

APPENDIX B. AIR QUALITY AND GREENHOUSE GAS EMISSIONS MODEL OUTPUTS

This page intentionally left blank.

Cal Poly Gold Tree Solar Facility
San Luis Obispo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	40.00	User Defined Unit	40.00	200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.2	Precipitation Freq (Days)	44
Climate Zone	4			Operational Year	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Area of the maintenace building

Construction Phase - The construction period is anticipated to extend over an approximately 12-week period

Off-road Equipment - Roster as noted in the project description

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Trip lenght equal to the project distance to the center of San Luis Obispo (4 miles)

On-road Fugitive Dust - 220 meters of unpaved road

Grading - While the footprint of the final project may be less than 20 acres, construction of the proposed project is anticipated to require up to approximately 40 acres of disturbance.

Architectural Coating - Interior and exterior of the maintenance and stoarge building

Vehicle Trips - An estimated 2 maintenance trips per month and 8 panel washing activities per year.

Road Dust - Unpaved service road

Area Coating - see text

Landscape Equipment - Landscape equipment used twice a month

Water And Wastewater - Total anticipated operational water demand would be 1 acre foot per year

Solid Waste - No solid waste is expected to be generated

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Off-road Equipment Mitigation

Water exposed areas

Area Mitigation -

Operational Off-Road Equipment - Maintenance and panel wash

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	871,000.00	600.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,613,000.00	600.00
tblAreaCoating	Area_Nonresidential_Exterior	871000	600
tblAreaCoating	Area_Nonresidential_Interior	2613000	600
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	55.00	3.00
tblConstructionPhase	NumDays	740.00	40.00
tblConstructionPhase	NumDays	75.00	10.00
tblConstructionPhase	NumDays	30.00	10.00
tblConstructionPhase	PhaseStartDate	6/24/2017	6/26/2017

tblConstructionPhase	PhaseStartDate	4/29/2017	5/1/2017
tblConstructionPhase	PhaseStartDate	4/15/2017	4/17/2017
tblGrading	AcresOfGrading	25.00	40.00
tblGrading	AcresOfGrading	0.00	40.00
tblGrading	MaterialExported	0.00	560.00
tblGrading	MaterialExported	0.00	280.00
tblLandscapeEquipment	NumberSummerDays	330	24
tblLandUse	LotAcreage	0.00	40.00
tblOnRoadDust	HaulingPercentPave	100.00	96.50
tblOnRoadDust	HaulingPercentPave	100.00	96.50
tblOnRoadDust	HaulingPercentPave	100.00	96.50
tblOnRoadDust	HaulingPercentPave	100.00	96.50
tblOnRoadDust	VendorPercentPave	100.00	96.50
tblOnRoadDust	VendorPercentPave	100.00	96.50
tblOnRoadDust	VendorPercentPave	100.00	96.50
tblOnRoadDust	VendorPercentPave	100.00	96.50
tblOnRoadDust	VendorPercentPave	100.00	96.50
tblOnRoadDust	WorkerPercentPave	100.00	96.50
tblOnRoadDust	WorkerPercentPave	100.00	96.50
tblOnRoadDust	WorkerPercentPave	100.00	96.50
tblOnRoadDust	WorkerPercentPave	100.00	96.50
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	32.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblRoadDust	RoadPercentPave	100	96.5
tblSolidWaste	SolidWasteGenerationRate	2,160.08	0.00
tblTripsAndVMT	HaulingTripNumber	35.00	20.00
tblTripsAndVMT	HaulingTripNumber	70.00	40.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00

tblTripsAndVMT	VendorTripLength	5.00	4.00
tblTripsAndVMT	VendorTripLength	5.00	4.00
tblTripsAndVMT	VendorTripLength	5.00	4.00
tblTripsAndVMT	VendorTripLength	5.00	4.00
tblTripsAndVMT	VendorTripNumber	286.00	0.00
tblTripsAndVMT	WorkerTripLength	13.00	4.00
tblTripsAndVMT	WorkerTripLength	13.00	4.00
tblTripsAndVMT	WorkerTripLength	13.00	4.00
tblTripsAndVMT	WorkerTripLength	13.00	4.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	20.00	40.00
tblTripsAndVMT	WorkerTripNumber	732.00	60.00
tblTripsAndVMT	WorkerTripNumber	146.00	10.00
tblVehicleTrips	CC_TL	5.00	4.00
tblVehicleTrips	CNW_TL	5.00	4.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.09
tblWater	IndoorWaterUseRate	402,837,500.00	0.00
tblWater	OutdoorWaterUseRate	0.00	328,551.00

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	8.4900e-003	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-003
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	0.8720	9.8344	4.6854	0.0132		0.3651	0.3651		0.3359	0.3359		1,344.2625	1,344.2625	0.4119		1,352.9119
Total	0.8805	9.8344	4.6895	0.0132	0.0000	0.3651	0.3651	0.0000	0.3359	0.3359		1,344.2712	1,344.2712	0.4119		1,352.9212

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	8.4900e-003	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-003
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	0.8720	9.8344	4.6854	0.0132		0.3651	0.3651		0.3359	0.3359		1,344.2625	1,344.2625	0.4119		1,352.9119
Total	0.8805	9.8344	4.6895	0.0132	0.0000	0.3651	0.3651	0.0000	0.3359	0.3359		1,344.2712	1,344.2712	0.4119		1,352.9212

	ROG	NOx	CO	SO2	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	99.04	100.00	99.91	100.00	0.00	99.99	99.99	0.00	99.99	99.99	0.00	100.00	100.00	100.00	0.00	100.00

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	4/3/2017	4/14/2017	5	10	Site preparation, including vegetation removal
2	Site Grading	Grading	4/17/2017	4/28/2017	5	10	Site Grading, including internal access road construction
3	PV construction/Installation	Building Construction	5/1/2017	6/23/2017	5	40	Installation of PV arrays, transformer, maintenance and storage building, generation interconnect and fencing
4	Coating/Painting	Architectural Coating	6/26/2017	6/28/2017	5	3	Application of paint to both the interior and exterior of storage building

Acres of Grading (Site Preparation Phase): 40

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 600; Non-Residential Outdoor: 600 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Excavators	0		162	0.38
Site Preparation	Graders	0		174	0.41
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Scrapers	0		361	0.48
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Grading	Cranes	0		226	0.29
Site Grading	Excavators	2	8.00	162	0.38
Site Grading	Forklifts	0		89	0.20
Site Grading	Generator Sets	0		84	0.74
Site Grading	Graders	1	8.00	174	0.41
Site Grading	Rubber Tired Dozers	1	8.00	255	0.40
Site Grading	Scrapers	2	8.00	361	0.48
Site Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Grading	Welders	0		46	0.45
PV construction/Installation	Cranes	1	7.00	226	0.29
PV construction/Installation	Forklifts	3	8.00	89	0.20
PV construction/Installation	Generator Sets	1	8.00	84	0.74
PV construction/Installation	Tractors/Loaders/Backhoes	3	7.00	97	0.37
PV construction/Installation	Welders	1	8.00	46	0.45
Coating/Painting	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	20.00	0.00	20.00	4.00	4.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Grading	8	40.00	0.00	40.00	4.00	4.00	20.00	LD_Mix	HDT_Mix	HHDT
PV construction/Installation	9	60.00	0.00	80.00	4.00	4.00	20.00	LD_Mix	HDT_Mix	HHDT
Coating/Painting	1	10.00	0.00	0.00	4.00	4.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 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					22.3134	0.0000	22.3134	10.3895	0.0000	10.3895			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	4.8382	51.7535	39.3970	0.0391	22.3134	2.7542	25.0676	10.3895	2.5339	12.9234		4,003.0859	4,003.0859	1.2265		4,028.8432

3.2 Site Preparation - 2017

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	0.0507	0.5779	0.5540	1.5100e-003	2.0944	7.0500e-003	2.1014	0.2149	6.4800e-003	0.2214		149.0819	149.0819	1.0200e-003		149.1032
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	0.0605	0.0474	0.4642	7.0000e-004	4.1801	5.6000e-004	4.1807	0.4269	5.1000e-004	0.4274		56.0807	56.0807	3.4900e-003		56.1541
Total	0.1112	0.6253	1.0183	2.2100e-003	6.2745	7.6100e-003	6.2821	0.6418	6.9900e-003	0.6488		205.1625	205.1625	4.5100e-003		205.2573

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					10.0410	0.0000	10.0410	4.6753	0.0000	4.6753			0.0000			0.0000
Off-Road	1.2300	34.4240	23.4003	0.0391		0.9611	0.9611		0.9611	0.9611	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	1.2300	34.4240	23.4003	0.0391	10.0410	0.9611	11.0021	4.6753	0.9611	5.6363	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432

3.2 Site Preparation - 2017

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	0.0507	0.5779	0.5540	1.5100e-003	0.6520	7.0500e-003	0.6591	0.0710	6.4800e-003	0.0775		149.0819	149.0819	1.0200e-003		149.1032
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	0.0605	0.0474	0.4642	7.0000e-004	1.2954	5.6000e-004	1.2960	0.1391	5.1000e-004	0.1396		56.0807	56.0807	3.4900e-003		56.1541
Total	0.1112	0.6253	1.0183	2.2100e-003	1.9475	7.6100e-003	1.9551	0.2101	6.9900e-003	0.2171		205.1625	205.1625	4.5100e-003		205.2573

3.3 Site 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					10.2744	0.0000	10.2744	3.7698	0.0000	3.7698			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	6.0991	69.5920	46.8050	0.0617	10.2744	3.3172	13.5916	3.7698	3.0518	6.8216		6,313.3690	6,313.3690	1.9344		6,353.9915

3.3 Site Grading - 2017

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	0.1014	1.1558	1.1081	3.0100e-003	4.1887	0.0141	4.2028	0.4298	0.0130	0.4428		298.1637	298.1637	2.0400e-003		298.2064
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	0.1210	0.0949	0.9285	1.4000e-003	8.3603	1.1200e-003	8.3614	0.8539	1.0200e-003	0.8549		112.1614	112.1614	6.9900e-003		112.3081
Total	0.2224	1.2507	2.0365	4.4100e-003	12.5490	0.0152	12.5642	1.2836	0.0140	1.2976		410.3251	410.3251	9.0300e-003		410.5145

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					4.6235	0.0000	4.6235	1.6964	0.0000	1.6964			0.0000			0.0000
Off-Road	1.8922	50.9465	37.9432	0.0617		1.3783	1.3783		1.3783	1.3783	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915
Total	1.8922	50.9465	37.9432	0.0617	4.6235	1.3783	6.0017	1.6964	1.3783	3.0747	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915

3.3 Site Grading - 2017

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	0.1014	1.1558	1.1081	3.0100e-003	1.3040	0.0141	1.3181	0.1420	0.0130	0.1549		298.1637	298.1637	2.0400e-003		298.2064
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	0.1210	0.0949	0.9285	1.4000e-003	2.5909	1.1200e-003	2.5920	0.2782	1.0200e-003	0.2792		112.1614	112.1614	6.9900e-003		112.3081
Total	0.2224	1.2507	2.0365	4.4100e-003	3.8949	0.0152	3.9101	0.4201	0.0140	0.4341		410.3251	410.3251	9.0300e-003		410.5145

3.4 PV construction/Installation - 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					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490

3.4 PV construction/Installation - 2017

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	0.0507	0.5779	0.5540	1.5100e-003	2.0944	7.0500e-003	2.1014	0.2149	6.4800e-003	0.2214		149.0819	149.0819	1.0200e-003		149.1032
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	0.1815	0.1423	1.3927	2.1000e-003	12.5404	1.6800e-003	12.5421	1.2808	1.5400e-003	1.2823		168.2420	168.2420	0.0105		168.4622
Total	0.2322	0.7202	1.9467	3.6100e-003	14.6348	8.7300e-003	14.6435	1.4957	8.0200e-003	1.5037		317.3239	317.3239	0.0115		317.5654

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490

3.4 PV construction/Installation - 2017

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	0.0507	0.5779	0.5540	1.5100e-003	0.6520	7.0500e-003	0.6591	0.0710	6.4800e-003	0.0775		149.0819	149.0819	1.0200e-003		149.1032
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	0.1815	0.1423	1.3927	2.1000e-003	3.8863	1.6800e-003	3.8880	0.4173	1.5400e-003	0.4188		168.2420	168.2420	0.0105		168.4622
Total	0.2322	0.7202	1.9467	3.6100e-003	4.5383	8.7300e-003	4.5470	0.4883	8.0200e-003	0.4963		317.3239	317.3239	0.0115		317.5654

3.5 Coating/Painting - 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					
Archit. Coating	4.6350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	4.9673	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721

3.5 Coating/Painting - 2017

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	0.0303	0.0237	0.2321	3.5000e-004	2.0901	2.8000e-004	2.0904	0.2135	2.6000e-004	0.2137		28.0403	28.0403	1.7500e-003			28.0770
Total	0.0303	0.0237	0.2321	3.5000e-004	2.0901	2.8000e-004	2.0904	0.2135	2.6000e-004	0.2137		28.0403	28.0403	1.7500e-003			28.0770

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	4.6350					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0297			282.0721
Total	4.7489	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0297			282.0721

3.5 Coating/Painting - 2017

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	0.0303	0.0237	0.2321	3.5000e-004	0.6477	2.8000e-004	0.6480	0.0696	2.6000e-004	0.0698		28.0403	28.0403	1.7500e-003		28.0770
Total	0.0303	0.0237	0.2321	3.5000e-004	0.6477	2.8000e-004	0.6480	0.0696	2.6000e-004	0.0698		28.0403	28.0403	1.7500e-003		28.0770

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

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

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	4.00	4.00	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.455822	0.042278	0.214871	0.150331	0.067865	0.009870	0.017824	0.023125	0.002334	0.001396	0.008751	0.000854	0.004679

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.4900e-003	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-003
Unmitigated	8.4900e-003	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-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					
Consumer Products	4.2800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-004	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-003
Architectural Coating	3.8100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	8.4900e-003	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-003

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	4.2800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-004	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-003
Architectural Coating	3.8100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	8.4900e-003	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-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
Off-Highway Trucks	1	8.00	32	400	0.38	Diesel

UnMitigated/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
Equipment Type	lb/day										lb/day					
Off-Highway Trucks	0.8720	9.8344	4.6854	0.0132		0.3651	0.3651		0.3359	0.3359		1,344.2625	1,344.2625	0.4119		1,352.9119
Total	0.8720	9.8344	4.6854	0.0132		0.3651	0.3651		0.3359	0.3359		1,344.2625	1,344.2625	0.4119		1,352.9119

10.0 Vegetation

Cal Poly Gold Tree Solar Facility
San Luis Obispo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	40.00	User Defined Unit	40.00	200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.2	Precipitation Freq (Days)	44
Climate Zone	4			Operational Year	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Area of the maintenace building

Construction Phase - The construction period is anticipated to extend over an approximately 12-week period

Off-road Equipment - Roster as noted in the project description

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Trip lenght equal to the project distance to the center of San Luis Obispo (4 miles)

On-road Fugitive Dust - 220 meters of unpaved road

Grading - While the footprint of the final project may be less than 20 acres, construction of the proposed project is anticipated to require up to approximately 40 acres of disturbance.

Architectural Coating - Interior and exterior of the maintenance and stoarge building

Vehicle Trips - An estimated 2 maintenance trips per month and 8 panel washing activities per year.

Road Dust - Unpaved service road

Area Coating - see text

Landscape Equipment - Landscape equipment used twice a month

Water And Wastewater - Total anticipated operational water demand would be 1 acre foot per year

Solid Waste - No solid waste is expected to be generated

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Off-road Equipment Mitigation

Water exposed areas

Area Mitigation -

Operational Off-Road Equipment - Maintenance and panel wash

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	871,000.00	600.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,613,000.00	600.00
tblAreaCoating	Area_Nonresidential_Exterior	871000	600
tblAreaCoating	Area_Nonresidential_Interior	2613000	600
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	55.00	3.00
tblConstructionPhase	NumDays	740.00	40.00
tblConstructionPhase	NumDays	75.00	10.00
tblConstructionPhase	NumDays	30.00	10.00
tblConstructionPhase	PhaseStartDate	6/24/2017	6/26/2017

tblConstructionPhase	PhaseStartDate	4/29/2017	5/1/2017
tblConstructionPhase	PhaseStartDate	4/15/2017	4/17/2017
tblGrading	AcresOfGrading	25.00	40.00
tblGrading	AcresOfGrading	0.00	40.00
tblGrading	MaterialExported	0.00	560.00
tblGrading	MaterialExported	0.00	280.00
tblLandscapeEquipment	NumberSummerDays	330	24
tblLandUse	LotAcreage	0.00	40.00
tblOnRoadDust	HaulingPercentPave	100.00	96.50
tblOnRoadDust	HaulingPercentPave	100.00	96.50
tblOnRoadDust	HaulingPercentPave	100.00	96.50
tblOnRoadDust	HaulingPercentPave	100.00	96.50
tblOnRoadDust	VendorPercentPave	100.00	96.50
tblOnRoadDust	VendorPercentPave	100.00	96.50
tblOnRoadDust	VendorPercentPave	100.00	96.50
tblOnRoadDust	VendorPercentPave	100.00	96.50
tblOnRoadDust	WorkerPercentPave	100.00	96.50
tblOnRoadDust	WorkerPercentPave	100.00	96.50
tblOnRoadDust	WorkerPercentPave	100.00	96.50
tblOnRoadDust	WorkerPercentPave	100.00	96.50
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	32.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblRoadDust	RoadPercentPave	100	96.5
tblSolidWaste	SolidWasteGenerationRate	2,160.08	0.00
tblTripsAndVMT	HaulingTripNumber	35.00	20.00
tblTripsAndVMT	HaulingTripNumber	70.00	40.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00

tblTripsAndVMT	VendorTripLength	5.00	4.00
tblTripsAndVMT	VendorTripLength	5.00	4.00
tblTripsAndVMT	VendorTripLength	5.00	4.00
tblTripsAndVMT	VendorTripLength	5.00	4.00
tblTripsAndVMT	VendorTripNumber	286.00	0.00
tblTripsAndVMT	WorkerTripLength	13.00	4.00
tblTripsAndVMT	WorkerTripLength	13.00	4.00
tblTripsAndVMT	WorkerTripLength	13.00	4.00
tblTripsAndVMT	WorkerTripLength	13.00	4.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	20.00	40.00
tblTripsAndVMT	WorkerTripNumber	732.00	60.00
tblTripsAndVMT	WorkerTripNumber	146.00	10.00
tblVehicleTrips	CC_TL	5.00	4.00
tblVehicleTrips	CNW_TL	5.00	4.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.09
tblWater	IndoorWaterUseRate	402,837,500.00	0.00
tblWater	OutdoorWaterUseRate	0.00	328,551.00

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	8.4900e-003	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-003
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	0.8720	9.8344	4.6854	0.0132		0.3651	0.3651		0.3359	0.3359		1,344.2625	1,344.2625	0.4119		1,352.9119
Total	0.8805	9.8344	4.6895	0.0132	0.0000	0.3651	0.3651	0.0000	0.3359	0.3359		1,344.2712	1,344.2712	0.4119		1,352.9212

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	8.4900e-003	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-003
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	0.8720	9.8344	4.6854	0.0132		0.3651	0.3651		0.3359	0.3359		1,344.2625	1,344.2625	0.4119		1,352.9119
Total	0.8805	9.8344	4.6895	0.0132	0.0000	0.3651	0.3651	0.0000	0.3359	0.3359		1,344.2712	1,344.2712	0.4119		1,352.9212

	ROG	NOx	CO	SO2	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	99.04	100.00	99.91	100.00	0.00	99.99	99.99	0.00	99.99	99.99	0.00	100.00	100.00	100.00	0.00	100.00

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	4/3/2017	4/14/2017	5	10	Site preparation, including vegetation removal
2	Site Grading	Grading	4/17/2017	4/28/2017	5	10	Site Grading, including internal access road construction
3	PV construction/Installation	Building Construction	5/1/2017	6/23/2017	5	40	Installation of PV arrays, transformer, maintenance and storage building, generation interconnect and fencing
4	Coating/Painting	Architectural Coating	6/26/2017	6/28/2017	5	3	Application of paint to both the interior and exterior of storage building

Acres of Grading (Site Preparation Phase): 40

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 600; Non-Residential Outdoor: 600 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Excavators	0		162	0.38
Site Preparation	Graders	0		174	0.41
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Scrapers	0		361	0.48
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Grading	Cranes	0		226	0.29
Site Grading	Excavators	2	8.00	162	0.38
Site Grading	Forklifts	0		89	0.20
Site Grading	Generator Sets	0		84	0.74
Site Grading	Graders	1	8.00	174	0.41
Site Grading	Rubber Tired Dozers	1	8.00	255	0.40
Site Grading	Scrapers	2	8.00	361	0.48
Site Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Grading	Welders	0		46	0.45
PV construction/Installation	Cranes	1	7.00	226	0.29
PV construction/Installation	Forklifts	3	8.00	89	0.20
PV construction/Installation	Generator Sets	1	8.00	84	0.74
PV construction/Installation	Tractors/Loaders/Backhoes	3	7.00	97	0.37
PV construction/Installation	Welders	1	8.00	46	0.45
Coating/Painting	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	20.00	0.00	20.00	4.00	4.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Grading	8	40.00	0.00	40.00	4.00	4.00	20.00	LD_Mix	HDT_Mix	HHDT
PV construction/Installation	9	60.00	0.00	80.00	4.00	4.00	20.00	LD_Mix	HDT_Mix	HHDT
Coating/Painting	1	10.00	0.00	0.00	4.00	4.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 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					22.3134	0.0000	22.3134	10.3895	0.0000	10.3895			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	4.8382	51.7535	39.3970	0.0391	22.3134	2.7542	25.0676	10.3895	2.5339	12.9234		4,003.0859	4,003.0859	1.2265		4,028.8432

3.2 Site Preparation - 2017

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	0.0435	0.5647	0.3966	1.5100e-003	2.0944	7.0200e-003	2.1014	0.2149	6.4600e-003	0.2214		149.4295	149.4295	1.0000e-003		149.4506
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	0.0553	0.0418	0.4249	7.3000e-004	4.1801	5.6000e-004	4.1807	0.4269	5.1000e-004	0.4274		58.7130	58.7130	3.4900e-003		58.7864
Total	0.0988	0.6065	0.8215	2.2400e-003	6.2745	7.5800e-003	6.2821	0.6418	6.9700e-003	0.6488		208.1425	208.1425	4.4900e-003		208.2369

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					10.0410	0.0000	10.0410	4.6753	0.0000	4.6753			0.0000			0.0000
Off-Road	1.2300	34.4240	23.4003	0.0391		0.9611	0.9611		0.9611	0.9611	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	1.2300	34.4240	23.4003	0.0391	10.0410	0.9611	11.0021	4.6753	0.9611	5.6363	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432

3.2 Site Preparation - 2017

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	0.0435	0.5647	0.3966	1.5100e-003	0.6520	7.0200e-003	0.6590	0.0710	6.4600e-003	0.0774		149.4295	149.4295	1.0000e-003		149.4506
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	0.0553	0.0418	0.4249	7.3000e-004	1.2954	5.6000e-004	1.2960	0.1391	5.1000e-004	0.1396		58.7130	58.7130	3.4900e-003		58.7864
Total	0.0988	0.6065	0.8215	2.2400e-003	1.9475	7.5800e-003	1.9550	0.2101	6.9700e-003	0.2170		208.1425	208.1425	4.4900e-003		208.2369

3.3 Site 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					10.2744	0.0000	10.2744	3.7698	0.0000	3.7698			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	6.0991	69.5920	46.8050	0.0617	10.2744	3.3172	13.5916	3.7698	3.0518	6.8216		6,313.3690	6,313.3690	1.9344		6,353.9915

3.3 Site Grading - 2017

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	0.0871	1.1293	0.7932	3.0100e-003	4.1887	0.0141	4.2028	0.4298	0.0129	0.4427		298.8590	298.8590	2.0100e-003			298.9012
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	0.1105	0.0836	0.8499	1.4700e-003	8.3603	1.1200e-003	8.3614	0.8539	1.0200e-003	0.8549		117.4260	117.4260	6.9900e-003			117.5727
Total	0.1976	1.2129	1.6430	4.4800e-003	12.5490	0.0152	12.5642	1.2836	0.0139	1.2976		416.2850	416.2850	9.0000e-003			416.4739

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					4.6235	0.0000	4.6235	1.6964	0.0000	1.6964			0.0000			0.0000	
Off-Road	1.8922	50.9465	37.9432	0.0617		1.3783	1.3783		1.3783	1.3783	0.0000	6,313.3690	6,313.3690	1.9344			6,353.9915
Total	1.8922	50.9465	37.9432	0.0617	4.6235	1.3783	6.0017	1.6964	1.3783	3.0747	0.0000	6,313.3690	6,313.3690	1.9344			6,353.9915

3.3 Site Grading - 2017

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	0.0871	1.1293	0.7932	3.0100e-003	1.3040	0.0141	1.3181	0.1420	0.0129	0.1549		298.8590	298.8590	2.0100e-003		298.9012
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	0.1105	0.0836	0.8499	1.4700e-003	2.5909	1.1200e-003	2.5920	0.2782	1.0200e-003	0.2792		117.4260	117.4260	6.9900e-003		117.5727
Total	0.1976	1.2129	1.6430	4.4800e-003	3.8949	0.0152	3.9101	0.4201	0.0139	0.4341		416.2850	416.2850	9.0000e-003		416.4739

3.4 PV construction/Installation - 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					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490

3.4 PV construction/Installation - 2017

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	0.0435	0.5647	0.3966	1.5100e-003	2.0944	7.0200e-003	2.1014	0.2149	6.4600e-003	0.2214		149.4295	149.4295	1.0000e-003		149.4506
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	0.1658	0.1254	1.2748	2.2000e-003	12.5404	1.6800e-003	12.5421	1.2808	1.5400e-003	1.2823		176.1389	176.1389	0.0105		176.3591
Total	0.2093	0.6901	1.6714	3.7100e-003	14.6348	8.7000e-003	14.6435	1.4957	8.0000e-003	1.5037		325.5684	325.5684	0.0115		325.8097

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490

3.4 PV construction/Installation - 2017

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	0.0435	0.5647	0.3966	1.5100e-003	0.6520	7.0200e-003	0.6590	0.0710	6.4600e-003	0.0774		149.4295	149.4295	1.0000e-003		149.4506
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	0.1658	0.1254	1.2748	2.2000e-003	3.8863	1.6800e-003	3.8880	0.4173	1.5400e-003	0.4188		176.1389	176.1389	0.0105		176.3591
Total	0.2093	0.6901	1.6714	3.7100e-003	4.5383	8.7000e-003	4.5470	0.4883	8.0000e-003	0.4963		325.5684	325.5684	0.0115		325.8097

3.5 Coating/Painting - 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					
Archit. Coating	4.6350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	4.9673	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721

3.5 Coating/Painting - 2017

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	0.0276	0.0209	0.2125	3.7000e-004	2.0901	2.8000e-004	2.0904	0.2135	2.6000e-004	0.2137		29.3565	29.3565	1.7500e-003			29.3932
Total	0.0276	0.0209	0.2125	3.7000e-004	2.0901	2.8000e-004	2.0904	0.2135	2.6000e-004	0.2137		29.3565	29.3565	1.7500e-003			29.3932

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	4.6350					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0297			282.0721
Total	4.7489	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0297			282.0721

3.5 Coating/Painting - 2017

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	0.0276	0.0209	0.2125	3.7000e-004	0.6477	2.8000e-004	0.6480	0.0696	2.6000e-004	0.0698		29.3565	29.3565	1.7500e-003		29.3932
Total	0.0276	0.0209	0.2125	3.7000e-004	0.6477	2.8000e-004	0.6480	0.0696	2.6000e-004	0.0698		29.3565	29.3565	1.7500e-003		29.3932

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

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

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	4.00	4.00	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.455822	0.042278	0.214871	0.150331	0.067865	0.009870	0.017824	0.023125	0.002334	0.001396	0.008751	0.000854	0.004679

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.4900e-003	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-003
Unmitigated	8.4900e-003	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-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					
Consumer Products	4.2800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-004	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-003
Architectural Coating	3.8100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	8.4900e-003	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-003

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					
Landscaping	4.0000e-004	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-003
Architectural Coating	3.8100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.2800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	8.4900e-003	4.0000e-005	4.1600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		8.7500e-003	8.7500e-003	2.0000e-005		9.2700e-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
Off-Highway Trucks	1	8.00	32	400	0.38	Diesel

UnMitigated/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
Equipment Type	lb/day										lb/day					
Off-Highway Trucks	0.8720	9.8344	4.6854	0.0132		0.3651	0.3651		0.3359	0.3359		1,344.2625	1,344.2625	0.4119		1,352.9119
Total	0.8720	9.8344	4.6854	0.0132		0.3651	0.3651		0.3359	0.3359		1,344.2625	1,344.2625	0.4119		1,352.9119

10.0 Vegetation

**Cal Poly Gold Tree Solar Facility
San Luis Obispo County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	40.00	User Defined Unit	40.00	200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.2	Precipitation Freq (Days)	44
Climate Zone	4			Operational Year	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Area of the maintenace building

Construction Phase - The construction period is anticipated to extend over an approximately 12-week period

Off-road Equipment - Roster as noted in the project description

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Trip lenght equal to the project distance to the center of San Luis Obispo (4 miles)

On-road Fugitive Dust - 220 meters of unpaved road

Grading - While the footprint of the final project may be less than 20 acres, construction of the proposed project is anticipated to require up to approximately 40 acres of disturbance.

Architectural Coating - Interior and exterior of the maintenance and stoarge building

Vehicle Trips - An estimated 2 maintenance trips per month and 8 panel washing activities per year.

Road Dust - Unpaved service road

Area Coating - see text

Landscape Equipment - Landscape equipment used twice a month

Water And Wastewater - Total anticipated operational water demand would be 1 acre foot per year

Solid Waste - No solid waste is expected to be generated

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Off-road Equipment Mitigation

Water exposed areas

Area Mitigation -

Operational Off-Road Equipment - Maintenance and panel wash

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	871,000.00	600.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,613,000.00	600.00
tblAreaCoating	Area_Nonresidential_Exterior	871000	600
tblAreaCoating	Area_Nonresidential_Interior	2613000	600
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	55.00	3.00
tblConstructionPhase	NumDays	740.00	40.00
tblConstructionPhase	NumDays	75.00	10.00
tblConstructionPhase	NumDays	30.00	10.00
tblConstructionPhase	PhaseStartDate	6/24/2017	6/26/2017

tblConstructionPhase	PhaseStartDate	4/29/2017	5/1/2017
tblConstructionPhase	PhaseStartDate	4/15/2017	4/17/2017
tblGrading	AcresOfGrading	25.00	40.00
tblGrading	AcresOfGrading	0.00	40.00
tblGrading	MaterialExported	0.00	560.00
tblGrading	MaterialExported	0.00	280.00
tblLandscapeEquipment	NumberSummerDays	330	24
tblLandUse	LotAcreage	0.00	40.00
tblOnRoadDust	HaulingPercentPave	100.00	96.50
tblOnRoadDust	HaulingPercentPave	100.00	96.50
tblOnRoadDust	HaulingPercentPave	100.00	96.50
tblOnRoadDust	HaulingPercentPave	100.00	96.50
tblOnRoadDust	VendorPercentPave	100.00	96.50
tblOnRoadDust	VendorPercentPave	100.00	96.50
tblOnRoadDust	VendorPercentPave	100.00	96.50
tblOnRoadDust	VendorPercentPave	100.00	96.50
tblOnRoadDust	WorkerPercentPave	100.00	96.50
tblOnRoadDust	WorkerPercentPave	100.00	96.50
tblOnRoadDust	WorkerPercentPave	100.00	96.50
tblOnRoadDust	WorkerPercentPave	100.00	96.50
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	32.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblRoadDust	RoadPercentPave	100	96.5
tblSolidWaste	SolidWasteGenerationRate	2,160.08	0.00
tblTripsAndVMT	HaulingTripNumber	35.00	20.00
tblTripsAndVMT	HaulingTripNumber	70.00	40.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00

tblTripsAndVMT	VendorTripLength	5.00	4.00
tblTripsAndVMT	VendorTripLength	5.00	4.00
tblTripsAndVMT	VendorTripLength	5.00	4.00
tblTripsAndVMT	VendorTripLength	5.00	4.00
tblTripsAndVMT	VendorTripNumber	286.00	0.00
tblTripsAndVMT	WorkerTripLength	13.00	4.00
tblTripsAndVMT	WorkerTripLength	13.00	4.00
tblTripsAndVMT	WorkerTripLength	13.00	4.00
tblTripsAndVMT	WorkerTripLength	13.00	4.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	20.00	40.00
tblTripsAndVMT	WorkerTripNumber	732.00	60.00
tblTripsAndVMT	WorkerTripNumber	146.00	10.00
tblVehicleTrips	CC_TL	5.00	4.00
tblVehicleTrips	CNW_TL	5.00	4.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.09
tblWater	IndoorWaterUseRate	402,837,500.00	0.00
tblWater	OutdoorWaterUseRate	0.00	328,551.00

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	1.4800e-003	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	0.0140	0.1574	0.0750	2.1000e-004		5.8400e-003	5.8400e-003		5.3700e-003	5.3700e-003	0.0000	19.5119	19.5119	5.9800e-003	0.0000	19.6375
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	0.3345	0.3345	2.0000e-005	0.0000	0.3358
Total	0.0154	0.1574	0.0750	2.1000e-004	0.0000	5.8400e-003	5.8400e-003	0.0000	5.3700e-003	5.3700e-003	0.0000	19.8465	19.8465	6.0000e-003	0.0000	19.9734

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	1.4800e-003	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	0.0140	0.1574	0.0750	2.1000e-004		5.8400e-003	5.8400e-003		5.3700e-003	5.3700e-003	0.0000	19.5119	19.5119	5.9800e-003	0.0000	19.6375
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	0.3345	0.3345	2.0000e-005	0.0000	0.3358
Total	0.0154	0.1574	0.0750	2.1000e-004	0.0000	5.8400e-003	5.8400e-003	0.0000	5.3700e-003	5.3700e-003	0.0000	19.8465	19.8465	6.0000e-003	0.0000	19.9734

	ROG	NOx	CO	SO2	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	90.41	100.00	99.93	100.00	0.00	100.00	100.00	0.00	100.00	100.00	0.00	98.31	98.31	99.67	0.00	98.32

2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	0.0000
Total	0.0000

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	4/3/2017	4/14/2017	5	10	Site preparation, including vegetation removal
2	Site Grading	Grading	4/17/2017	4/28/2017	5	10	Site Grading, including internal access road construction
3	PV construction/Installation	Building Construction	5/1/2017	6/23/2017	5	40	Installation of PV arrays, transformer, maintenace and storage building, generation interconnect and fencing
4	Coating/Painting	Architectural Coating	6/26/2017	6/28/2017	5	3	Application of paint to both the interior and exterior of stoarge building

Acres of Grading (Site Preparation Phase): 40

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 600; Non-Residential Outdoor: 600 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Excavators	0		162	0.38
Site Preparation	Graders	0		174	0.41
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Scrapers	0		361	0.48
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Grading	Cranes	0		226	0.29
Site Grading	Excavators	2	8.00	162	0.38
Site Grading	Forklifts	0		89	0.20
Site Grading	Generator Sets	0		84	0.74
Site Grading	Graders	1	8.00	174	0.41
Site Grading	Rubber Tired Dozers	1	8.00	255	0.40
Site Grading	Scrapers	2	8.00	361	0.48
Site Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Grading	Welders	0		46	0.45
PV construction/Installation	Cranes	1	7.00	226	0.29
PV construction/Installation	Forklifts	3	8.00	89	0.20
PV construction/Installation	Generator Sets	1	8.00	84	0.74
PV construction/Installation	Tractors/Loaders/Backhoes	3	7.00	97	0.37
PV construction/Installation	Welders	1	8.00	46	0.45
Coating/Painting	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	20.00	0.00	20.00	4.00	4.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Grading	8	40.00	0.00	40.00	4.00	4.00	20.00	LD_Mix	HDT_Mix	HHDT
PV construction/Installation	9	60.00	0.00	80.00	4.00	4.00	20.00	LD_Mix	HDT_Mix	HHDT
Coating/Painting	1	10.00	0.00	0.00	4.00	4.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 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					0.1116	0.0000	0.1116	0.0520	0.0000	0.0520	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
Total	0.0242	0.2588	0.1970	2.0000e-004	0.1116	0.0138	0.1253	0.0520	0.0127	0.0646	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745

3.2 Site Preparation - 2017**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4000e-004	2.9100e-003	2.4700e-003	1.0000e-005	9.2300e-003	4.0000e-005	9.2600e-003	9.5000e-004	3.0000e-005	9.8000e-004	0.0000	0.6771	0.6771	0.0000	0.0000	0.6772
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	2.8000e-004	2.3000e-004	2.2300e-003	0.0000	0.0184	0.0000	0.0184	1.8800e-003	0.0000	1.8900e-003	0.0000	0.2564	0.2564	2.0000e-005	0.0000	0.2567
Total	5.2000e-004	3.1400e-003	4.7000e-003	1.0000e-005	0.0276	4.0000e-005	0.0277	2.8300e-003	3.0000e-005	2.8700e-003	0.0000	0.9335	0.9335	2.0000e-005	0.0000	0.9339

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					0.0502	0.0000	0.0502	0.0234	0.0000	0.0234	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1500e-003	0.1721	0.1170	2.0000e-004		4.8100e-003	4.8100e-003		4.8100e-003	4.8100e-003	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
Total	6.1500e-003	0.1721	0.1170	2.0000e-004	0.0502	4.8100e-003	0.0550	0.0234	4.8100e-003	0.0282	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745

3.2 Site Preparation - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4000e-004	2.9100e-003	2.4700e-003	1.0000e-005	2.8800e-003	4.0000e-005	2.9200e-003	3.2000e-004	3.0000e-005	3.5000e-004	0.0000	0.6771	0.6771	0.0000	0.0000	0.6772
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	2.8000e-004	2.3000e-004	2.2300e-003	0.0000	5.7200e-003	0.0000	5.7300e-003	6.2000e-004	0.0000	6.2000e-004	0.0000	0.2564	0.2564	2.0000e-005	0.0000	0.2567
Total	5.2000e-004	3.1400e-003	4.7000e-003	1.0000e-005	8.6000e-003	4.0000e-005	8.6500e-003	9.4000e-004	3.0000e-005	9.7000e-004	0.0000	0.9335	0.9335	2.0000e-005	0.0000	0.9339

3.3 Site 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					0.0514	0.0000	0.0514	0.0189	0.0000	0.0189	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0305	0.3480	0.2340	3.1000e-004		0.0166	0.0166		0.0153	0.0153	0.0000	28.6370	28.6370	8.7700e-003	0.0000	28.8212
Total	0.0305	0.3480	0.2340	3.1000e-004	0.0514	0.0166	0.0680	0.0189	0.0153	0.0341	0.0000	28.6370	28.6370	8.7700e-003	0.0000	28.8212

3.3 Site Grading - 2017

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	4.8000e-004	5.8300e-003	4.9500e-003	2.0000e-005	0.0185	7.0000e-005	0.0185	1.9000e-003	6.0000e-005	1.9600e-003	0.0000	1.3543	1.3543	1.0000e-005	0.0000	1.3545
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	4.6000e-004	4.4700e-003	1.0000e-005	0.0368	1.0000e-005	0.0368	3.7700e-003	1.0000e-005	3.7700e-003	0.0000	0.5127	0.5127	3.0000e-005	0.0000	0.5134
Total	1.0400e-003	6.2900e-003	9.4200e-003	3.0000e-005	0.0553	8.0000e-005	0.0553	5.6700e-003	7.0000e-005	5.7300e-003	0.0000	1.8670	1.8670	4.0000e-005	0.0000	1.8679

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					0.0231	0.0000	0.0231	8.4800e-003	0.0000	8.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.4600e-003	0.2547	0.1897	3.1000e-004		6.8900e-003	6.8900e-003		6.8900e-003	6.8900e-003	0.0000	28.6369	28.6369	8.7700e-003	0.0000	28.8212
Total	9.4600e-003	0.2547	0.1897	3.1000e-004	0.0231	6.8900e-003	0.0300	8.4800e-003	6.8900e-003	0.0154	0.0000	28.6369	28.6369	8.7700e-003	0.0000	28.8212

3.3 Site Grading - 2017

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	4.8000e-004	5.8300e-003	4.9500e-003	2.0000e-005	5.7700e-003	7.0000e-005	5.8400e-003	6.3000e-004	6.0000e-005	7.0000e-004	0.0000	1.3543	1.3543	1.0000e-005	0.0000	1.3545
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	4.6000e-004	4.4700e-003	1.0000e-005	0.0115	1.0000e-005	0.0115	1.2400e-003	1.0000e-005	1.2400e-003	0.0000	0.5127	0.5127	3.0000e-005	0.0000	0.5134
Total	1.0400e-003	6.2900e-003	9.4200e-003	3.0000e-005	0.0172	8.0000e-005	0.0173	1.8700e-003	7.0000e-005	1.9400e-003	0.0000	1.8670	1.8670	4.0000e-005	0.0000	1.8679

3.4 PV construction/Installation - 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					
Off-Road	0.0621	0.5281	0.3626	5.4000e-004		0.0356	0.0356		0.0335	0.0335	0.0000	47.8958	47.8958	0.0118	0.0000	48.1434
Total	0.0621	0.5281	0.3626	5.4000e-004		0.0356	0.0356		0.0335	0.0335	0.0000	47.8958	47.8958	0.0118	0.0000	48.1434

3.4 PV construction/Installation - 2017

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	9.5000e-004	0.0117	9.8900e-003	3.0000e-005	0.0369	1.4000e-004	0.0370	3.8000e-003	1.3000e-004	3.9300e-003	0.0000	2.7086	2.7086	2.0000e-005	0.0000	2.7089
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3300e-003	2.7900e-003	0.0268	4.0000e-005	0.2209	3.0000e-005	0.2209	0.0226	3.0000e-005	0.0227	0.0000	3.0763	3.0763	1.9000e-004	0.0000	3.0803
Total	4.2800e-003	0.0144	0.0367	7.0000e-005	0.2578	1.7000e-004	0.2580	0.0264	1.6000e-004	0.0266	0.0000	5.7849	5.7849	2.1000e-004	0.0000	5.7893

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	0.0216	0.4692	0.3563	5.4000e-004		0.0180	0.0180		0.0180	0.0180	0.0000	47.8958	47.8958	0.0118	0.0000	48.1433
Total	0.0216	0.4692	0.3563	5.4000e-004		0.0180	0.0180		0.0180	0.0180	0.0000	47.8958	47.8958	0.0118	0.0000	48.1433

3.4 PV construction/Installation - 2017**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	9.5000e-004	0.0117	9.8900e-003	3.0000e-005	0.0115	1.4000e-004	0.0117	1.2700e-003	1.3000e-004	1.4000e-003	0.0000	2.7086	2.7086	2.0000e-005	0.0000	2.7089
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3300e-003	2.7900e-003	0.0268	4.0000e-005	0.0687	3.0000e-005	0.0687	7.4300e-003	3.0000e-005	7.4600e-003	0.0000	3.0763	3.0763	1.9000e-004	0.0000	3.0803
Total	4.2800e-003	0.0144	0.0367	7.0000e-005	0.0802	1.7000e-004	0.0804	8.7000e-003	1.6000e-004	8.8600e-003	0.0000	5.7849	5.7849	2.1000e-004	0.0000	5.7893

3.5 Coating/Painting - 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					
Archit. Coating	6.9500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0000e-004	3.2800e-003	2.8000e-003	0.0000		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	0.3830	0.3830	4.0000e-005	0.0000	0.3838
Total	7.4500e-003	3.2800e-003	2.8000e-003	0.0000		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	0.3830	0.3830	4.0000e-005	0.0000	0.3838

3.5 Coating/Painting - 2017

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	4.0000e-005	3.0000e-005	3.4000e-004	0.0000	2.7600e-003	0.0000	2.7600e-003	2.8000e-004	0.0000	2.8000e-004	0.0000	0.0385	0.0385	0.0000	0.0000	0.0385
Total	4.0000e-005	3.0000e-005	3.4000e-004	0.0000	2.7600e-003	0.0000	2.7600e-003	2.8000e-004	0.0000	2.8000e-004	0.0000	0.0385	0.0385	0.0000	0.0000	0.0385

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.9500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7000e-004	3.5300e-003	2.7500e-003	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.3830	0.3830	4.0000e-005	0.0000	0.3838
Total	7.1200e-003	3.5300e-003	2.7500e-003	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.3830	0.3830	4.0000e-005	0.0000	0.3838

4.2 Trip Summary Information

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

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	4.00	4.00	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.455822	0.042278	0.214871	0.150331	0.067865	0.009870	0.017824	0.023125	0.002334	0.001396	0.008751	0.000854	0.004679

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4800e-003	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Unmitigated	1.4800e-003	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-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					
Consumer Products	7.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Architectural Coating	7.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.4800e-003	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Consumer Products	7.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Architectural Coating	7.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.4800e-003	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.3345	2.0000e-005	0.0000	0.3358
Unmitigated	0.3345	2.0000e-005	0.0000	0.3358

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0.328551	0.3345	2.0000e-005	0.0000	0.3358
Total		0.3345	2.0000e-005	0.0000	0.3358

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0.328551	0.3345	2.0000e-005	0.0000	0.3358
Total		0.3345	2.0000e-005	0.0000	0.3358

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

8.2 Waste by Land Use

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
Off-Highway Trucks	1	8.00	32	400	0.38	Diesel

UnMitigated/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
Equipment Type	tons/yr										MT/yr					
Off-Highway Trucks	0.0140	0.1574	0.0750	2.1000e-004		5.8400e-003	5.8400e-003		5.3700e-003	5.3700e-003	0.0000	19.5119	19.5119	5.9800e-003	0.0000	19.6375
Total	0.0140	0.1574	0.0750	2.1000e-004		5.8400e-003	5.8400e-003		5.3700e-003	5.3700e-003	0.0000	19.5119	19.5119	5.9800e-003	0.0000	19.6375

10.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	0.0000	0.0000	0.0000	0.0000

10.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	1 / 1	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

**Cal Poly Gold Tree Solar Facility
San Luis Obispo County, Mitigation Report**

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Coating/Painting	0.04	-0.08	0.02	0.00	0.46	0.46	0.00	0.00	0.00	0.00	0.00	0.00
PV construction/Installation	0.61	0.11	0.02	0.00	0.49	0.46	0.00	0.00	0.00	0.00	0.00	0.00
Site Grading	0.67	0.26	0.18	0.00	0.58	0.55	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.73	0.33	0.40	0.00	0.65	0.62	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	Tier 2	1	1	No Change	0.00
Cranes	Diesel	Tier 2	1	1	No Change	0.00
Excavators	Diesel	Tier 2	2	2	No Change	0.00
Forklifts	Diesel	Tier 2	3	3	No Change	0.00
Generator Sets	Diesel	Tier 2	1	1	No Change	0.00
Graders	Diesel	Tier 2	1	1	No Change	0.00
Rubber Tired Dozers	Diesel	Tier 2	4	4	No Change	0.00
Scrapers	Diesel	Tier 2	2	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 2	9	9	No Change	0.00
Welders	Diesel	Tier 2	1	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	5.00000E-004	3.28000E-003	2.80000E-003	0.00000E+000	2.60000E-004	2.60000E-004	0.00000E+000	3.82990E-001	3.82990E-001	4.00000E-005	0.00000E+000	3.83840E-001
Cranes	1.13400E-002	1.34630E-001	4.82400E-002	1.00000E-004	6.00000E-003	5.52000E-003	0.00000E+000	9.16408E+000	9.16408E+000	2.81000E-003	0.00000E+000	9.22304E+000
Excavators	3.62000E-003	4.01700E-002	3.42100E-002	5.00000E-005	1.98000E-003	1.82000E-003	0.00000E+000	4.91024E+000	4.91024E+000	1.50000E-003	0.00000E+000	4.94184E+000
Forklifts	1.26600E-002	1.09580E-001	7.49500E-002	9.00000E-005	9.04000E-003	8.32000E-003	0.00000E+000	8.50512E+000	8.50512E+000	2.61000E-003	0.00000E+000	8.55984E+000
Generator Sets	1.14000E-002	8.92800E-002	7.54700E-002	1.30000E-004	6.01000E-003	6.01000E-003	0.00000E+000	1.13042E+001	1.13042E+001	9.10000E-004	0.00000E+000	1.13234E+001
Graders	4.76000E-003	4.82100E-002	2.41900E-002	3.00000E-005	2.71000E-003	2.49000E-003	0.00000E+000	2.89211E+000	2.89211E+000	8.90000E-004	0.00000E+000	2.91072E+000
Rubber Tired Dozers	2.38100E-002	2.63850E-001	1.98810E-001	1.80000E-004	1.22600E-002	1.12800E-002	0.00000E+000	1.65109E+001	1.65109E+001	5.06000E-003	0.00000E+000	1.66172E+001
Scrapers	1.29900E-002	1.63180E-001	1.01980E-001	1.50000E-004	6.55000E-003	6.02000E-003	0.00000E+000	1.38196E+001	1.38196E+001	4.23000E-003	0.00000E+000	1.39085E+001
Tractors/Loaders/Backhoes	2.61400E-002	2.51120E-001	1.97490E-001	2.60000E-004	1.88900E-002	1.73700E-002	0.00000E+000	2.38198E+001	2.38198E+001	7.30000E-003	0.00000E+000	2.39731E+001
Welders	1.00200E-002	3.48100E-002	3.82500E-002	5.00000E-005	2.56000E-003	2.56000E-003	0.00000E+000	3.76441E+000	3.76441E+000	8.10000E-004	0.00000E+000	3.78152E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	1.70000E-004	3.53000E-003	2.75000E-003	0.00000E+000	1.40000E-004	1.40000E-004	0.00000E+000	3.82990E-001	3.82990E-001	4.00000E-005	0.00000E+000	3.83840E-001
Cranes	2.43000E-003	8.39500E-002	5.25900E-002	1.00000E-004	1.78000E-003	1.78000E-003	0.00000E+000	9.16407E+000	9.16407E+000	2.81000E-003	0.00000E+000	9.22303E+000
Excavators	2.06000E-003	4.52700E-002	4.01700E-002	5.00000E-005	1.39000E-003	1.39000E-003	0.00000E+000	4.91024E+000	4.91024E+000	1.50000E-003	0.00000E+000	4.94183E+000
Forklifts	4.33000E-003	8.94700E-002	6.96900E-002	9.00000E-005	3.62000E-003	3.62000E-003	0.00000E+000	8.50511E+000	8.50511E+000	2.61000E-003	0.00000E+000	8.55983E+000
Generator Sets	5.04000E-003	1.04150E-001	8.11300E-002	1.30000E-004	4.21000E-003	4.21000E-003	0.00000E+000	1.13041E+001	1.13041E+001	9.10000E-004	0.00000E+000	1.13234E+001
Graders	1.20000E-003	2.62300E-002	2.32800E-002	3.00000E-005	8.10000E-004	8.10000E-004	0.00000E+000	2.89211E+000	2.89211E+000	8.90000E-004	0.00000E+000	2.91072E+000
Rubber Tired Dozers	4.32000E-003	1.49310E-001	9.35500E-002	1.80000E-004	3.17000E-003	3.17000E-003	0.00000E+000	1.65109E+001	1.65109E+001	5.06000E-003	0.00000E+000	1.66171E+001
Scrapers	3.67000E-003	1.15830E-001	7.94600E-002	1.50000E-004	2.69000E-003	2.69000E-003	0.00000E+000	1.38196E+001	1.38196E+001	4.23000E-003	0.00000E+000	1.39085E+001
Tractors/Loaders/Balckhoes	1.20100E-002	2.48050E-001	1.93220E-001	2.60000E-004	1.00300E-002	1.00300E-002	0.00000E+000	2.38198E+001	2.38198E+001	7.30000E-003	0.00000E+000	2.39731E+001
Welders	2.12000E-003	3.38100E-002	2.99400E-002	5.00000E-005	2.04000E-003	2.04000E-003	0.00000E+000	3.76441E+000	3.76441E+000	8.10000E-004	0.00000E+000	3.78152E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	6.60000E-001	-7.62195E-002	1.78571E-002	0.00000E+000	4.61538E-001	4.61538E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	7.85714E-001	3.76439E-001	-9.01741E-002	0.00000E+000	7.03333E-001	6.77536E-001	0.00000E+000	1.09122E-006	1.09122E-006	0.00000E+000	0.00000E+000	1.08424E-006
Excavators	4.30939E-001	-1.26960E-001	-1.74218E-001	0.00000E+000	2.97980E-001	2.36264E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.02354E-006
Forklifts	6.57978E-001	1.83519E-001	7.01801E-002	0.00000E+000	5.99558E-001	5.64904E-001	0.00000E+000	1.17576E-006	1.17576E-006	0.00000E+000	0.00000E+000	1.16825E-006
Generator Sets	5.57895E-001	-1.66555E-001	-7.49967E-002	0.00000E+000	2.99501E-001	2.99501E-001	0.00000E+000	8.84631E-007	8.84631E-007	0.00000E+000	0.00000E+000	8.83130E-007
Graders	7.47899E-001	4.55922E-001	3.76189E-002	0.00000E+000	7.01107E-001	6.74699E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	8.18564E-001	4.34110E-001	5.29450E-001	0.00000E+000	7.41436E-001	7.18972E-001	0.00000E+000	1.21132E-006	1.21132E-006	0.00000E+000	0.00000E+000	1.20358E-006
Scrapers	7.17475E-001	2.90170E-001	2.20828E-001	0.00000E+000	5.89313E-001	5.53156E-001	0.00000E+000	7.23609E-007	7.23609E-007	0.00000E+000	0.00000E+000	7.18983E-007
Tractors/Loaders/Balckhoes	5.40551E-001	1.22252E-002	2.16213E-002	0.00000E+000	4.69031E-001	4.22568E-001	0.00000E+000	1.25946E-006	1.25946E-006	0.00000E+000	0.00000E+000	1.25140E-006
Welders	7.88423E-001	2.87274E-002	2.17255E-001	0.00000E+000	2.03125E-001	2.03125E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	70.00	PM2.5 Reduction	70.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	0.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			

		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00	2.00	
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		
No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

Area Mitigation

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

No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

Energy Mitigation Measures

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

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

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	

No	Install low-flow Shower	20.00
No	Turf Reduction	
No	Use Water Efficient Irrigation Systems	6.10
No	Water Efficient Landscape	

Solid Waste Mitigation

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