**

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					
General Light Industry	0.497534	5.3700e-003	0.0488	0.0410	2.9000e-004		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003		58.5334	58.5334	1.1200e-003	1.0700e-003	58.8813
Total		**5.3700e-003**	**0.0488**	**0.0410**	**2.9000e-004**		**3.7100e-003**	**3.7100e-003**		**3.7100e-003**	**3.7100e-003**		**58.5334**	**58.5334**	**1.1200e-003**	**1.0700e-003**	**58.8813**

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	0.2235	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-003
Unmitigated	0.2235	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-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	0.0254					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1980					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-003
Total	**0.2235**	**1.0000e-005**	**1.0300e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.1900e-003**	**2.1900e-003**	**1.0000e-005**		**2.3400e-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	0.0254					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1980					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.1900e-003	2.1900e-003	1.0000e-005		2.3400e-003
Total	**0.2235**	**1.0000e-005**	**1.0300e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.1900e-003**	**2.1900e-003**	**1.0000e-005**		**2.3400e-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

West Parcel Solar With New Truck Haul Plan

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	10.00	1000sqft	17.70	10,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**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 - Acreage of site.

Construction Phase - Based on construction schedule provided.

Off-road Equipment - Equipment provided.

Off-road Equipment - Equipment provided.

Off-road Equipment - Equipment provided

Off-road Equipment - Equipment provided.

Off-road Equipment - Equipment provided.

Off-road Equipment - Equipment provided.

Trips and VMT - Haul trips from Iteris report.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Construction Off-road Equipment Mitigation - Tier IV required mitigation.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstructionPhase	NumDays	300.00	76.00
tblConstructionPhase	NumDays	30.00	62.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	10.00	62.00
tblConstructionPhase	NumDays	10.00	62.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	PhaseEndDate	11/7/2018	3/30/2018
tblConstructionPhase	PhaseEndDate	7/18/2018	12/6/2017
tblConstructionPhase	PhaseEndDate	8/10/2018	12/29/2017
tblConstructionPhase	PhaseEndDate	12/6/2017	3/14/2018
tblConstructionPhase	PhaseEndDate	2/16/2018	3/14/2018
tblConstructionPhase	PhaseStartDate	8/11/2018	1/2/2018
tblConstructionPhase	PhaseStartDate	2/17/2018	9/26/2017
tblConstructionPhase	PhaseStartDate	7/19/2018	12/7/2017
tblConstructionPhase	PhaseStartDate	9/26/2017	1/2/2018
tblConstructionPhase	PhaseStartDate	12/7/2017	1/2/2018
tblGrading	AcresOfGrading	186.00	325.00
tblGrading	AcresOfGrading	90.00	50.00
tblGrading	AcresOfGrading	0.00	75.00
tblLandUse	LotAcreage	0.23	17.70
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripLength	20.00	6.60
tblTripsAndVMT	HaulingTripNumber	0.00	9,929.00

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					

2017	0.3362	4.5088	2.2051	4.8100e-003	0.6727	0.1675	0.8402	0.2716	0.1543	0.4260	0.0000	453.5408	453.5408	0.1030	0.0000	456.1155
2018	0.0192	0.1798	0.1683	2.6000e-004	0.0440	0.0121	0.0560	5.4200e-003	0.0111	0.0165	0.0000	23.6865	23.6865	5.9300e-003	0.0000	23.8348
Maximum	**0.3362**	**4.5088**	**2.2051**	**4.8100e-003**	**0.6727**	**0.1675**	**0.8402**	**0.2716**	**0.1543**	**0.4260**	**0.0000**	**453.5408**	**453.5408**	**0.1030**	**0.0000**	**456.1155**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0474	0.8612	1.6700	4.8100e-003	0.6727	-0.0034	0.6693	0.2716	-0.0026	0.2690	0.0000	453.5404	453.5404	0.1030	0.0000	
2018	2.9500e-003	4.0200e-003	0.1687	2.6000e-004	0.0440	-0.0009	0.0431	5.4200e-003	-0.0008	4.6600e-003	0.0000	23.6865	23.6865	5.9300e-003	0.0000	
Maximum	**0.0474**	**0.8612**	**1.6700**	**4.8100e-003**	**0.6727**	**-0.0009**	**0.6693**	**0.2716**	**-0.0008**	**0.2690**	**0.0000**	**453.5404**	**453.5404**	**0.1030**	**0.0000**	**456.1151**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**85.83**	**81.55**	**22.53**	**0.00**	**0.00**	**102.39**	**20.51**	**0.00**	**102.04**	**38.15**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

1	**9-1-2017**	**9-30-2017**	0.2252	0.0653
		Highest	0.2252	0.0653

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	0.0408	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.6000e-004
Energy	9.8000e-004	8.9000e-003	7.4800e-003	5.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	45.7270	45.7270	1.6700e-003	4.9000e-004	45.9135
Mobile	0.0225	0.1316	0.3376	1.1300e-003	0.0886	1.3000e-003	0.0899	0.0237	1.2200e-003	0.0250	0.0000	103.7053	103.7053	5.3800e-003	0.0000	103.8398
Waste						0.0000	0.0000		0.0000	0.0000	2.5171	0.0000	2.5171	0.1488	0.0000	6.2360
Water						0.0000	0.0000		0.0000	0.0000	0.7337	9.5940	10.3277	0.0758	1.8600e-003	12.7760
Total	**0.0642**	**0.1405**	**0.3452**	**1.1800e-003**	**0.0886**	**1.9800e-003**	**0.0906**	**0.0237**	**1.9000e-003**	**0.0256**	**3.2507**	**159.0266**	**162.2773**	**0.2316**	**2.3500e-003**	**168.7656**

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	0.0408	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.6000e-004
Energy	9.8000e-004	8.9000e-003	7.4800e-003	5.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	45.7270	45.7270	1.6700e-003	4.9000e-004	45.9135
Mobile	0.0225	0.1316	0.3376	1.1300e-003	0.0886	1.3000e-003	0.0899	0.0237	1.2200e-003	0.0250	0.0000	103.7053	103.7053	5.3800e-003	0.0000	103.8398
Waste						0.0000	0.0000		0.0000	0.0000	2.5171	0.0000	2.5171	0.1488	0.0000	6.2360
Water						0.0000	0.0000		0.0000	0.0000	0.7337	9.5940	10.3277	0.0758	1.8600e-003	12.7760
Total	**0.0642**	**0.1405**	**0.3452**	**1.1800e-003**	**0.0886**	**1.9800e-003**	**0.0906**	**0.0237**	**1.9000e-003**	**0.0256**	**3.2507**	**159.0266**	**162.2773**	**0.2316**	**2.3500e-003**	**168.7656**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Prep	Site Preparation	9/1/2017	9/25/2017	6	21	
2	Landscaping	Site Preparation	1/2/2018	3/14/2018	6	62	
3	Restoration	Site Preparation	1/2/2018	3/14/2018	6	62	
4	Grading Including Import	Grading	9/26/2017	12/6/2017	6	62	
5	Finish Grading	Grading	12/7/2017	12/29/2017	6	20	
6	Solar Panel Installation	Building Construction	1/2/2018	3/30/2018	6	76	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Prep	Air Compressors	1	6.00	78	0.48
Site Prep	Rubber Tired Dozers	3	8.00	247	0.40
Site Prep	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading Including Import	Cranes	0	7.00	231	0.29
Grading Including Import	Excavators	0	8.00	158	0.38
Grading Including Import	Forklifts	0	8.00	89	0.20

Grading Including Import	Generator Sets	0	8.00	84	0.74
Grading Including Import	Graders	0	8.00	187	0.41
Grading Including Import	Rubber Tired Dozers	1	8.00	247	0.40
Grading Including Import	Scrapers	3	8.00	367	0.48
Grading Including Import	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading Including Import	Welders	0	8.00	46	0.45
Finish Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Finish Grading	Excavators	0	8.00	158	0.38
Finish Grading	Graders	1	8.00	187	0.41
Finish Grading	Rubber Tired Dozers	1	8.00	247	0.40
Finish Grading	Scrapers	4	8.00	367	0.48
Finish Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Landscaping	Excavators	0	8.00	158	0.38
Landscaping	Graders	0	8.00	187	0.41
Landscaping	Rubber Tired Dozers	0	8.00	247	0.40
Landscaping	Scrapers	0	8.00	367	0.48
Landscaping	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Restoration	Pavers	0	8.00	130	0.42
Restoration	Paving Equipment	0	8.00	132	0.36
Restoration	Rollers	0	8.00	80	0.38
Restoration	Rubber Tired Dozers	0	8.00	247	0.40
Restoration	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Solar Panel Installation	Cranes	0	7.00	231	0.29
Solar Panel Installation	Forklifts	0	8.00	89	0.20
Solar Panel Installation	Generator Sets	0	8.00	84	0.74
Solar Panel Installation	Rubber Tired Dozers	0	8.00	247	0.40
Solar Panel Installation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Solar Panel Installation	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Prep	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading Including Import	6	15.00	0.00	9,929.00	14.70	6.90	6.60	LD_Mix	HDT_Mix	HHDT
Finish Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Landscaping	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Restoration	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Solar Panel Installation	1	4.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Site Prep - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1897	0.0000	0.1897	0.1043	0.0000	0.1043	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0556	0.5718	0.2659	4.3000e-004		0.0320	0.0320		0.0296	0.0296	0.0000	39.7820	39.7820	0.0117	0.0000	40.0733
Total	**0.0556**	**0.5718**	**0.2659**	**4.3000e-004**	**0.1897**	**0.0320**	**0.2217**	**0.1043**	**0.0296**	**0.1339**	**0.0000**	**39.7820**	**39.7820**	**0.0117**	**0.0000**	**40.0733**

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	1.2600e-003	1.0500e-003	0.0112	3.0000e-005	2.3000e-003	2.0000e-005	2.3200e-003	6.1000e-004	2.0000e-005	6.3000e-004	0.0000	2.2740	2.2740	9.0000e-005	0.0000	2.2762
Total	**1.2600e-003**	**1.0500e-003**	**0.0112**	**3.0000e-005**	**2.3000e-003**	**2.0000e-005**	**2.3200e-003**	**6.1000e-004**	**2.0000e-005**	**6.3000e-004**	**0.0000**	**2.2740**	**2.2740**	**9.0000e-005**	**0.0000**	**2.2762**

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					0.1897	0.0000	0.1897	0.1043	0.0000	0.1043	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	-0.0032	-0.0721	0.2331	4.3000e-004		-0.0044	-0.0044		-0.0040	-0.0040	0.0000	39.7820	39.7820	0.0117	0.0000	40.0733
Total	**-0.0032**	**-0.0721**	**0.2331**	**4.3000e-004**	**0.1897**	**-0.0044**	**0.1853**	**0.1043**	**-0.0040**	**0.1003**	**0.0000**	**39.7820**	**39.7820**	**0.0117**	**0.0000**	**40.0733**

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	1.2600e-003	1.0500e-003	0.0112	3.0000e-005	2.3000e-003	2.0000e-005	2.3200e-003	6.1000e-004	2.0000e-005	6.3000e-004	0.0000	2.2740	2.2740	9.0000e-005	0.0000	2.2762
Total	**1.2600e-003**	**1.0500e-003**	**0.0112**	**3.0000e-005**	**2.3000e-003**	**2.0000e-005**	**2.3200e-003**	**6.1000e-004**	**2.0000e-005**	**6.3000e-004**	**0.0000**	**2.2740**	**2.2740**	**9.0000e-005**	**0.0000**	**2.2762**

3.3 Landscaping - 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					0.0398	0.0000	0.0398	4.2900e-003	0.0000	4.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1200e-003	0.0408	0.0362	5.0000e-005		2.8900e-003	2.8900e-003		2.6600e-003	2.6600e-003	0.0000	4.3981	4.3981	1.3700e-003	0.0000	4.4323
Total	**4.1200e-003**	**0.0408**	**0.0362**	**5.0000e-005**	**0.0398**	**2.8900e-003**	**0.0427**	**4.2900e-003**	**2.6600e-003**	**6.9500e-003**	**0.0000**	**4.3981**	**4.3981**	**1.3700e-003**	**0.0000**	**4.4323**

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	4.9000e-004	4.0000e-004	4.3400e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9788	0.9788	3.0000e-005	0.0000	0.9797
Total	**4.9000e-004**	**4.0000e-004**	**4.3400e-003**	**1.0000e-005**	**1.0200e-003**	**1.0000e-005**	**1.0300e-003**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.9788**	**0.9788**	**3.0000e-005**	**0.0000**	**0.9797**

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					0.0398	0.0000	0.0398	4.2900e-003	0.0000	4.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0000e-004	-0.0017	0.0363	5.0000e-005		-0.0002	-0.0002		-0.0002	-0.0002	0.0000	4.3981	4.3981	1.3700e-003	0.0000	4.4323
Total	**2.0000e-004**	**-0.0017**	**0.0363**	**5.0000e-005**	**0.0398**	**-0.0002**	**0.0395**	**4.2900e-003**	**-0.0002**	**4.0800e-003**	**0.0000**	**4.3981**	**4.3981**	**1.3700e-003**	**0.0000**	**4.4323**

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	4.9000e-004	4.0000e-004	4.3400e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9788	0.9788	3.0000e-005	0.0000	0.9797

Total	**4.9000e-004**	**4.0000e-004**	**4.3400e-003**	**1.0000e-005**	**1.0200e-003**	**1.0000e-005**	**1.0300e-003**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.9788**	**0.9788**	**3.0000e-005**	**0.0000**	**0.9797**

3.4 Restoration - 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1200e-003	0.0408	0.0362	5.0000e-005		2.8900e-003	2.8900e-003		2.6600e-003	2.6600e-003	0.0000	4.3981	4.3981	1.3700e-003	0.0000	4.4323
Total	**4.1200e-003**	**0.0408**	**0.0362**	**5.0000e-005**	**0.0000**	**2.8900e-003**	**2.8900e-003**	**0.0000**	**2.6600e-003**	**2.6600e-003**	**0.0000**	**4.3981**	**4.3981**	**1.3700e-003**	**0.0000**	**4.4323**

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	4.9000e-004	4.0000e-004	4.3400e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9788	0.9788	3.0000e-005	0.0000	0.9797
Total	**4.9000e-004**	**4.0000e-004**	**4.3400e-003**	**1.0000e-005**	**1.0200e-003**	**1.0000e-005**	**1.0300e-003**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.9788**	**0.9788**	**3.0000e-005**	**0.0000**	**0.9797**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0000e-004	-0.0017	0.0363	5.0000e-005		-0.0002	-0.0002		-0.0002	-0.0002	0.0000	4.3981	4.3981	1.3700e-003	0.0000	4.4323
Total	**2.0000e-004**	**-0.0017**	**0.0363**	**5.0000e-005**	**0.0000**	**-0.0002**	**-0.0002**	**0.0000**	**-0.0002**	**-0.0002**	**0.0000**	**4.3981**	**4.3981**	**1.3700e-003**	**0.0000**	**4.4323**

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	4.9000e-004	4.0000e-004	4.3400e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9788	0.9788	3.0000e-005	0.0000	0.9797
Total	**4.9000e-004**	**4.0000e-004**	**4.3400e-003**	**1.0000e-005**	**1.0200e-003**	**1.0000e-005**	**1.0300e-003**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.9788**	**0.9788**	**3.0000e-005**	**0.0000**	**0.9797**

3.5 Grading Including Import - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3590	0.0000	0.3590	0.1212	0.0000	0.1212	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1806	2.1459	1.2561	1.8700e-003		0.0964	0.0964		0.0887	0.0887	0.0000	173.1378	173.1378	0.0531	0.0000	174.4640
Total	**0.1806**	**2.1459**	**1.2561**	**1.8700e-003**	**0.3590**	**0.0964**	**0.4554**	**0.1212**	**0.0887**	**0.2099**	**0.0000**	**173.1378**	**173.1378**	**0.0531**	**0.0000**	**174.4640**

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	0.0246	0.9150	0.1586	1.6500e-003	0.0282	3.3500e-003	0.0316	7.7600e-003	3.2000e-003	0.0110	0.0000	161.3813	161.3813	0.0164	0.0000	161.7915
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7800e-003	2.3200e-003	0.0248	6.0000e-005	5.1000e-003	4.0000e-005	5.1400e-003	1.3500e-003	4.0000e-005	1.3900e-003	0.0000	5.0354	5.0354	1.9000e-004	0.0000	5.0401
Total	**0.0273**	**0.9173**	**0.1834**	**1.7100e-003**	**0.0333**	**3.3900e-003**	**0.0367**	**9.1100e-003**	**3.2400e-003**	**0.0124**	**0.0000**	**166.4167**	**166.4167**	**0.0166**	**0.0000**	**166.8316**

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					0.3590	0.0000	0.3590	0.1212	0.0000	0.1212	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0141	-0.0003	0.8945	1.8700e-003		-0.0024	-0.0024		-0.0020	-0.0020	0.0000	173.1376	173.1376	0.0531	0.0000	174.4638
Total	**0.0141**	**-0.0003**	**0.8945**	**1.8700e-003**	**0.3590**	**-0.0024**	**0.3566**	**0.1212**	**-0.0020**	**0.1192**	**0.0000**	**173.1376**	**173.1376**	**0.0531**	**0.0000**	**174.4638**

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	0.0246	0.9150	0.1586	1.6500e-003	0.0282	3.3500e-003	0.0316	7.7600e-003	3.2000e-003	0.0110	0.0000	161.3813	161.3813	0.0164	0.0000	161.7915
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7800e-003	2.3200e-003	0.0248	6.0000e-005	5.1000e-003	4.0000e-005	5.1400e-003	1.3500e-003	4.0000e-005	1.3900e-003	0.0000	5.0354	5.0354	1.9000e-004	0.0000	5.0401
Total	**0.0273**	**0.9173**	**0.1834**	**1.7100e-003**	**0.0333**	**3.3900e-003**	**0.0367**	**9.1100e-003**	**3.2400e-003**	**0.0124**	**0.0000**	**166.4167**	**166.4167**	**0.0166**	**0.0000**	**166.8316**

3.6 Finish Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0867	0.0000	0.0867	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0705	0.8720	0.4806	7.6000e-004		0.0356	0.0356		0.0328	0.0328	0.0000	70.3060	70.3060	0.0215	0.0000	70.8445

Total	**0.0705**	**0.8720**	**0.4806**	**7.6000e-004**	**0.0867**	**0.0356**	**0.1223**	**0.0360**	**0.0328**	**0.0687**	**0.0000**	**70.3060**	**70.3060**	**0.0215**	**0.0000**	**70.8445**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-004	7.5000e-004	7.9800e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.6243	1.6243	6.0000e-005	0.0000	1.6259
Total	**9.0000e-004**	**7.5000e-004**	**7.9800e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.6243**	**1.6243**	**6.0000e-005**	**0.0000**	**1.6259**

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					0.0867	0.0000	0.0867	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.0600e-003	0.0145	0.3399	7.6000e-004		0.0000	0.0000		7.0000e-005	7.0000e-005	0.0000	70.3059	70.3059	0.0215	0.0000	70.8444
Total	**7.0600e-003**	**0.0145**	**0.3399**	**7.6000e-004**	**0.0867**	**0.0000**	**0.0867**	**0.0360**	**7.0000e-005**	**0.0360**	**0.0000**	**70.3059**	**70.3059**	**0.0215**	**0.0000**	**70.8444**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-004	7.5000e-004	7.9800e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.6243	1.6243	6.0000e-005	0.0000	1.6259
Total	**9.0000e-004**	**7.5000e-004**	**7.9800e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.6243**	**1.6243**	**6.0000e-005**	**0.0000**	**1.6259**

3.7 Solar Panel Installation - 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	8.8500e-003	0.0874	0.0777	1.0000e-004		6.1900e-003	6.1900e-003		5.7000e-003	5.7000e-003	0.0000	9.4345	9.4345	2.9400e-003	0.0000	9.5080
Total	**8.8500e-003**	**0.0874**	**0.0777**	**1.0000e-004**		**6.1900e-003**	**6.1900e-003**		**5.7000e-003**	**5.7000e-003**	**0.0000**	**9.4345**	**9.4345**	**2.9400e-003**	**0.0000**	**9.5080**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3000e-004	9.4000e-003	2.4200e-003	2.0000e-005	4.8000e-004	7.0000e-005	5.5000e-004	1.4000e-004	6.0000e-005	2.0000e-004	0.0000	1.8984	1.8984	1.4000e-004	0.0000	1.9017
Worker	8.1000e-004	6.6000e-004	7.0900e-003	2.0000e-005	1.6700e-003	1.0000e-005	1.6800e-003	4.4000e-004	1.0000e-005	4.6000e-004	0.0000	1.5998	1.5998	5.0000e-005	0.0000	1.6012
Total	**1.1400e-003**	**0.0101**	**9.5100e-003**	**4.0000e-005**	**2.1500e-003**	**8.0000e-005**	**2.2300e-003**	**5.8000e-004**	**7.0000e-005**	**6.6000e-004**	**0.0000**	**3.4982**	**3.4982**	**1.9000e-004**	**0.0000**	**3.5029**

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	4.3000e-004	-0.0035	0.0779	1.0000e-004		-0.0005	-0.0005		-0.0004	-0.0004	0.0000	9.4345	9.4345	2.9400e-003	0.0000	9.5080
Total	**4.3000e-004**	**-0.0035**	**0.0779**	**1.0000e-004**		**-0.0005**	**-0.0005**		**-0.0004**	**-0.0004**	**0.0000**	**9.4345**	**9.4345**	**2.9400e-003**	**0.0000**	**9.5080**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3000e-004	9.4000e-003	2.4200e-003	2.0000e-005	4.8000e-004	7.0000e-005	5.5000e-004	1.4000e-004	6.0000e-005	2.0000e-004	0.0000	1.8984	1.8984	1.4000e-004	0.0000	1.9017
Worker	8.1000e-004	6.6000e-004	7.0900e-003	2.0000e-005	1.6700e-003	1.0000e-005	1.6800e-003	4.4000e-004	1.0000e-005	4.6000e-004	0.0000	1.5998	1.5998	5.0000e-005	0.0000	1.6012
Total	**1.1400e-003**	**0.0101**	**9.5100e-003**	**4.0000e-005**	**2.1500e-003**	**8.0000e-005**	**2.2300e-003**	**5.8000e-004**	**7.0000e-005**	**6.6000e-004**	**0.0000**	**3.4982**	**3.4982**	**1.9000e-004**	**0.0000**	**3.5029**

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	0.0225	0.1316	0.3376	1.1300e-003	0.0886	1.3000e-003	0.0899	0.0237	1.2200e-003	0.0250	0.0000	103.7053	103.7053	5.3800e-003	0.0000	103.8398
Unmitigated	0.0225	0.1316	0.3376	1.1300e-003	0.0886	1.3000e-003	0.0899	0.0237	1.2200e-003	0.0250	0.0000	103.7053	103.7053	5.3800e-003	0.0000	103.8398

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	69.70	13.20	6.80	233,117	233,117
Total	69.70	13.20	6.80	233,117	233,117

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

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	36.0361	36.0361	1.4900e-003	3.1000e-004	36.1650
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	36.0361	36.0361	1.4900e-003	3.1000e-004	36.1650
NaturalGas Mitigated	9.8000e-004	8.9000e-003	7.4800e-003	5.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	9.6909	9.6909	1.9000e-004	1.8000e-004	9.7485
NaturalGas Unmitigated	9.8000e-004	8.9000e-003	7.4800e-003	5.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	9.6909	9.6909	1.9000e-004	1.8000e-004	9.7485

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					
General Light Industry	181600	9.8000e-004	8.9000e-003	7.4800e-003	5.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	9.6909	9.6909	1.9000e-004	1.8000e-004	9.7485
Total		**9.8000e-004**	**8.9000e-003**	**7.4800e-003**	**5.0000e-005**		**6.8000e-004**	**6.8000e-004**		**6.8000e-004**	**6.8000e-004**	**0.0000**	**9.6909**	**9.6909**	**1.9000e-004**	**1.8000e-004**	**9.7485**

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					
General Light Industry	181600	9.8000e-004	8.9000e-003	7.4800e-003	5.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	9.6909	9.6909	1.9000e-004	1.8000e-004	9.7485
Total		**9.8000e-004**	**8.9000e-003**	**7.4800e-003**	**5.0000e-005**		**6.8000e-004**	**6.8000e-004**		**6.8000e-004**	**6.8000e-004**	**0.0000**	**9.6909**	**9.6909**	**1.9000e-004**	**1.8000e-004**	**9.7485**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	113100	36.0361	1.4900e-003	3.1000e-004	36.1650

Total		**36.0361**	**1.4900e-003**	**3.1000e-004**	**36.1650**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	113100	36.0361	1.4900e-003	3.1000e-004	36.1650
Total		**36.0361**	**1.4900e-003**	**3.1000e-004**	**36.1650**

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	0.0408	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.6000e-004
Unmitigated	0.0408	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.6000e-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	4.6400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0361					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.6000e-004
Total	**0.0408**	**0.0000**	**1.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.5000e-004**	**2.5000e-004**	**0.0000**	**0.0000**	**2.6000e-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	4.6400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0361					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-004	2.5000e-004	0.0000	0.0000	2.6000e-004
Total	**0.0408**	**0.0000**	**1.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.5000e-004**	**2.5000e-004**	**0.0000**	**0.0000**	**2.6000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	10.3277	0.0758	1.8600e-003	12.7760
Unmitigated	10.3277	0.0758	1.8600e-003	12.7760

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	2.3125 / 0	10.3277	0.0758	1.8600e-003	12.7760
Total		**10.3277**	**0.0758**	**1.8600e-003**	**12.7760**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	2.3125 / 0	10.3277	0.0758	1.8600e-003	12.7760
Total		**10.3277**	**0.0758**	**1.8600e-003**	**12.7760**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.5171	0.1488	0.0000	6.2360
Unmitigated	2.5171	0.1488	0.0000	6.2360

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	12.4	2.5171	0.1488	0.0000	6.2360
Total		**2.5171**	**0.1488**	**0.0000**	**6.2360**

Mitigated

General Light Industry	12.4	2.5171	0.1488	0.0000	6.2360
Total		**2.5171**	**0.1488**	**0.0000**	**6.2360**

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

Traffic Haul Plan

Roadway Name:	*Temple*
Vehicles per day	*26,513*
Speed (mph)	*45*
Grade Adj. (dB)	*0*
Vehicle Noise Red (dB)	*0*

	Day	Eve	Night	Equiv.
Auto	75.51%	12.57%	9.34%	208.6%
MT	1.56%	0.09%	0.19%	3.7%
HT	0.64%	0.02%	0.08%	1.5%

This is the CNEL at 15 m.

	Soft CNEL(15m)	Hard CNEL(15m)
Auto	69.9	71.1
Medium Trk.	60.7	61.9
Heavy Truck	61.3	62.5
Total	70.9	72.1

To get other noise levels, Put in other distances (ft).

Dist.	Soft	Hard
100	66.3	69.0
250	60.3	65.0
300	59.1	64.2
1000	51.3	59.0

To get other distances, Put in other noise levels.

CNEL	Soft	Hard
57	416	1,592
60	262	798
65	122	252
70	57	80

Lot	Road Elevation	Distance To Wall	Base Of Wall	Dist. To Observer	Pad Elevation	Observer Height	Wall Height	***Barrier Reduction*** Auto	MT	HT	Temple CNEL	Truck CNEL	Total CNEL	Delta
at 50 feet	*0*	*25*	*0*	*50*	*0*	*5*	*0.0*	0.0	0.0	0.0	**70.8**	**57.2**	**71.0**	**0.2**

Traffic Haul Plan

Roadway Name:	*Grand*
Vehicles per day	*36,613*
Speed (mph)	*45*
Grade Adj. (dB)	*0*
Vehicle Noise Red (dB)	*0*

	Day	Eve	Night	Equiv.
Auto	75.51%	12.57%	9.34%	208.6%
MT	1.56%	0.09%	0.19%	3.7%
HT	0.64%	0.02%	0.08%	1.5%

This is the CNEL at 15 m.

	Soft CNEL(15m)	Hard CNEL(15m)
Auto	71.3	72.5
Medium Trk.	62.1	63.3
Heavy Truck	62.7	63.9
Total	72.3	73.5

To get other noise levels, Put in other distances (ft).

Dist.	Soft	Hard
100	67.7	70.4
250	61.7	66.4
300	60.5	65.7
1000	52.7	60.4

To get other distances, Put in other noise levels.

CNEL	Soft	Hard
57	515	2,199
60	325	1,102
65	151	349
70	70	110

Lot	Road Elevation	Distance To Wall	Base Of Wall	Dist. To Observer	Pad Elevation	Observer Height	Wall Height	***Barrier Reduction*** Auto	MT	HT	Grand CNEL	Truck CNEL	Total CNEL	Delta
at 50 feet	*0*	*25*	*0*	*50*	*0*	*5*	*0.0*	0.0	0.0	0.0	**72.2**	**57.2**	**72.3**	**0.1**

Traffic Haul Plan

Roadway Name:	*Valley*
Vehicles per day	*33,575*
Speed (mph)	*45*
Grade Adj. (dB)	*0*
Vehicle Noise Red (dB)	*0*

	Day	Eve	Night	Equiv.
Auto	75.51%	12.57%	9.34%	208.6%
MT	1.56%	0.09%	0.19%	3.7%
HT	0.64%	0.02%	0.08%	1.5%

This is the CNEL at 15 m.

	Soft CNEL(15m)	Hard CNEL(15m)
Auto	70.9	72.1
Medium Trk.	61.7	62.9
Heavy Truck	62.3	63.5
Total	71.9	73.1

To get other noise levels, Put in other distances (ft).

Dist.	Soft	Hard
100	67.3	70.0
250	61.3	66.1
300	60.1	65.3
1000	52.3	60.0

To get other distances, Put in other noise levels.

CNEL	Soft	Hard
57	487	2,017
60	307	1,011
65	142	320
70	66	101

Lot	Road Elevation	Distance To Wall	Base Of Wall	Dist. To Observer	Pad Elevation	Observer Height	Wall Height	***Barrier Reduction*** Auto	MT	HT	Valley CNEL	Truck CNEL	Total CNEL	Delta
at 50 feet	*0*	*25*	*0*	*50*	*0*	*5*	*0.0*	0.0	0.0	0.0	**71.8**	**57.2**	**72.0**	**0.1**

TRUCKS ONLY

Roadway Name:	*Trucks*
Vehicles per day	*160*
Speed (mph)	*45*
Grade Adj. (dB)	*0*
Vehicle Noise Red (dB)	*0*

MT (%)	*0.00%*
HT(%)	*100.00%*
Day	*100%*
Evening	*0%*
Night	*0%*

	Day	Eve	Night	Equiv.
Auto	0.00%	0.00%	0.00%	0.0%
MT	0.00%	0.00%	0.00%	0.0%
HT	100.00%	0.00%	0.00%	100.0%

This is the CNEL at 15 m.

	Soft CNEL(15m)	Hard CNEL(15m)
Auto	0.0	0.0
Medium Trk.	0.0	0.0
Heavy Truck	57.3	58.5
Total	57.3	58.5

To get other noise levels, Put in other distances (ft).

Dist.	Soft	Hard
100	52.7	55.4
250	46.7	51.5
500	42.2	48.4
1000	37.7	45.4

To get other distances, Put in other noise levels.

CNEL	Soft	Hard
57	52	70
60	33	35
65	15	11
70	7	3

Lot	Road Elevation	Distance To Wall	Base Of Wall	Dist. To Observer	Pad Elevation	Observer Height	Wall Height	***Barrier Reduction*** Auto	MT	HT	*Trucks* CNEL
At 50 feet	*0*	*25*	*0*	*50*	*0*	*5*	*0.0*	0.0	0.0	0.0	**57.2**