

Lancaster Energy Center
Los Angeles-Mojave Desert County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	47,268.70	1000sqft	1,085.14	47,268,698.40	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	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 - Construction phases per project description (18 months)

Off-road Equipment - Equipment specifications per project description

Off-road Equipment - Equipment specification per project description

Off-road Equipment - Equipment specifications from project description

Off-road Equipment - Equipment specifications per project description

Trips and VMT - Worker trips are 250 max per day per project description. Vendor trips based on 12,168 trips total (project description) divided by total of 391 construction days (18 months working 5 days/week).

Grading - Grading estimates for Gen-tie Routes 3 and 6, switching station, bike path, hydrant trenches, and array block grading conservatively estimated at up to 300 acres.

Vehicle Trips - Estimated 12 work trips per day total

Consumer Products - No consumer products proposed

Area Coating - No application of architectural coatings during operation

Energy Use - Assumes no energy use during operation

Water And Wastewater - Water use per project description

Solid Waste - estimated 1 ton solid waste/month total

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	0
tblAreaCoating	Area_Nonresidential_Exterior	23474500	0
tblAreaCoating	Area_Nonresidential_Interior	70423500	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	0	250
tblConstructionPhase	NumDays	155,000.00	196.00
tblConstructionPhase	NumDays	155,000.00	65.00
tblConstructionPhase	NumDays	6,000.00	65.00
tblConstructionPhase	PhaseStartDate	8/29/2015	8/31/2015
tblConstructionPhase	PhaseStartDate	5/30/2015	6/1/2015
tblConsumerProducts	ROG_EF	2.14E-05	1E-19

tblEnergyUse	LightingElect	3.55	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	T24E	2.75	0.00
tblEnergyUse	T24NG	14.36	0.00
tblGrading	AcresOfGrading	0.00	300.00
tblOffRoadEquipment	HorsePower	226.00	399.00
tblOffRoadEquipment	HorsePower	89.00	145.00
tblOffRoadEquipment	HorsePower	84.00	15.00
tblOffRoadEquipment	HorsePower	255.00	357.00
tblOffRoadEquipment	HorsePower	97.00	108.00
tblOffRoadEquipment	HorsePower	97.00	108.00
tblOffRoadEquipment	HorsePower	97.00	108.00
tblOffRoadEquipment	HorsePower	84.00	15.00
tblOffRoadEquipment	HorsePower	84.00	15.00
tblOffRoadEquipment	HorsePower	400.00	189.00
tblOffRoadEquipment	HorsePower	400.00	189.00
tblOffRoadEquipment	HorsePower	400.00	189.00
tblOffRoadEquipment	HorsePower	400.00	189.00
tblOffRoadEquipment	HorsePower	171.00	47.00
tblOffRoadEquipment	HorsePower	80.00	95.00
tblOffRoadEquipment	HorsePower	100.00	93.00
tblOffRoadEquipment	HorsePower	255.00	357.00
tblOffRoadEquipment	HorsePower	97.00	108.00
tblOffRoadEquipment	HorsePower	80.00	63.00
tblOffRoadEquipment	HorsePower	80.00	63.00
tblOffRoadEquipment	LoadFactor	0.29	0.43
tblOffRoadEquipment	LoadFactor	0.20	0.30

tblOffRoadEquipment	LoadFactor	0.74	0.50
tblOffRoadEquipment	LoadFactor	0.40	0.59
tblOffRoadEquipment	LoadFactor	0.37	0.55
tblOffRoadEquipment	LoadFactor	0.37	0.55
tblOffRoadEquipment	LoadFactor	0.37	0.55
tblOffRoadEquipment	LoadFactor	0.74	0.50
tblOffRoadEquipment	LoadFactor	0.74	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.42	0.40
tblOffRoadEquipment	LoadFactor	0.38	0.56
tblOffRoadEquipment	LoadFactor	0.40	0.60
tblOffRoadEquipment	LoadFactor	0.40	0.59
tblOffRoadEquipment	LoadFactor	0.37	0.55
tblOffRoadEquipment	LoadFactor	0.50	0.75
tblOffRoadEquipment	LoadFactor	0.50	0.75
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	OperationalYear	2014	2016

tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	58,216.76	0.00
tblTripsAndVMT	VendorTripNumber	0.00	31.00
tblTripsAndVMT	VendorTripNumber	0.00	31.00
tblTripsAndVMT	VendorTripNumber	7,695.00	31.00
tblTripsAndVMT	VendorTripNumber	7,695.00	31.00
tblTripsAndVMT	WorkerTripNumber	19,719.00	250.00
tblTripsAndVMT	WorkerTripNumber	19,719.00	250.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	2.5387e-004
tblWater	IndoorWaterUseRate	10,856,956,250.00	0.00
tblWater	OutdoorWaterUseRate	0.00	2,933,000.00

2.0 Emissions Summary

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	0.0434	4.2700e-003	0.4455	3.0000e-005		1.6100e-003	1.6100e-003		1.6100e-003	1.6100e-003	0.0000	0.8446	0.8446	2.3900e-003	0.0000	0.8949
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	6.7800e-003	0.0181	0.0970	1.7000e-004	0.0125	1.9000e-004	0.0127	3.3200e-003	1.8000e-004	3.5000e-003	0.0000	13.4359	13.4359	7.1000e-004	0.0000	13.4509
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	9.3249	9.3249	4.3000e-004	9.0000e-005	9.3614
Total	0.0502	0.0224	0.5425	2.0000e-004	0.0125	1.8000e-003	0.0143	3.3200e-003	1.7900e-003	5.1100e-003	0.0000	23.6055	23.6055	3.5300e-003	9.0000e-005	23.7071

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0434	4.2700e-003	0.4455	3.0000e-005		1.6100e-003	1.6100e-003		1.6100e-003	1.6100e-003	0.0000	0.8446	0.8446	2.3900e-003	0.0000	0.8949
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	6.7800e-003	0.0181	0.0970	1.7000e-004	0.0125	1.9000e-004	0.0127	3.3200e-003	1.8000e-004	3.5000e-003	0.0000	13.4359	13.4359	7.1000e-004	0.0000	13.4509
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	9.3249	9.3249	4.3000e-004	9.0000e-005	9.3614
Total	0.0502	0.0224	0.5425	2.0000e-004	0.0125	1.8000e-003	0.0143	3.3200e-003	1.7900e-003	5.1100e-003	0.0000	23.6055	23.6055	3.5300e-003	9.0000e-005	23.7071

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2015	5/29/2015	5	65	
2	Trenching	Trenching	6/1/2015	8/28/2015	5	65	
3	PV Installation	Building Construction	8/31/2015	5/30/2016	5	196	
4	Gen-Tie, Trail, Vegetation Install	Building Construction	5/31/2016	8/29/2016	5	65	

Acres of Grading (Site Preparation Phase): 300

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Generator Sets	2	2.00	15	0.50
Site Preparation	Off-Highway Trucks	4	8.00	189	0.50
Site Preparation	Rollers	1	8.00	95	0.56
Site Preparation	Rough Terrain Forklifts	1	8.00	93	0.60
Site Preparation	Rubber Tired Dozers	2	6.00	357	0.59
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	108	0.55
Trenching	Generator Sets	2	2.00	15	0.50
Trenching	Off-Highway Trucks	4	8.00	189	0.50
Trenching	Tractors/Loaders/Backhoes	2	7.00	108	0.55
Trenching	Trenchers	2	8.00	63	0.75
PV Installation	Cranes	1	7.00	399	0.43
PV Installation	Forklifts	2	8.00	145	0.30
PV Installation	Generator Sets	2	2.00	15	0.50
PV Installation	Off-Highway Trucks	4	8.00	189	0.50
PV Installation	Other Construction Equipment	8	6.00	47	0.40
PV Installation	Tractors/Loaders/Backhoes	1	7.00	108	0.55
PV Installation	Welders	1	8.00	46	0.45
Gen-Tie, Trail, Vegetation Install	Cranes	1	7.00	226	0.29
Gen-Tie, Trail, Vegetation Install	Forklifts	3	8.00	89	0.20
Gen-Tie, Trail, Vegetation Install	Generator Sets	1	8.00	84	0.74
Gen-Tie, Trail, Vegetation Install	Off-Highway Trucks	2	8.00	189	0.50
Gen-Tie, Trail, Vegetation Install	Rubber Tired Dozers	1	6.00	357	0.59
Gen-Tie, Trail, Vegetation Install	Tractors/Loaders/Backhoes	1	7.00	108	0.55
Gen-Tie, Trail, Vegetation Install	Trenchers	2	8.00	63	0.75
Gen-Tie, Trail, Vegetation Install	Welders	1	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 Preparation	12	30.00	31.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	10	25.00	31.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
PV Installation	19	250.00	31.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Gen-Tie, Trail, Vegetation Install	12	250.00	31.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

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					0.4527	0.0000	0.4527	0.1786	0.0000	0.1786	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2979	3.2464	1.9767	2.5600e-003		0.1648	0.1648		0.1516	0.1516	0.0000	243.2444	243.2444	0.0724	0.0000	244.7652
Total	0.2979	3.2464	1.9767	2.5600e-003	0.4527	0.1648	0.6174	0.1786	0.1516	0.3302	0.0000	243.2444	243.2444	0.0724	0.0000	244.7652

3.2 Site Preparation - 2015

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	0.0137	0.0914	0.1891	2.0000e-004	5.8000e-003	1.3500e-003	7.1500e-003	1.6400e-003	1.2400e-003	2.8800e-003	0.0000	18.4971	18.4971	1.4000e-004	0.0000	18.5000
Worker	4.9200e-003	9.2400e-003	0.0950	1.5000e-004	0.0122	1.1000e-004	0.0123	3.2400e-003	1.0000e-004	3.3400e-003	0.0000	11.5925	11.5925	7.8000e-004	0.0000	11.6089
Total	0.0187	0.1007	0.2841	3.5000e-004	0.0180	1.4600e-003	0.0195	4.8800e-003	1.3400e-003	6.2200e-003	0.0000	30.0895	30.0895	9.2000e-004	0.0000	30.1089

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					0.4527	0.0000	0.4527	0.1786	0.0000	0.1786	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2979	3.2464	1.9767	2.5600e-003		0.1648	0.1648		0.1516	0.1516	0.0000	243.2441	243.2441	0.0724	0.0000	244.7649
Total	0.2979	3.2464	1.9767	2.5600e-003	0.4527	0.1648	0.6174	0.1786	0.1516	0.3302	0.0000	243.2441	243.2441	0.0724	0.0000	244.7649

3.2 Site Preparation - 2015

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	0.0137	0.0914	0.1891	2.0000e-004	5.8000e-003	1.3500e-003	7.1500e-003	1.6400e-003	1.2400e-003	2.8800e-003	0.0000	18.4971	18.4971	1.4000e-004	0.0000	18.5000
Worker	4.9200e-003	9.2400e-003	0.0950	1.5000e-004	0.0122	1.1000e-004	0.0123	3.2400e-003	1.0000e-004	3.3400e-003	0.0000	11.5925	11.5925	7.8000e-004	0.0000	11.6089
Total	0.0187	0.1007	0.2841	3.5000e-004	0.0180	1.4600e-003	0.0195	4.8800e-003	1.3400e-003	6.2200e-003	0.0000	30.0895	30.0895	9.2000e-004	0.0000	30.1089

3.3 Trenching - 2015

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	0.1824	1.8588	0.8653	1.6200e-003		0.1054	0.1054		0.0971	0.0971	0.0000	154.2153	154.2153	0.0458	0.0000	155.1779
Total	0.1824	1.8588	0.8653	1.6200e-003		0.1054	0.1054		0.0971	0.0971	0.0000	154.2153	154.2153	0.0458	0.0000	155.1779

3.3 Trenching - 2015

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	0.0000
Vendor	0.0137	0.0914	0.1891	2.0000e-004	5.8000e-003	1.3500e-003	7.1500e-003	1.6400e-003	1.2400e-003	2.8800e-003	0.0000	18.4971	18.4971	1.4000e-004	0.0000	18.5000	
Worker	4.1000e-003	7.7000e-003	0.0792	1.2000e-004	0.0102	9.0000e-005	0.0103	2.7000e-003	8.0000e-005	2.7800e-003	0.0000	9.6604	9.6604	6.5000e-004	0.0000	9.6741	
Total	0.0178	0.0991	0.2683	3.2000e-004	0.0160	1.4400e-003	0.0174	4.3400e-003	1.3200e-003	5.6600e-003	0.0000	28.1574	28.1574	7.9000e-004	0.0000	28.1741	

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	0.1824	1.8588	0.8653	1.6200e-003		0.1054	0.1054		0.0971	0.0971	0.0000	154.2151	154.2151	0.0458	0.0000	155.1777
Total	0.1824	1.8588	0.8653	1.6200e-003		0.1054	0.1054		0.0971	0.0971	0.0000	154.2151	154.2151	0.0458	0.0000	155.1777

3.3 Trenching - 2015

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	0.0000
Vendor	0.0137	0.0914	0.1891	2.0000e-004	5.8000e-003	1.3500e-003	7.1500e-003	1.6400e-003	1.2400e-003	2.8800e-003	0.0000	18.4971	18.4971	1.4000e-004	0.0000	18.5000	
Worker	4.1000e-003	7.7000e-003	0.0792	1.2000e-004	0.0102	9.0000e-005	0.0103	2.7000e-003	8.0000e-005	2.7800e-003	0.0000	9.6604	9.6604	6.5000e-004	0.0000	9.6741	
Total	0.0178	0.0991	0.2683	3.2000e-004	0.0160	1.4400e-003	0.0174	4.3400e-003	1.3200e-003	5.6600e-003	0.0000	28.1574	28.1574	7.9000e-004	0.0000	28.1741	

3.4 PV Installation - 2015

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	0.4042	3.5077	2.0486	3.1600e-003		0.1897	0.1897		0.1751	0.1751	0.0000	298.0519	298.0519	0.0885	0.0000	299.9099
Total	0.4042	3.5077	2.0486	3.1600e-003		0.1897	0.1897		0.1751	0.1751	0.0000	298.0519	298.0519	0.0885	0.0000	299.9099

3.4 PV Installation - 2015

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	0.0188	0.1252	0.2589	2.8000e-004	7.9400e-003	1.8500e-003	9.7900e-003	2.2400e-003	1.7000e-003	3.9400e-003	0.0000	25.3267	25.3267	1.9000e-004	0.0000	25.3307
Worker	0.0562	0.1055	1.0841	1.7000e-003	0.1393	1.2400e-003	0.1406	0.0370	1.1300e-003	0.0381	0.0000	132.2730	132.2730	8.9400e-003	0.0000	132.4606
Total	0.0750	0.2306	1.3431	1.9800e-003	0.1473	3.0900e-003	0.1503	0.0392	2.8300e-003	0.0421	0.0000	157.5997	157.5997	9.1300e-003	0.0000	157.7914

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	0.4042	3.5077	2.0486	3.1600e-003		0.1897	0.1897		0.1751	0.1751	0.0000	298.0515	298.0515	0.0885	0.0000	299.9095
Total	0.4042	3.5077	2.0486	3.1600e-003		0.1897	0.1897		0.1751	0.1751	0.0000	298.0515	298.0515	0.0885	0.0000	299.9095

3.4 PV Installation - 2015

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	0.0188	0.1252	0.2589	2.8000e-004	7.9400e-003	1.8500e-003	9.7900e-003	2.2400e-003	1.7000e-003	3.9400e-003	0.0000	25.3267	25.3267	1.9000e-004	0.0000	25.3307
Worker	0.0562	0.1055	1.0841	1.7000e-003	0.1393	1.2400e-003	0.1406	0.0370	1.1300e-003	0.0381	0.0000	132.2730	132.2730	8.9400e-003	0.0000	132.4606
Total	0.0750	0.2306	1.3431	1.9800e-003	0.1473	3.0900e-003	0.1503	0.0392	2.8300e-003	0.0421	0.0000	157.5997	157.5997	9.1300e-003	0.0000	157.7914

3.4 PV Installation - 2016

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	0.4606	3.9390	2.3881	3.8000e-003		0.2129	0.2129		0.1965	0.1965	0.0000	354.7072	354.7072	0.1061	0.0000	356.9344
Total	0.4606	3.9390	2.3881	3.8000e-003		0.2129	0.2129		0.1965	0.1965	0.0000	354.7072	354.7072	0.1061	0.0000	356.9344

3.4 PV Installation - 2016

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	0.0000
Vendor	0.0208	0.1309	0.2947	3.3000e-004	9.5500e-003	1.9300e-003	0.0115	2.7000e-003	1.7800e-003	4.4700e-003	0.0000	30.1009	30.1009	2.2000e-004	0.0000	30.1054	
Worker	0.0588	0.1136	1.1674	2.0400e-003	0.1675	1.4100e-003	0.1689	0.0445	1.2900e-003	0.0458	0.0000	153.3548	153.3548	9.8400e-003	0.0000	153.5614	
Total	0.0796	0.2446	1.4621	2.3700e-003	0.1770	3.3400e-003	0.1804	0.0472	3.0700e-003	0.0502	0.0000	183.4557	183.4557	0.0101	0.0000	183.6668	

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	0.4606	3.9390	2.3881	3.8000e-003		0.2129	0.2129		0.1965	0.1965	0.0000	354.7068	354.7068	0.1061	0.0000	356.9340
Total	0.4606	3.9390	2.3881	3.8000e-003		0.2129	0.2129		0.1965	0.1965	0.0000	354.7068	354.7068	0.1061	0.0000	356.9340

3.4 PV Installation - 2016

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	0.0208	0.1309	0.2947	3.3000e-004	9.5500e-003	1.9300e-003	0.0115	2.7000e-003	1.7800e-003	4.4700e-003	0.0000	30.1009	30.1009	2.2000e-004	0.0000	30.1054
Worker	0.0588	0.1136	1.1674	2.0400e-003	0.1675	1.4100e-003	0.1689	0.0445	1.2900e-003	0.0458	0.0000	153.3548	153.3548	9.8400e-003	0.0000	153.5614
Total	0.0796	0.2446	1.4621	2.3700e-003	0.1770	3.3400e-003	0.1804	0.0472	3.0700e-003	0.0502	0.0000	183.4557	183.4557	0.0101	0.0000	183.6668

3.5 Gen-Tie, Trail, Vegetation Install - 2016

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	0.2510	2.3969	1.4506	1.9900e-003		0.1387	0.1387		0.1288	0.1288	0.0000	184.0753	184.0753	0.0513	0.0000	185.1527
Total	0.2510	2.3969	1.4506	1.9900e-003		0.1387	0.1387		0.1288	0.1288	0.0000	184.0753	184.0753	0.0513	0.0000	185.1527

3.5 Gen-Tie, Trail, Vegetation Install - 2016

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	0.0126	0.0795	0.1790	2.0000e-004	5.8000e-003	1.1700e-003	6.9700e-003	1.6400e-003	1.0800e-003	2.7200e-003	0.0000	18.2856	18.2856	1.3000e-004	0.0000	18.2883
Worker	0.0357	0.0690	0.7092	1.2400e-003	0.1017	8.6000e-004	0.1026	0.0270	7.8000e-004	0.0278	0.0000	93.1595	93.1595	5.9800e-003	0.0000	93.2849
Total	0.0484	0.1486	0.8882	1.4400e-003	0.1075	2.0300e-003	0.1096	0.0287	1.8600e-003	0.0305	0.0000	111.4450	111.4450	6.1100e-003	0.0000	111.5733

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	0.2510	2.3969	1.4506	1.9900e-003		0.1387	0.1387		0.1288	0.1288	0.0000	184.0751	184.0751	0.0513	0.0000	185.1524
Total	0.2510	2.3969	1.4506	1.9900e-003		0.1387	0.1387		0.1288	0.1288	0.0000	184.0751	184.0751	0.0513	0.0000	185.1524

3.5 Gen-Tie, Trail, Vegetation Install - 2016

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	0.0126	0.0795	0.1790	2.0000e-004	5.8000e-003	1.1700e-003	6.9700e-003	1.6400e-003	1.0800e-003	2.7200e-003	0.0000	18.2856	18.2856	1.3000e-004	0.0000	18.2883
Worker	0.0357	0.0690	0.7092	1.2400e-003	0.1017	8.6000e-004	0.1026	0.0270	7.8000e-004	0.0278	0.0000	93.1595	93.1595	5.9800e-003	0.0000	93.2849
Total	0.0484	0.1486	0.8882	1.4400e-003	0.1075	2.0300e-003	0.1096	0.0287	1.8600e-003	0.0305	0.0000	111.4450	111.4450	6.1100e-003	0.0000	111.5733

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	6.7800e-003	0.0181	0.0970	1.7000e-004	0.0125	1.9000e-004	0.0127	3.3200e-003	1.8000e-004	3.5000e-003	0.0000	13.4359	13.4359	7.1000e-004	0.0000	13.4509
Unmitigated	6.7800e-003	0.0181	0.0970	1.7000e-004	0.0125	1.9000e-004	0.0127	3.3200e-003	1.8000e-004	3.5000e-003	0.0000	13.4359	13.4359	7.1000e-004	0.0000	13.4509

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	12.00	0.00	0.00	33,115	33,115
Total	12.00	0.00	0.00	33,115	33,115

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
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.486685	0.070911	0.172614	0.163811	0.062980	0.009896	0.005016	0.012126	0.001124	0.001040	0.007729	0.000709	0.005359

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
General Light Industry	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	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	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		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	tons/yr										MT/yr					
Mitigated	0.0434	4.2700e-003	0.4455	3.0000e-005		1.6100e-003	1.6100e-003		1.6100e-003	1.6100e-003	0.0000	0.8446	0.8446	2.3900e-003	0.0000	0.8949
Unmitigated	0.0434	4.2700e-003	0.4455	3.0000e-005		1.6100e-003	1.6100e-003		1.6100e-003	1.6100e-003	0.0000	0.8446	0.8446	2.3900e-003	0.0000	0.8949

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0434	4.2700e-003	0.4455	3.0000e-005		1.6100e-003	1.6100e-003		1.6100e-003	1.6100e-003	0.0000	0.8446	0.8446	2.3900e-003	0.0000	0.8949
Total	0.0434	4.2700e-003	0.4455	3.0000e-005		1.6100e-003	1.6100e-003		1.6100e-003	1.6100e-003	0.0000	0.8446	0.8446	2.3900e-003	0.0000	0.8949

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					
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0434	4.2700e-003	0.4455	3.0000e-005		1.6100e-003	1.6100e-003		1.6100e-003	1.6100e-003	0.0000	0.8446	0.8446	2.3900e-003	0.0000	0.8949
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0434	4.2700e-003	0.4455	3.0000e-005		1.6100e-003	1.6100e-003		1.6100e-003	1.6100e-003	0.0000	0.8446	0.8446	2.3900e-003	0.0000	0.8949

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.3249	4.3000e-004	9.0000e-005	9.3614
Unmitigated	9.3249	4.3000e-004	9.0000e-005	9.3614

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 2.933	9.3249	4.3000e-004	9.0000e-005	9.3614
Total		9.3249	4.3000e-004	9.0000e-005	9.3614

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 2.933	9.3249	4.3000e-004	9.0000e-005	9.3614
Total		9.3249	4.3000e-004	9.0000e-005	9.3614

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			
General Light Industry	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			
General Light Industry	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
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10.0 Vegetation

Lancaster Energy Center
Los Angeles-Mojave Desert County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	47,268.70	1000sqft	1,085.14	47,268,698.40	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	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 - Construction phases per project description (18 months)

Off-road Equipment - Equipment specifications per project description

Off-road Equipment - Equipment specification per project description

Off-road Equipment - Equipment specifications from project description

Off-road Equipment - Equipment specifications per project description

Trips and VMT - Worker trips are 250 max per day per project description. Vendor trips based on 12,168 trips total (project description) divided by total of 391 construction days (18 months working 5 days/week).

Grading - Grading estimates for Gen-tie Routes 3 and 6, switching station, bike path, hydrant trenches, and array block grading conservatively estimated at up to 300 acres.

Vehicle Trips - Estimated 12 work trips per day total

Consumer Products - No consumer products proposed

Area Coating - No application of architectural coatings during operation

Energy Use - Assumes no energy use during operation

Water And Wastewater - Water use per project description

Solid Waste - estimated 1 ton solid waste/month total

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	0
tblAreaCoating	Area_Nonresidential_Exterior	23474500	0
tblAreaCoating	Area_Nonresidential_Interior	70423500	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	0	250
tblConstructionPhase	NumDays	155,000.00	196.00
tblConstructionPhase	NumDays	155,000.00	65.00
tblConstructionPhase	NumDays	6,000.00	65.00
tblConstructionPhase	PhaseStartDate	8/29/2015	8/31/2015
tblConstructionPhase	PhaseStartDate	5/30/2015	6/1/2015
tblConsumerProducts	ROG_EF	2.14E-05	1E-19

tblEnergyUse	LightingElect	3.55	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	T24E	2.75	0.00
tblEnergyUse	T24NG	14.36	0.00
tblGrading	AcresOfGrading	0.00	300.00
tblOffRoadEquipment	HorsePower	226.00	399.00
tblOffRoadEquipment	HorsePower	89.00	145.00
tblOffRoadEquipment	HorsePower	84.00	15.00
tblOffRoadEquipment	HorsePower	255.00	357.00
tblOffRoadEquipment	HorsePower	97.00	108.00
tblOffRoadEquipment	HorsePower	97.00	108.00
tblOffRoadEquipment	HorsePower	97.00	108.00
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tblOffRoadEquipment	HorsePower	171.00	47.00
tblOffRoadEquipment	HorsePower	80.00	95.00
tblOffRoadEquipment	HorsePower	100.00	93.00
tblOffRoadEquipment	HorsePower	255.00	357.00
tblOffRoadEquipment	HorsePower	97.00	108.00
tblOffRoadEquipment	HorsePower	80.00	63.00
tblOffRoadEquipment	HorsePower	80.00	63.00
tblOffRoadEquipment	LoadFactor	0.29	0.43
tblOffRoadEquipment	LoadFactor	0.20	0.30

tblOffRoadEquipment	LoadFactor	0.74	0.50
tblOffRoadEquipment	LoadFactor	0.40	0.59
tblOffRoadEquipment	LoadFactor	0.37	0.55
tblOffRoadEquipment	LoadFactor	0.37	0.55
tblOffRoadEquipment	LoadFactor	0.37	0.55
tblOffRoadEquipment	LoadFactor	0.74	0.50
tblOffRoadEquipment	LoadFactor	0.74	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.42	0.40
tblOffRoadEquipment	LoadFactor	0.38	0.56
tblOffRoadEquipment	LoadFactor	0.40	0.60
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tblOffRoadEquipment	LoadFactor	0.50	0.75
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	OperationalYear	2014	2016

tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	58,216.76	0.00
tblTripsAndVMT	VendorTripNumber	0.00	31.00
tblTripsAndVMT	VendorTripNumber	0.00	31.00
tblTripsAndVMT	VendorTripNumber	7,695.00	31.00
tblTripsAndVMT	VendorTripNumber	7,695.00	31.00
tblTripsAndVMT	WorkerTripNumber	19,719.00	250.00
tblTripsAndVMT	WorkerTripNumber	19,719.00	250.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	2.5387e-004
tblWater	IndoorWaterUseRate	10,856,956,250.00	0.00
tblWater	OutdoorWaterUseRate	0.00	2,933,000.00

2.0 Emissions Summary

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	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0574	0.1272	0.8140	1.4400e-003	0.0977	1.4700e-003	0.0992	0.0260	1.3500e-003	0.0274		123.4617	123.4617	6.0300e-003		123.5883
Total	0.5400	0.1746	5.7642	1.8000e-003	0.0977	0.0193	0.1171	0.0260	0.0192	0.0453		133.8066	133.8066	0.0353	0.0000	134.5483

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	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0574	0.1272	0.8140	1.4400e-003	0.0977	1.4700e-003	0.0992	0.0260	1.3500e-003	0.0274		123.4617	123.4617	6.0300e-003		123.5883
Total	0.5400	0.1746	5.7642	1.8000e-003	0.0977	0.0193	0.1171	0.0260	0.0192	0.0453		133.8066	133.8066	0.0353	0.0000	134.5483

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2015	5/29/2015	5	65	
2	Trenching	Trenching	6/1/2015	8/28/2015	5	65	
3	PV Installation	Building Construction	8/31/2015	5/30/2016	5	196	
4	Gen-Tie, Trail, Vegetation Install	Building Construction	5/31/2016	8/29/2016	5	65	

Acres of Grading (Site Preparation Phase): 300

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Generator Sets	2	2.00	15	0.50
Site Preparation	Off-Highway Trucks	4	8.00	189	0.50
Site Preparation	Rollers	1	8.00	95	0.56
Site Preparation	Rough Terrain Forklifts	1	8.00	93	0.60
Site Preparation	Rubber Tired Dozers	2	6.00	357	0.59
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	108	0.55
Trenching	Generator Sets	2	2.00	15	0.50
Trenching	Off-Highway Trucks	4	8.00	189	0.50
Trenching	Tractors/Loaders/Backhoes	2	7.00	108	0.55
Trenching	Trenchers	2	8.00	63	0.75
PV Installation	Cranes	1	7.00	399	0.43
PV Installation	Forklifts	2	8.00	145	0.30
PV Installation	Generator Sets	2	2.00	15	0.50
PV Installation	Off-Highway Trucks	4	8.00	189	0.50
PV Installation	Other Construction Equipment	8	6.00	47	0.40
PV Installation	Tractors/Loaders/Backhoes	1	7.00	108	0.55
PV Installation	Welders	1	8.00	46	0.45
Gen-Tie, Trail, Vegetation Install	Cranes	1	7.00	226	0.29
Gen-Tie, Trail, Vegetation Install	Forklifts	3	8.00	89	0.20
Gen-Tie, Trail, Vegetation Install	Generator Sets	1	8.00	84	0.74
Gen-Tie, Trail, Vegetation Install	Off-Highway Trucks	2	8.00	189	0.50
Gen-Tie, Trail, Vegetation Install	Rubber Tired Dozers	1	6.00	357	0.59
Gen-Tie, Trail, Vegetation Install	Tractors/Loaders/Backhoes	1	7.00	108	0.55
Gen-Tie, Trail, Vegetation Install	Trenchers	2	8.00	63	0.75
Gen-Tie, Trail, Vegetation Install	Welders	1	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 Preparation	12	30.00	31.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	10	25.00	31.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
PV Installation	19	250.00	31.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Gen-Tie, Trail, Vegetation Install	12	250.00	31.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

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					13.9278	0.0000	13.9278	5.4938	0.0000	5.4938			0.0000			0.0000
Off-Road	9.1662	99.8904	60.8200	0.0787		5.0694	5.0694		4.6653	4.6653		8,250.187 2	8,250.187 2	2.4562		8,301.768 1
Total	9.1662	99.8904	60.8200	0.0787	13.9278	5.0694	18.9971	5.4938	4.6653	10.1591		8,250.187 2	8,250.187 2	2.4562		8,301.768 1

3.2 Site Preparation - 2015

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	0.3815	2.6619	4.5635	6.2600e-003	0.1815	0.0413	0.2228	0.0512	0.0380	0.0891		629.7641	629.7641	4.6700e-003			629.8621
Worker	0.1719	0.2525	3.3812	5.0500e-003	0.3832	3.3500e-003	0.3865	0.1016	3.0600e-003	0.1047		432.6717	432.6717	0.0266			433.2296
Total	0.5533	2.9144	7.9447	0.0113	0.5647	0.0447	0.6094	0.1528	0.0410	0.1938		1,062.4358	1,062.4358	0.0312			1,063.0917

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					13.9278	0.0000	13.9278	5.4938	0.0000	5.4938			0.0000			0.0000	
Off-Road	9.1662	99.8904	60.8200	0.0787		5.0694	5.0694		4.6653	4.6653	0.0000	8,250.1872	8,250.1872	2.4562			8,301.7681
Total	9.1662	99.8904	60.8200	0.0787	13.9278	5.0694	18.9971	5.4938	4.6653	10.1591	0.0000	8,250.1872	8,250.1872	2.4562			8,301.7681

3.2 Site Preparation - 2015

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	0.3815	2.6619	4.5635	6.2600e-003	0.1815	0.0413	0.2228	0.0512	0.0380	0.0891		629.7641	629.7641	4.6700e-003			629.8621
Worker	0.1719	0.2525	3.3812	5.0500e-003	0.3832	3.3500e-003	0.3865	0.1016	3.0600e-003	0.1047		432.6717	432.6717	0.0266			433.2296
Total	0.5533	2.9144	7.9447	0.0113	0.5647	0.0447	0.6094	0.1528	0.0410	0.1938		1,062.4358	1,062.4358	0.0312			1,063.0917

3.3 Trenching - 2015

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	5.6110	57.1943	26.6245	0.0500		3.2442	3.2442		2.9862	2.9862		5,230.5606	5,230.5606	1.5548			5,263.2104
Total	5.6110	57.1943	26.6245	0.0500		3.2442	3.2442		2.9862	2.9862		5,230.5606	5,230.5606	1.5548			5,263.2104

3.3 Trenching - 2015

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	0.3815	2.6619	4.5635	6.2600e-003	0.1815	0.0413	0.2228	0.0512	0.0380	0.0891		629.7641	629.7641	4.6700e-003			629.8621
Worker	0.1432	0.2104	2.8177	4.2100e-003	0.3193	2.7900e-003	0.3221	0.0847	2.5500e-003	0.0872		360.5597	360.5597	0.0221			361.0247
Total	0.5247	2.8724	7.3812	0.0105	0.5008	0.0441	0.5449	0.1358	0.0405	0.1764		990.3238	990.3238	0.0268			990.8868

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	5.6110	57.1943	26.6245	0.0500		3.2442	3.2442		2.9862	2.9862	0.0000	5,230.5606	5,230.5606	1.5548			5,263.2104
Total	5.6110	57.1943	26.6245	0.0500		3.2442	3.2442		2.9862	2.9862	0.0000	5,230.5606	5,230.5606	1.5548			5,263.2104

3.3 Trenching - 2015

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	0.3815	2.6619	4.5635	6.2600e-003	0.1815	0.0413	0.2228	0.0512	0.0380	0.0891		629.7641	629.7641	4.6700e-003			629.8621
Worker	0.1432	0.2104	2.8177	4.2100e-003	0.3193	2.7900e-003	0.3221	0.0847	2.5500e-003	0.0872		360.5597	360.5597	0.0221			361.0247
Total	0.5247	2.8724	7.3812	0.0105	0.5008	0.0441	0.5449	0.1358	0.0405	0.1764		990.3238	990.3238	0.0268			990.8868

3.4 PV Installation - 2015

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	9.0832	78.8236	46.0359	0.0710		4.2621	4.2621		3.9352	3.9352		7,383.0546	7,383.0546	2.1916			7,429.0791
Total	9.0832	78.8236	46.0359	0.0710		4.2621	4.2621		3.9352	3.9352		7,383.0546	7,383.0546	2.1916			7,429.0791

3.4 PV Installation - 2015

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	0.3815	2.6619	4.5635	6.2600e-003	0.1815	0.0413	0.2228	0.0512	0.0380	0.0891		629.7641	629.7641	4.6700e-003			629.8621
Worker	1.4323	2.1041	28.1767	0.0421	3.1933	0.0279	3.2212	0.8468	0.0255	0.8723		3,605.5974	3,605.5974	0.2214			3,610.2465
Total	1.8137	4.7660	32.7402	0.0483	3.3748	0.0692	3.4440	0.8980	0.0635	0.9615		4,235.3615	4,235.3615	0.2261			4,240.1086

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	9.0832	78.8236	46.0359	0.0710		4.2621	4.2621		3.9352	3.9352	0.0000	7,383.0546	7,383.0546	2.1916			7,429.0791
Total	9.0832	78.8236	46.0359	0.0710		4.2621	4.2621		3.9352	3.9352	0.0000	7,383.0546	7,383.0546	2.1916			7,429.0791

3.4 PV Installation - 2015

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	0.3815	2.6619	4.5635	6.2600e-003	0.1815	0.0413	0.2228	0.0512	0.0380	0.0891		629.7641	629.7641	4.6700e-003			629.8621
Worker	1.4323	2.1041	28.1767	0.0421	3.1933	0.0279	3.2212	0.8468	0.0255	0.8723		3,605.5974	3,605.5974	0.2214			3,610.2465
Total	1.8137	4.7660	32.7402	0.0483	3.3748	0.0692	3.4440	0.8980	0.0635	0.9615		4,235.3615	4,235.3615	0.2261			4,240.1086

3.4 PV Installation - 2016

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	8.6084	73.6260	44.6365	0.0710		3.9793	3.9793		3.6737	3.6737		7,308.3696	7,308.3696	2.1852			7,354.2593
Total	8.6084	73.6260	44.6365	0.0710		3.9793	3.9793		3.6737	3.6737		7,308.3696	7,308.3696	2.1852			7,354.2593

3.4 PV Installation - 2016

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	0.3507	2.3177	4.2905	6.2500e-003	0.1815	0.0359	0.2175	0.0512	0.0330	0.0842		622.5744	622.5744	4.3900e-003			622.6665
Worker	1.2575	1.8878	25.3396	0.0420	3.1933	0.0263	3.2196	0.8468	0.0241	0.8710		3,477.5834	3,477.5834	0.2027			3,481.8396
Total	1.6082	4.2054	29.6301	0.0483	3.3748	0.0623	3.4370	0.8980	0.0572	0.9552		4,100.1577	4,100.1577	0.2071			4,104.5062

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	8.6084	73.6260	44.6365	0.0710		3.9793	3.9793		3.6737	3.6737	0.0000	7,308.3696	7,308.3696	2.1852			7,354.2593
Total	8.6084	73.6260	44.6365	0.0710		3.9793	3.9793		3.6737	3.6737	0.0000	7,308.3696	7,308.3696	2.1852			7,354.2593

3.4 PV Installation - 2016

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	0.3507	2.3177	4.2905	6.2500e-003	0.1815	0.0359	0.2175	0.0512	0.0330	0.0842		622.5744	622.5744	4.3900e-003			622.6665
Worker	1.2575	1.8878	25.3396	0.0420	3.1933	0.0263	3.2196	0.8468	0.0241	0.8710		3,477.5834	3,477.5834	0.2027			3,481.8396
Total	1.6082	4.2054	29.6301	0.0483	3.3748	0.0623	3.4370	0.8980	0.0572	0.9552		4,100.1577	4,100.1577	0.2071			4,104.5062

3.5 Gen-Tie, Trail, Vegetation Install - 2016

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	7.7223	73.7502	44.6324	0.0612		4.2668	4.2668		3.9639	3.9639		6,243.3311	6,243.3311	1.7401			6,279.8730
Total	7.7223	73.7502	44.6324	0.0612		4.2668	4.2668		3.9639	3.9639		6,243.3311	6,243.3311	1.7401			6,279.8730

3.5 Gen-Tie, Trail, Vegetation Install - 2016

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	0.3507	2.3177	4.2905	6.2500e-003	0.1815	0.0359	0.2175	0.0512	0.0330	0.0842		622.5744	622.5744	4.3900e-003			622.6665
Worker	1.2575	1.8878	25.3396	0.0420	3.1933	0.0263	3.2196	0.8468	0.0241	0.8710		3,477.5834	3,477.5834	0.2027			3,481.8396
Total	1.6082	4.2054	29.6301	0.0483	3.3748	0.0623	3.4370	0.8980	0.0572	0.9552		4,100.1577	4,100.1577	0.2071			4,104.5062

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	7.7223	73.7502	44.6324	0.0612		4.2668	4.2668		3.9639	3.9639	0.0000	6,243.3311	6,243.3311	1.7401			6,279.8730
Total	7.7223	73.7502	44.6324	0.0612		4.2668	4.2668		3.9639	3.9639	0.0000	6,243.3311	6,243.3311	1.7401			6,279.8730

3.5 Gen-Tie, Trail, Vegetation Install - 2016

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	0.3507	2.3177	4.2905	6.2500e-003	0.1815	0.0359	0.2175	0.0512	0.0330	0.0842		622.5744	622.5744	4.3900e-003		622.6665
Worker	1.2575	1.8878	25.3396	0.0420	3.1933	0.0263	3.2196	0.8468	0.0241	0.8710		3,477.5834	3,477.5834	0.2027		3,481.8396
Total	1.6082	4.2054	29.6301	0.0483	3.3748	0.0623	3.4370	0.8980	0.0572	0.9552		4,100.1577	4,100.1577	0.2071		4,104.5062

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	0.0574	0.1272	0.8140	1.4400e-003	0.0977	1.4700e-003	0.0992	0.0260	1.3500e-003	0.0274		123.4617	123.4617	6.0300e-003		123.5883
Unmitigated	0.0574	0.1272	0.8140	1.4400e-003	0.0977	1.4700e-003	0.0992	0.0260	1.3500e-003	0.0274		123.4617	123.4617	6.0300e-003		123.5883

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	12.00	0.00	0.00	33,115	33,115
Total	12.00	0.00	0.00	33,115	33,115

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
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.486685	0.070911	0.172614	0.163811	0.062980	0.009896	0.005016	0.012126	0.001124	0.001040	0.007729	0.000709	0.005359

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	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					
General Light Industry	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					
General Light Industry	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	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600
Unmitigated	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600

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					
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Lancaster Energy Center
Los Angeles-Mojave Desert County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	47,268.70	1000sqft	1,085.14	47,268,698.40	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	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 - Construction phases per project description (18 months)

Off-road Equipment - Equipment specifications per project description

Off-road Equipment - Equipment specification per project description

Off-road Equipment - Equipment specifications from project description

Off-road Equipment - Equipment specifications per project description

Trips and VMT - Worker trips are 250 max per day per project description. Vendor trips based on 12,168 trips total (project description) divided by total of 391 construction days (18 months working 5 days/week).

Grading - Grading estimates for Gen-tie Routes 3 and 6, switching station, bike path, hydrant trenches, and array block grading conservatively estimated at up to 300 acres.

Vehicle Trips - Estimated 12 work trips per day total

Consumer Products - No consumer products proposed

Area Coating - No application of architectural coatings during operation

Energy Use - Assumes no energy use during operation

Water And Wastewater - Water use per project description

Solid Waste - estimated 1 ton solid waste/month total

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	0
tblAreaCoating	Area_Nonresidential_Exterior	23474500	0
tblAreaCoating	Area_Nonresidential_Interior	70423500	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	0	250
tblConstructionPhase	NumDays	155,000.00	196.00
tblConstructionPhase	NumDays	155,000.00	65.00
tblConstructionPhase	NumDays	6,000.00	65.00
tblConstructionPhase	PhaseStartDate	8/29/2015	8/31/2015
tblConstructionPhase	PhaseStartDate	5/30/2015	6/1/2015
tblConsumerProducts	ROG_EF	2.14E-05	1E-19

tblEnergyUse	LightingElect	3.55	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	T24E	2.75	0.00
tblEnergyUse	T24NG	14.36	0.00
tblGrading	AcresOfGrading	0.00	300.00
tblOffRoadEquipment	HorsePower	226.00	399.00
tblOffRoadEquipment	HorsePower	89.00	145.00
tblOffRoadEquipment	HorsePower	84.00	15.00
tblOffRoadEquipment	HorsePower	255.00	357.00
tblOffRoadEquipment	HorsePower	97.00	108.00
tblOffRoadEquipment	HorsePower	97.00	108.00
tblOffRoadEquipment	HorsePower	97.00	108.00
tblOffRoadEquipment	HorsePower	84.00	15.00
tblOffRoadEquipment	HorsePower	84.00	15.00
tblOffRoadEquipment	HorsePower	400.00	189.00
tblOffRoadEquipment	HorsePower	400.00	189.00
tblOffRoadEquipment	HorsePower	400.00	189.00
tblOffRoadEquipment	HorsePower	400.00	189.00
tblOffRoadEquipment	HorsePower	171.00	47.00
tblOffRoadEquipment	HorsePower	80.00	95.00
tblOffRoadEquipment	HorsePower	100.00	93.00
tblOffRoadEquipment	HorsePower	255.00	357.00
tblOffRoadEquipment	HorsePower	97.00	108.00
tblOffRoadEquipment	HorsePower	80.00	63.00
tblOffRoadEquipment	HorsePower	80.00	63.00
tblOffRoadEquipment	LoadFactor	0.29	0.43
tblOffRoadEquipment	LoadFactor	0.20	0.30

tblOffRoadEquipment	LoadFactor	0.74	0.50
tblOffRoadEquipment	LoadFactor	0.40	0.59
tblOffRoadEquipment	LoadFactor	0.37	0.55
tblOffRoadEquipment	LoadFactor	0.37	0.55
tblOffRoadEquipment	LoadFactor	0.37	0.55
tblOffRoadEquipment	LoadFactor	0.74	0.50
tblOffRoadEquipment	LoadFactor	0.74	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.42	0.40
tblOffRoadEquipment	LoadFactor	0.38	0.56
tblOffRoadEquipment	LoadFactor	0.40	0.60
tblOffRoadEquipment	LoadFactor	0.40	0.59
tblOffRoadEquipment	LoadFactor	0.37	0.55
tblOffRoadEquipment	LoadFactor	0.50	0.75
tblOffRoadEquipment	LoadFactor	0.50	0.75
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	OperationalYear	2014	2016

tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	58,216.76	0.00
tblTripsAndVMT	VendorTripNumber	0.00	31.00
tblTripsAndVMT	VendorTripNumber	0.00	31.00
tblTripsAndVMT	VendorTripNumber	7,695.00	31.00
tblTripsAndVMT	VendorTripNumber	7,695.00	31.00
tblTripsAndVMT	WorkerTripNumber	19,719.00	250.00
tblTripsAndVMT	WorkerTripNumber	19,719.00	250.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	2.5387e-004
tblWater	IndoorWaterUseRate	10,856,956,250.00	0.00
tblWater	OutdoorWaterUseRate	0.00	2,933,000.00

2.0 Emissions Summary

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	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0528	0.1348	0.6991	1.2900e-003	0.0977	1.4800e-003	0.0992	0.0260	1.3600e-003	0.0274		111.2328	111.2328	6.0300e-003		111.3594
Total	0.5354	0.1822	5.6493	1.6500e-003	0.0977	0.0193	0.1171	0.0260	0.0192	0.0453		121.5776	121.5776	0.0353	0.0000	122.3194

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	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0528	0.1348	0.6991	1.2900e-003	0.0977	1.4800e-003	0.0992	0.0260	1.3600e-003	0.0274		111.2328	111.2328	6.0300e-003		111.3594
Total	0.5354	0.1822	5.6493	1.6500e-003	0.0977	0.0193	0.1171	0.0260	0.0192	0.0453		121.5776	121.5776	0.0353	0.0000	122.3194

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2015	5/29/2015	5	65	
2	Trenching	Trenching	6/1/2015	8/28/2015	5	65	
3	PV Installation	Building Construction	8/31/2015	5/30/2016	5	196	
4	Gen-Tie, Trail, Vegetation Install	Building Construction	5/31/2016	8/29/2016	5	65	

Acres of Grading (Site Preparation Phase): 300

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Generator Sets	2	2.00	15	0.50
Site Preparation	Off-Highway Trucks	4	8.00	189	0.50
Site Preparation	Rollers	1	8.00	95	0.56
Site Preparation	Rough Terrain Forklifts	1	8.00	93	0.60
Site Preparation	Rubber Tired Dozers	2	6.00	357	0.59
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	108	0.55
Trenching	Generator Sets	2	2.00	15	0.50
Trenching	Off-Highway Trucks	4	8.00	189	0.50
Trenching	Tractors/Loaders/Backhoes	2	7.00	108	0.55
Trenching	Trenchers	2	8.00	63	0.75
PV Installation	Cranes	1	7.00	399	0.43
PV Installation	Forklifts	2	8.00	145	0.30
PV Installation	Generator Sets	2	2.00	15	0.50
PV Installation	Off-Highway Trucks	4	8.00	189	0.50
PV Installation	Other Construction Equipment	8	6.00	47	0.40
PV Installation	Tractors/Loaders/Backhoes	1	7.00	108	0.55
PV Installation	Welders	1	8.00	46	0.45
Gen-Tie, Trail, Vegetation Install	Cranes	1	7.00	226	0.29
Gen-Tie, Trail, Vegetation Install	Forklifts	3	8.00	89	0.20
Gen-Tie, Trail, Vegetation Install	Generator Sets	1	8.00	84	0.74
Gen-Tie, Trail, Vegetation Install	Off-Highway Trucks	2	8.00	189	0.50
Gen-Tie, Trail, Vegetation Install	Rubber Tired Dozers	1	6.00	357	0.59
Gen-Tie, Trail, Vegetation Install	Tractors/Loaders/Backhoes	1	7.00	108	0.55
Gen-Tie, Trail, Vegetation Install	Trenchers	2	8.00	63	0.75
Gen-Tie, Trail, Vegetation Install	Welders	1	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 Preparation	12	30.00	31.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	10	25.00	31.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
PV Installation	19	250.00	31.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Gen-Tie, Trail, Vegetation Install	12	250.00	31.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

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					13.9278	0.0000	13.9278	5.4938	0.0000	5.4938			0.0000			0.0000
Off-Road	9.1662	99.8904	60.8200	0.0787		5.0694	5.0694		4.6653	4.6653		8,250.187 2	8,250.187 2	2.4562		8,301.768 1
Total	9.1662	99.8904	60.8200	0.0787	13.9278	5.0694	18.9971	5.4938	4.6653	10.1591		8,250.187 2	8,250.187 2	2.4562		8,301.768 1

3.2 Site Preparation - 2015

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	0.4146	2.7572	5.4092	6.2200e-003	0.1815	0.0419	0.2234	0.0512	0.0385	0.0897		624.0624	624.0624	4.8200e-003			624.1636
Worker	0.1534	0.2684	2.7190	4.4400e-003	0.3832	3.3500e-003	0.3865	0.1016	3.0600e-003	0.1047		381.3708	381.3708	0.0266			381.9287
Total	0.5680	3.0256	8.1281	0.0107	0.5647	0.0453	0.6100	0.1528	0.0416	0.1944		1,005.4332	1,005.4332	0.0314			1,006.0922

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					13.9278	0.0000	13.9278	5.4938	0.0000	5.4938			0.0000				0.0000
Off-Road	9.1662	99.8904	60.8200	0.0787		5.0694	5.0694		4.6653	4.6653	0.0000	8,250.1872	8,250.1872	2.4562			8,301.7681
Total	9.1662	99.8904	60.8200	0.0787	13.9278	5.0694	18.9971	5.4938	4.6653	10.1591	0.0000	8,250.1872	8,250.1872	2.4562			8,301.7681

3.2 Site Preparation - 2015

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	0.4146	2.7572	5.4092	6.2200e-003	0.1815	0.0419	0.2234	0.0512	0.0385	0.0897		624.0624	624.0624	4.8200e-003			624.1636
Worker	0.1534	0.2684	2.7190	4.4400e-003	0.3832	3.3500e-003	0.3865	0.1016	3.0600e-003	0.1047		381.3708	381.3708	0.0266			381.9287
Total	0.5680	3.0256	8.1281	0.0107	0.5647	0.0453	0.6100	0.1528	0.0416	0.1944		1,005.4332	1,005.4332	0.0314			1,006.0922

3.3 Trenching - 2015

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	5.6110	57.1943	26.6245	0.0500		3.2442	3.2442		2.9862	2.9862		5,230.5606	5,230.5606	1.5548			5,263.2104
Total	5.6110	57.1943	26.6245	0.0500		3.2442	3.2442		2.9862	2.9862		5,230.5606	5,230.5606	1.5548			5,263.2104

3.3 Trenching - 2015

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	0.4146	2.7572	5.4092	6.2200e-003	0.1815	0.0419	0.2234	0.0512	0.0385	0.0897		624.0624	624.0624	4.8200e-003			624.1636
Worker	0.1278	0.2237	2.2658	3.7000e-003	0.3193	2.7900e-003	0.3221	0.0847	2.5500e-003	0.0872		317.8090	317.8090	0.0221			318.2739
Total	0.5424	2.9808	7.6750	9.9200e-003	0.5008	0.0447	0.5455	0.1358	0.0411	0.1769		941.8714	941.8714	0.0270			942.4374

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	5.6110	57.1943	26.6245	0.0500		3.2442	3.2442		2.9862	2.9862	0.0000	5,230.5606	5,230.5606	1.5548			5,263.2104
Total	5.6110	57.1943	26.6245	0.0500		3.2442	3.2442		2.9862	2.9862	0.0000	5,230.5606	5,230.5606	1.5548			5,263.2104

3.3 Trenching - 2015

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	0.4146	2.7572	5.4092	6.2200e-003	0.1815	0.0419	0.2234	0.0512	0.0385	0.0897		624.0624	624.0624	4.8200e-003			624.1636
Worker	0.1278	0.2237	2.2658	3.7000e-003	0.3193	2.7900e-003	0.3221	0.0847	2.5500e-003	0.0872		317.8090	317.8090	0.0221			318.2739
Total	0.5424	2.9808	7.6750	9.9200e-003	0.5008	0.0447	0.5455	0.1358	0.0411	0.1769		941.8714	941.8714	0.0270			942.4374

3.4 PV Installation - 2015

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	9.0832	78.8236	46.0359	0.0710		4.2621	4.2621		3.9352	3.9352		7,383.0546	7,383.0546	2.1916			7,429.0791
Total	9.0832	78.8236	46.0359	0.0710		4.2621	4.2621		3.9352	3.9352		7,383.0546	7,383.0546	2.1916			7,429.0791

3.4 PV Installation - 2015

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	0.4146	2.7572	5.4092	6.2200e-003	0.1815	0.0419	0.2234	0.0512	0.0385	0.0897		624.0624	624.0624	4.8200e-003			624.1636
Worker	1.2780	2.2367	22.6580	0.0370	3.1933	0.0279	3.2212	0.8468	0.0255	0.8723		3,178.0899	3,178.0899	0.2214			3,182.7389
Total	1.6926	4.9938	28.0671	0.0432	3.3748	0.0698	3.4446	0.8980	0.0640	0.9620		3,802.1522	3,802.1522	0.2262			3,806.9025

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	9.0832	78.8236	46.0359	0.0710		4.2621	4.2621		3.9352	3.9352	0.0000	7,383.0546	7,383.0546	2.1916			7,429.0791
Total	9.0832	78.8236	46.0359	0.0710		4.2621	4.2621		3.9352	3.9352	0.0000	7,383.0546	7,383.0546	2.1916			7,429.0791

3.4 PV Installation - 2015

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	0.4146	2.7572	5.4092	6.2200e-003	0.1815	0.0419	0.2234	0.0512	0.0385	0.0897		624.0624	624.0624	4.8200e-003			624.1636
Worker	1.2780	2.2367	22.6580	0.0370	3.1933	0.0279	3.2212	0.8468	0.0255	0.8723		3,178.0899	3,178.0899	0.2214			3,182.7389
Total	1.6926	4.9938	28.0671	0.0432	3.3748	0.0698	3.4446	0.8980	0.0640	0.9620		3,802.1522	3,802.1522	0.2262			3,806.9025

3.4 PV Installation - 2016

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	8.6084	73.6260	44.6365	0.0710		3.9793	3.9793		3.6737	3.6737		7,308.3696	7,308.3696	2.1852			7,354.2593
Total	8.6084	73.6260	44.6365	0.0710		3.9793	3.9793		3.6737	3.6737		7,308.3696	7,308.3696	2.1852			7,354.2593

3.4 PV Installation - 2016

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	0.3815	2.3977	5.1216	6.2000e-003	0.1815	0.0364	0.2179	0.0512	0.0335	0.0847		616.9134	616.9134	4.5400e-003			617.0088
Worker	1.1162	2.0042	20.2962	0.0370	3.1933	0.0263	3.2196	0.8468	0.0241	0.8710		3,064.6131	3,064.6131	0.2027			3,068.8694
Total	1.4977	4.4019	25.4178	0.0432	3.3748	0.0627	3.4375	0.8980	0.0576	0.9556		3,681.5266	3,681.5266	0.2072			3,685.8782

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	8.6084	73.6260	44.6365	0.0710		3.9793	3.9793		3.6737	3.6737	0.0000	7,308.3696	7,308.3696	2.1852			7,354.2593
Total	8.6084	73.6260	44.6365	0.0710		3.9793	3.9793		3.6737	3.6737	0.0000	7,308.3696	7,308.3696	2.1852			7,354.2593

3.4 PV Installation - 2016

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	0.3815	2.3977	5.1216	6.2000e-003	0.1815	0.0364	0.2179	0.0512	0.0335	0.0847		616.9134	616.9134	4.5400e-003			617.0088
Worker	1.1162	2.0042	20.2962	0.0370	3.1933	0.0263	3.2196	0.8468	0.0241	0.8710		3,064.6131	3,064.6131	0.2027			3,068.8694
Total	1.4977	4.4019	25.4178	0.0432	3.3748	0.0627	3.4375	0.8980	0.0576	0.9556		3,681.5266	3,681.5266	0.2072			3,685.8782

3.5 Gen-Tie, Trail, Vegetation Install - 2016

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	7.7223	73.7502	44.6324	0.0612		4.2668	4.2668		3.9639	3.9639		6,243.3311	6,243.3311	1.7401			6,279.8730
Total	7.7223	73.7502	44.6324	0.0612		4.2668	4.2668		3.9639	3.9639		6,243.3311	6,243.3311	1.7401			6,279.8730

3.5 Gen-Tie, Trail, Vegetation Install - 2016

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	0.3815	2.3977	5.1216	6.2000e-003	0.1815	0.0364	0.2179	0.0512	0.0335	0.0847		616.9134	616.9134	4.5400e-003			617.0088
Worker	1.1162	2.0042	20.2962	0.0370	3.1933	0.0263	3.2196	0.8468	0.0241	0.8710		3,064.6131	3,064.6131	0.2027			3,068.8694
Total	1.4977	4.4019	25.4178	0.0432	3.3748	0.0627	3.4375	0.8980	0.0576	0.9556		3,681.5266	3,681.5266	0.2072			3,685.8782

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	7.7223	73.7502	44.6324	0.0612		4.2668	4.2668		3.9639	3.9639	0.0000	6,243.3311	6,243.3311	1.7401			6,279.8730
Total	7.7223	73.7502	44.6324	0.0612		4.2668	4.2668		3.9639	3.9639	0.0000	6,243.3311	6,243.3311	1.7401			6,279.8730

3.5 Gen-Tie, Trail, Vegetation Install - 2016

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	0.3815	2.3977	5.1216	6.2000e-003	0.1815	0.0364	0.2179	0.0512	0.0335	0.0847		616.9134	616.9134	4.5400e-003		617.0088
Worker	1.1162	2.0042	20.2962	0.0370	3.1933	0.0263	3.2196	0.8468	0.0241	0.8710		3,064.6131	3,064.6131	0.2027		3,068.8694
Total	1.4977	4.4019	25.4178	0.0432	3.3748	0.0627	3.4375	0.8980	0.0576	0.9556		3,681.5266	3,681.5266	0.2072		3,685.8782

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	0.0528	0.1348	0.6991	1.2900e-003	0.0977	1.4800e-003	0.0992	0.0260	1.3600e-003	0.0274		111.2328	111.2328	6.0300e-003		111.3594
Unmitigated	0.0528	0.1348	0.6991	1.2900e-003	0.0977	1.4800e-003	0.0992	0.0260	1.3600e-003	0.0274		111.2328	111.2328	6.0300e-003		111.3594

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	12.00	0.00	0.00	33,115	33,115
Total	12.00	0.00	0.00	33,115	33,115

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
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.486685	0.070911	0.172614	0.163811	0.062980	0.009896	0.005016	0.012126	0.001124	0.001040	0.007729	0.000709	0.005359

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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					
General Light Industry	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					
General Light Industry	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	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600
Unmitigated	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600

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					
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.4826	0.0474	4.9502	3.6000e-004		0.0179	0.0179		0.0179	0.0179		10.3449	10.3449	0.0293		10.9600

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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