Appendix A

CalEEMod Output Files

Irwin Reservoir and TM

San Bernardino-Mojave Desert County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.30	Acre	1.30	56,628.00	0
Other Non-Asphalt Surfaces	6.41	Acre	6.41	279,219.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2015
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 - see table

Off-road Equipment - see table

Off-road Equipment - see table

Off-road Equipment - see table

Off-road Equipment - see table

Trips and VMT - water truck trips added

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	71.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	PhaseEndDate	2/20/2015	2/22/2015
tblConstructionPhase	PhaseEndDate	6/8/2015	6/1/2015
tblConstructionPhase	PhaseEndDate	2/6/2015	2/8/2015
tblConstructionPhase	PhaseStartDate	6/2/2015	5/26/2015
tblGrading	AcresOfGrading	5.63	10.00
tblGrading	AcresOfGrading	8.44	0.00
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	LoadFactor	0.48	0.48
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	7.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00

tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	7.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	8.6849	54.9048	53.7003	0.0733	7.9553	3.3457	10.2780	3.8706	3.1545	6.0074	0.0000	7,062.6420	7,062.6420	1.2752	0.0000	7,089.4220
Total	**8.6849**	**54.9048**	**53.7003**	**0.0733**	**7.9553**	**3.3457**	**10.2780**	**3.8706**	**3.1545**	**6.0074**	**0.0000**	**7,062.6420**	**7,062.6420**	**1.2752**	**0.0000**	**7,089.4220**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	8.6849	54.9048	53.7003	0.0733	7.9553	3.3457	10.2780	3.8706	3.1545	6.0074	0.0000	7,062.6420	7,062.6420	1.2752	0.0000	7,089.4220
Total	**8.6849**	**54.9048**	**53.7003**	**0.0733**	**7.9553**	**3.3457**	**10.2780**	**3.8706**	**3.1545**	**6.0074**	**0.0000**	**7,062.6420**	**7,062.6420**	**1.2752**	**0.0000**	**7,089.4220**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2015	2/8/2015	5	5	
2	Grading	Grading	2/9/2015	2/22/2015	5	10	
3	Building Construction	Building Construction	2/23/2015	6/1/2015	5	71	
4	Paving	Paving	5/26/2015	6/1/2015	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

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	Graders	1	9.00	174	0.41
Site Preparation	Scrapers	1	9.00	361	0.48
Grading	Excavators	1	9.00	162	0.38
Building Construction	Cranes	1	9.00	226	0.29
Building Construction	Forklifts	2	9.00	89	0.20
Building Construction	Generator Sets	1	9.00	84	0.74
Paving	Pavers	1	9.00	125	0.42
Paving	Rollers	1	9.00	80	0.38
Grading	Rubber Tired Dozers	1	9.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	9.00	97	0.37
Grading	Graders	1	9.00	174	0.41
Grading	Tractors/Loaders/Backhoes	2	9.00	97	0.37
Paving	Paving Equipment	1	9.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	2	9.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	8.00	255	0.40
Building Construction	Welders	3	9.00	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	4	10.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	141.00	55.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	2.00	0.00	10.80	7.30	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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.6333	40.9382	24.1319	0.0309		2.1390	2.1390		1.9679	1.9679		3,242.6565	3,242.6565	0.9681		3,262.9860
Total	**3.6333**	**40.9382**	**24.1319**	**0.0309**	**0.0000**	**2.1390**	**2.1390**	**0.0000**	**1.9679**	**1.9679**		**3,242.6565**	**3,242.6565**	**0.9681**		**3,262.9860**

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	0.0290	0.1824	0.3478	4.4000e-004	0.0131	4.7100e-003	0.0179	3.7300e-003	4.3300e-003	8.0600e-003		44.1519	44.1519	2.8000e-004		44.1578
Worker	0.0516	0.0717	0.8333	1.0400e-003	0.0822	6.2000e-004	0.0828	0.0218	5.6000e-004	0.0224		88.7850	88.7850	5.8000e-003		88.9068
Total	**0.0806**	**0.2540**	**1.1811**	**1.4800e-003**	**0.0953**	**5.3300e-003**	**0.1006**	**0.0255**	**4.8900e-003**	**0.0304**		**132.9369**	**132.9369**	**6.0800e-003**		**133.0646**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.6333	40.9382	24.1319	0.0309		2.1390	2.1390		1.9679	1.9679	0.0000	3,242.6565	3,242.6565	0.9681		3,262.9860
Total	**3.6333**	**40.9382**	**24.1319**	**0.0309**	**0.0000**	**2.1390**	**2.1390**	**0.0000**	**1.9679**	**1.9679**	**0.0000**	**3,242.6565**	**3,242.6565**	**0.9681**		**3,262.9860**

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	0.0290	0.1824	0.3478	4.4000e-004	0.0131	4.7100e-003	0.0179	3.7300e-003	4.3300e-003	8.0600e-003		44.1519	44.1519	2.8000e-004		44.1578
Worker	0.0516	0.0717	0.8333	1.0400e-003	0.0822	6.2000e-004	0.0828	0.0218	5.6000e-004	0.0224		88.7850	88.7850	5.8000e-003		88.9068
Total	**0.0806**	**0.2540**	**1.1811**	**1.4800e-003**	**0.0953**	**5.3300e-003**	**0.1006**	**0.0255**	**4.8900e-003**	**0.0304**		**132.9369**	**132.9369**	**6.0800e-003**		**133.0646**

3.3 Grading - 2015

Unmitigated Construction On-Site

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					
Fugitive Dust					7.8354	0.0000	7.8354	3.8385	0.0000	3.8385			0.0000			0.0000
Off-Road	3.9063	41.6070	27.2785	0.0300		2.3172	2.3172		2.1318	2.1318		3,151.7192	3,151.7192	0.9409		3,171.4785
Total	**3.9063**	**41.6070**	**27.2785**	**0.0300**	**7.8354**	**2.3172**	**10.1525**	**3.8385**	**2.1318**	**5.9703**		**3,151.7192**	**3,151.7192**	**0.9409**		**3,171.4785**

Unmitigated Construction Off-Site

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					
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	0.0290	0.1824	0.3478	4.4000e-004	0.0131	4.7100e-003	0.0179	3.7300e-003	4.3300e-003	8.0600e-003		44.1519	44.1519	2.8000e-004		44.1578
Worker	0.0670	0.0932	1.0833	1.3500e-003	0.1068	8.0000e-004	0.1076	0.0283	7.3000e-004	0.0291		115.4205	115.4205	7.5400e-003		115.5789
Total	**0.0961**	**0.2755**	**1.4311**	**1.7900e-003**	**0.1199**	**5.5100e-003**	**0.1254**	**0.0321**	**5.0600e-003**	**0.0371**		**159.5724**	**159.5724**	**7.8200e-003**		**159.7367**

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					7.8354	0.0000	7.8354	3.8385	0.0000	3.8385			0.0000			0.0000
Off-Road	3.9063	41.6070	27.2785	0.0300		2.3172	2.3172		2.1318	2.1318	0.0000	3,151.7192	3,151.7192	0.9409		3,171.4785
Total	**3.9063**	**41.6070**	**27.2785**	**0.0300**	**7.8354**	**2.3172**	**10.1525**	**3.8385**	**2.1318**	**5.9703**	**0.0000**	**3,151.7192**	**3,151.7192**	**0.9409**		**3,171.4785**

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	0.0290	0.1824	0.3478	4.4000e-004	0.0131	4.7100e-003	0.0179	3.7300e-003	4.3300e-003	8.0600e-003		44.1519	44.1519	2.8000e-004		44.1578
Worker	0.0670	0.0932	1.0833	1.3500e-003	0.1068	8.0000e-004	0.1076	0.0283	7.3000e-004	0.0291		115.4205	115.4205	7.5400e-003		115.5789
Total	**0.0961**	**0.2755**	**1.4311**	**1.7900e-003**	**0.1199**	**5.5100e-003**	**0.1254**	**0.0321**	**5.0600e-003**	**0.0371**		**159.5724**	**159.5724**	**7.8200e-003**		**159.7367**

3.4 Building Construction - 2015

Unmitigated Construction On-Site

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					
Off-Road	5.1048	34.4781	22.9471	0.0328		2.4064	2.4064		2.2905	2.2905		3,165.2224	3,165.2224	0.7879		3,181.7690
Total	**5.1048**	**34.4781**	**22.9471**	**0.0328**		**2.4064**	**2.4064**		**2.2905**	**2.2905**		**3,165.2224**	**3,165.2224**	**0.7879**		**3,181.7690**

Unmitigated Construction Off-Site

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					
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	0.7982	5.0149	9.5644	0.0121	0.3613	0.1296	0.4909	0.1025	0.1192	0.2217		1,214.1784	1,214.1784	7.6500e-003		1,214.3391
Worker	0.7270	1.0107	11.7492	0.0147	1.1583	8.6800e-003	1.1670	0.3072	7.8800e-003	0.3151		1,251.8685	1,251.8685	0.0818		1,253.5862
Total	**1.5251**	**6.0256**	**21.3135**	**0.0267**	**1.5196**	**0.1383**	**1.6579**	**0.4097**	**0.1271**	**0.5368**		**2,466.0468**	**2,466.0468**	**0.0894**		**2,467.9252**

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	5.1048	34.4781	22.9471	0.0328		2.4064	2.4064		2.2905	2.2905	0.0000	3,165.2224	3,165.2224	0.7879		3,181.7690
Total	**5.1048**	**34.4781**	**22.9471**	**0.0328**		**2.4064**	**2.4064**		**2.2905**	**2.2905**	**0.0000**	**3,165.2224**	**3,165.2224**	**0.7879**		**3,181.7690**

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	0.7982	5.0149	9.5644	0.0121	0.3613	0.1296	0.4909	0.1025	0.1192	0.2217		1,214.1784	1,214.1784	7.6500e-003		1,214.3391
Worker	0.7270	1.0107	11.7492	0.0147	1.1583	8.6800e-003	1.1670	0.3072	7.8800e-003	0.3151		1,251.8685	1,251.8685	0.0818		1,253.5862
Total	**1.5251**	**6.0256**	**21.3135**	**0.0267**	**1.5196**	**0.1383**	**1.6579**	**0.4097**	**0.1271**	**0.5368**		**2,466.0468**	**2,466.0468**	**0.0894**		**2,467.9252**

3.5 Paving - 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	1.3034	14.1614	8.4252	0.0125		0.7958	0.7958		0.7322	0.7322		1,316.1928	1,316.1928	0.3929		1,324.4445
Paving	0.6812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9846**	**14.1614**	**8.4252**	**0.0125**		**0.7958**	**0.7958**		**0.7322**	**0.7322**		**1,316.1928**	**1,316.1928**	**0.3929**		**1,324.4445**

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	0.0290	0.1824	0.3478	4.4000e-004	0.0131	4.7100e-003	0.0179	3.7300e-003	4.3300e-003	8.0600e-003		44.1519	44.1519	2.8000e-004		44.1578
Worker	0.0413	0.0573	0.6666	8.3000e-004	0.0657	4.9000e-004	0.0662	0.0174	4.5000e-004	0.0179		71.0280	71.0280	4.6400e-003		71.1255
Total	**0.0703**	**0.2397**	**1.0144**	**1.2700e-003**	**0.0789**	**5.2000e-003**	**0.0841**	**0.0212**	**4.7800e-003**	**0.0259**		**115.1799**	**115.1799**	**4.9200e-003**		**115.2832**

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	1.3034	14.1614	8.4252	0.0125		0.7958	0.7958		0.7322	0.7322	0.0000	1,316.1928	1,316.1928	0.3929		1,324.4445
Paving	0.6812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9846**	**14.1614**	**8.4252**	**0.0125**		**0.7958**	**0.7958**		**0.7322**	**0.7322**	**0.0000**	**1,316.1928**	**1,316.1928**	**0.3929**		**1,324.4445**

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	0.0290	0.1824	0.3478	4.4000e-004	0.0131	4.7100e-003	0.0179	3.7300e-003	4.3300e-003	8.0600e-003		44.1519	44.1519	2.8000e-004		44.1578
Worker	0.0413	0.0573	0.6666	8.3000e-004	0.0657	4.9000e-004	0.0662	0.0174	4.5000e-004	0.0179		71.0280	71.0280	4.6400e-003		71.1255
Total	**0.0703**	**0.2397**	**1.0144**	**1.2700e-003**	**0.0789**	**5.2000e-003**	**0.0841**	**0.0212**	**4.7800e-003**	**0.0259**		**115.1799**	**115.1799**	**4.9200e-003**		**115.2832**

Irwin Reservoir and TM

San Bernardino-Mojave Desert County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.30	Acre	1.30	56,628.00	0
Other Non-Asphalt Surfaces	6.41	Acre	6.41	279,219.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2015
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 - see table

Off-road Equipment - see table

Off-road Equipment - see table

Off-road Equipment - see table

Off-road Equipment - see table

Trips and VMT - water truck trips added

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	71.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	PhaseEndDate	2/20/2015	2/22/2015
tblConstructionPhase	PhaseEndDate	6/8/2015	6/1/2015
tblConstructionPhase	PhaseEndDate	2/6/2015	2/8/2015
tblConstructionPhase	PhaseStartDate	6/2/2015	5/26/2015
tblGrading	AcresOfGrading	5.63	10.00
tblGrading	AcresOfGrading	8.44	0.00
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	LoadFactor	0.48	0.48
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	7.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00

tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	7.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	8.6724	55.1313	52.7642	0.0714	7.9553	3.3468	10.2780	3.8706	3.1555	6.0075	0.0000	6,891.8755	6,891.8755	1.2755	0.0000	6,918.6613
Total	**8.6724**	**55.1313**	**52.7642**	**0.0714**	**7.9553**	**3.3468**	**10.2780**	**3.8706**	**3.1555**	**6.0075**	**0.0000**	**6,891.8755**	**6,891.8755**	**1.2755**	**0.0000**	**6,918.6613**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	8.6724	55.1313	52.7642	0.0714	7.9553	3.3468	10.2780	3.8706	3.1555	6.0075	0.0000	6,891.8755	6,891.8755	1.2755	0.0000	6,918.6613
Total	**8.6724**	**55.1313**	**52.7642**	**0.0714**	**7.9553**	**3.3468**	**10.2780**	**3.8706**	**3.1555**	**6.0075**	**0.0000**	**6,891.8755**	**6,891.8755**	**1.2755**	**0.0000**	**6,918.6613**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2015	2/8/2015	5	5	
2	Grading	Grading	2/9/2015	2/22/2015	5	10	
3	Building Construction	Building Construction	2/23/2015	6/1/2015	5	71	
4	Paving	Paving	5/26/2015	6/1/2015	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

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	Graders	1	9.00	174	0.41
Site Preparation	Scrapers	1	9.00	361	0.48
Grading	Excavators	1	9.00	162	0.38
Building Construction	Cranes	1	9.00	226	0.29
Building Construction	Forklifts	2	9.00	89	0.20
Building Construction	Generator Sets	1	9.00	84	0.74
Paving	Pavers	1	9.00	125	0.42
Paving	Rollers	1	9.00	80	0.38
Grading	Rubber Tired Dozers	1	9.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	9.00	97	0.37
Grading	Graders	1	9.00	174	0.41
Grading	Tractors/Loaders/Backhoes	2	9.00	97	0.37
Paving	Paving Equipment	1	9.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	2	9.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	8.00	255	0.40
Building Construction	Welders	3	9.00	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	4	10.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	141.00	55.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	2.00	0.00	10.80	7.30	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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.6333	40.9382	24.1319	0.0309		2.1390	2.1390		1.9679	1.9679		3,242.6565	3,242.6565	0.9681		3,262.9860
Total	**3.6333**	**40.9382**	**24.1319**	**0.0309**	**0.0000**	**2.1390**	**2.1390**	**0.0000**	**1.9679**	**1.9679**		**3,242.6565**	**3,242.6565**	**0.9681**		**3,262.9860**

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	0.0316	0.1885	0.3947	4.4000e-004	0.0131	4.7500e-003	0.0179	3.7300e-003	4.3700e-003	8.1000e-003		43.7841	43.7841	2.9000e-004		43.7901
Worker	0.0458	0.0751	0.6808	9.1000e-004	0.0822	6.2000e-004	0.0828	0.0218	5.6000e-004	0.0224		78.0278	78.0278	5.8000e-003		78.1496
Total	**0.0774**	**0.2636**	**1.0755**	**1.3500e-003**	**0.0953**	**5.3700e-003**	**0.1007**	**0.0255**	**4.9300e-003**	**0.0305**		**121.8119**	**121.8119**	**6.0900e-003**		**121.9397**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.6333	40.9382	24.1319	0.0309		2.1390	2.1390		1.9679	1.9679	0.0000	3,242.6565	3,242.6565	0.9681		3,262.9860
Total	**3.6333**	**40.9382**	**24.1319**	**0.0309**	**0.0000**	**2.1390**	**2.1390**	**0.0000**	**1.9679**	**1.9679**	**0.0000**	**3,242.6565**	**3,242.6565**	**0.9681**		**3,262.9860**

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	0.0316	0.1885	0.3947	4.4000e-004	0.0131	4.7500e-003	0.0179	3.7300e-003	4.3700e-003	8.1000e-003		43.7841	43.7841	2.9000e-004		43.7901
Worker	0.0458	0.0751	0.6808	9.1000e-004	0.0822	6.2000e-004	0.0828	0.0218	5.6000e-004	0.0224		78.0278	78.0278	5.8000e-003		78.1496
Total	**0.0774**	**0.2636**	**1.0755**	**1.3500e-003**	**0.0953**	**5.3700e-003**	**0.1007**	**0.0255**	**4.9300e-003**	**0.0305**		**121.8119**	**121.8119**	**6.0900e-003**		**121.9397**

3.3 Grading - 2015

Unmitigated Construction On-Site

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					
Fugitive Dust					7.8354	0.0000	7.8354	3.8385	0.0000	3.8385			0.0000			0.0000
Off-Road	3.9063	41.6070	27.2785	0.0300		2.3172	2.3172		2.1318	2.1318		3,151.7192	3,151.7192	0.9409		3,171.4785
Total	**3.9063**	**41.6070**	**27.2785**	**0.0300**	**7.8354**	**2.3172**	**10.1525**	**3.8385**	**2.1318**	**5.9703**		**3,151.7192**	**3,151.7192**	**0.9409**		**3,171.4785**

Unmitigated Construction Off-Site

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					
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	0.0316	0.1885	0.3947	4.4000e-004	0.0131	4.7500e-003	0.0179	3.7300e-003	4.3700e-003	8.1000e-003		43.7841	43.7841	2.9000e-004		43.7901
Worker	0.0596	0.0976	0.8851	1.1900e-003	0.1068	8.0000e-004	0.1076	0.0283	7.3000e-004	0.0291		101.4361	101.4361	7.5400e-003		101.5945
Total	**0.0912**	**0.2861**	**1.2797**	**1.6300e-003**	**0.1199**	**5.5500e-003**	**0.1255**	**0.0321**	**5.1000e-003**	**0.0372**		**145.2202**	**145.2202**	**7.8300e-003**		**145.3846**

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					7.8354	0.0000	7.8354	3.8385	0.0000	3.8385			0.0000			0.0000
Off-Road	3.9063	41.6070	27.2785	0.0300		2.3172	2.3172		2.1318	2.1318	0.0000	3,151.7192	3,151.7192	0.9409		3,171.4785
Total	**3.9063**	**41.6070**	**27.2785**	**0.0300**	**7.8354**	**2.3172**	**10.1525**	**3.8385**	**2.1318**	**5.9703**	**0.0000**	**3,151.7192**	**3,151.7192**	**0.9409**		**3,171.4785**

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	0.0316	0.1885	0.3947	4.4000e-004	0.0131	4.7500e-003	0.0179	3.7300e-003	4.3700e-003	8.1000e-003		43.7841	43.7841	2.9000e-004		43.7901
Worker	0.0596	0.0976	0.8851	1.1900e-003	0.1068	8.0000e-004	0.1076	0.0283	7.3000e-004	0.0291		101.4361	101.4361	7.5400e-003		101.5945
Total	**0.0912**	**0.2861**	**1.2797**	**1.6300e-003**	**0.1199**	**5.5500e-003**	**0.1255**	**0.0321**	**5.1000e-003**	**0.0372**		**145.2202**	**145.2202**	**7.8300e-003**		**145.3846**

3.4 Building Construction - 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	5.1048	34.4781	22.9471	0.0328		2.4064	2.4064		2.2905	2.2905		3,165.2224	3,165.2224	0.7879		3,181.7690
Total	**5.1048**	**34.4781**	**22.9471**	**0.0328**		**2.4064**	**2.4064**		**2.2905**	**2.2905**		**3,165.2224**	**3,165.2224**	**0.7879**		**3,181.7690**

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	0.8686	5.1847	10.8530	0.0120	0.3613	0.1307	0.4920	0.1025	0.1202	0.2227		1,204.0624	1,204.0624	7.9200e-003		1,204.2287
Worker	0.6461	1.0586	9.5995	0.0129	1.1583	8.6800e-003	1.1670	0.3072	7.8800e-003	0.3151		1,100.1916	1,100.1916	0.0818		1,101.9093
Total	**1.5147**	**6.2432**	**20.4525**	**0.0249**	**1.5196**	**0.1394**	**1.6590**	**0.4097**	**0.1280**	**0.5378**		**2,304.2540**	**2,304.2540**	**0.0897**		**2,306.1380**

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	5.1048	34.4781	22.9471	0.0328		2.4064	2.4064		2.2905	2.2905	0.0000	3,165.2224	3,165.2224	0.7879		3,181.7690
Total	**5.1048**	**34.4781**	**22.9471**	**0.0328**		**2.4064**	**2.4064**		**2.2905**	**2.2905**	**0.0000**	**3,165.2224**	**3,165.2224**	**0.7879**		**3,181.7690**

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	0.8686	5.1847	10.8530	0.0120	0.3613	0.1307	0.4920	0.1025	0.1202	0.2227		1,204.0624	1,204.0624	7.9200e-003		1,204.2287
Worker	0.6461	1.0586	9.5995	0.0129	1.1583	8.6800e-003	1.1670	0.3072	7.8800e-003	0.3151		1,100.1916	1,100.1916	0.0818		1,101.9093
Total	**1.5147**	**6.2432**	**20.4525**	**0.0249**	**1.5196**	**0.1394**	**1.6590**	**0.4097**	**0.1280**	**0.5378**		**2,304.2540**	**2,304.2540**	**0.0897**		**2,306.1380**

3.5 Paving - 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	1.3034	14.1614	8.4252	0.0125		0.7958	0.7958		0.7322	0.7322		1,316.1928	1,316.1928	0.3929		1,324.4445
Paving	0.6812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9846**	**14.1614**	**8.4252**	**0.0125**		**0.7958**	**0.7958**		**0.7322**	**0.7322**		**1,316.1928**	**1,316.1928**	**0.3929**		**1,324.4445**

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	0.0316	0.1885	0.3947	4.4000e-004	0.0131	4.7500e-003	0.0179	3.7300e-003	4.3700e-003	8.1000e-003		43.7841	43.7841	2.9000e-004		43.7901
Worker	0.0367	0.0601	0.5447	7.3000e-004	0.0657	4.9000e-004	0.0662	0.0174	4.5000e-004	0.0179		62.4222	62.4222	4.6400e-003		62.5197
Total	**0.0682**	**0.2486**	**0.9393**	**1.1700e-003**	**0.0789**	**5.2400e-003**	**0.0841**	**0.0212**	**4.8200e-003**	**0.0260**		**106.2063**	**106.2063**	**4.9300e-003**		**106.3098**

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	1.3034	14.1614	8.4252	0.0125		0.7958	0.7958		0.7322	0.7322	0.0000	1,316.1928	1,316.1928	0.3929		1,324.4445
Paving	0.6812					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9846**	**14.1614**	**8.4252**	**0.0125**		**0.7958**	**0.7958**		**0.7322**	**0.7322**	**0.0000**	**1,316.1928**	**1,316.1928**	**0.3929**		**1,324.4445**

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	0.0316	0.1885	0.3947	4.4000e-004	0.0131	4.7500e-003	0.0179	3.7300e-003	4.3700e-003	8.1000e-003		43.7841	43.7841	2.9000e-004		43.7901
Worker	0.0367	0.0601	0.5447	7.3000e-004	0.0657	4.9000e-004	0.0662	0.0174	4.5000e-004	0.0179		62.4222	62.4222	4.6400e-003		62.5197
Total	**0.0682**	**0.2486**	**0.9393**	**1.1700e-003**	**0.0789**	**5.2400e-003**	**0.0841**	**0.0212**	**4.8200e-003**	**0.0260**		**106.2063**	**106.2063**	**4.9300e-003**		**106.3098**

Linda Vista Tank and TM

San Bernardino-Mojave Desert County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	2.80	Acre	2.80	121,968.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2015
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 - see table

Off-road Equipment - see table

Off-road Equipment - see table

Off-road Equipment - see table

Trips and VMT - water truck trips added

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	71.00
tblConstructionPhase	NumDays	6.00	10.00
tblConstructionPhase	NumDays	3.00	5.00
tblConstructionPhase	PhaseEndDate	2/20/2015	2/22/2015
tblConstructionPhase	PhaseEndDate	2/6/2015	2/8/2015
tblGrading	AcresOfGrading	5.63	3.00
tblGrading	AcresOfGrading	8.44	4.50
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	7.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	6.00	9.00
tblOffRoadEquipment	UsageHours	7.00	9.00
tblOffRoadEquipment	UsageHours	7.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.6580	41.9099	30.6748	0.0425	7.2129	2.4567	9.5370	3.7904	2.3367	5.9285	0.0000	4,059.5453	4,059.5453	0.9722	0.0000	4,079.9619
Total	**5.6580**	**41.9099**	**30.6748**	**0.0425**	**7.2129**	**2.4567**	**9.5370**	**3.7904**	**2.3367**	**5.9285**	**0.0000**	**4,059.5453**	**4,059.5453**	**0.9722**	**0.0000**	**4,079.9619**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.6580	41.9099	30.6748	0.0425	7.2129	2.4567	9.5370	3.7904	2.3367	5.9285	0.0000	4,059.5453	4,059.5453	0.9722	0.0000	4,079.9619
Total	**5.6580**	**41.9099**	**30.6748**	**0.0425**	**7.2129**	**2.4567**	**9.5370**	**3.7904**	**2.3367**	**5.9285**	**0.0000**	**4,059.5453**	**4,059.5453**	**0.9722**	**0.0000**	**4,079.9619**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2015	2/8/2015	5	5	
2	Grading	Grading	2/9/2015	2/22/2015	5	10	
3	Building Construction	Building Construction	2/23/2015	6/1/2015	5	71	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

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
Grading	Excavators	1	9.00	162	0.38
Building Construction	Generator Sets	1	9.00	84	0.74
Building Construction	Cranes	1	9.00	226	0.29
Building Construction	Forklifts	2	9.00	89	0.20
Site Preparation	Graders	1	9.00	174	0.41
Grading	Rubber Tired Dozers	1	9.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	9.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	9.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	2	9.00	97	0.37
Grading	Graders	1	9.00	174	0.41
Site Preparation	Scrapers	1	9.00	361	0.48
Building Construction	Welders	3	9.00	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	4	10.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	51.00	20.00	0.00	10.80	7.30	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					0.9545	0.0000	0.9545	0.1031	0.0000	0.1031			0.0000			0.0000
Off-Road	3.6289	40.8724	24.0846	0.0308		2.1370	2.1370		1.9660	1.9660		3,236.1996	3,236.1996	0.9661		3,256.4885
Total	**3.6289**	**40.8724**	**24.0846**	**0.0308**	**0.9545**	**2.1370**	**3.0914**	**0.1031**	**1.9660**	**2.0691**		**3,236.1996**	**3,236.1996**	**0.9661**		**3,256.4885**

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	0.0290	0.1824	0.3478	4.4000e-004	0.0131	4.7100e-003	0.0179	3.7300e-003	4.3300e-003	8.0600e-003		44.1519	44.1519	2.8000e-004		44.1578
Worker	0.0516	0.0717	0.8333	1.0400e-003	0.0822	6.2000e-004	0.0828	0.0218	5.6000e-004	0.0224		88.7850	88.7850	5.8000e-003		88.9068
Total	**0.0806**	**0.2540**	**1.1811**	**1.4800e-003**	**0.0953**	**5.3300e-003**	**0.1006**	**0.0255**	**4.8900e-003**	**0.0304**		**132.9369**	**132.9369**	**6.0800e-003**		**133.0646**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9545	0.0000	0.9545	0.1031	0.0000	0.1031			0.0000			0.0000
Off-Road	3.6289	40.8724	24.0846	0.0308		2.1370	2.1370		1.9660	1.9660	0.0000	3,236.1996	3,236.1996	0.9661		3,256.4885
Total	**3.6289**	**40.8724**	**24.0846**	**0.0308**	**0.9545**	**2.1370**	**3.0914**	**0.1031**	**1.9660**	**2.0691**	**0.0000**	**3,236.1996**	**3,236.1996**	**0.9661**		**3,256.4885**

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	0.0290	0.1824	0.3478	4.4000e-004	0.0131	4.7100e-003	0.0179	3.7300e-003	4.3300e-003	8.0600e-003		44.1519	44.1519	2.8000e-004		44.1578
Worker	0.0516	0.0717	0.8333	1.0400e-003	0.0822	6.2000e-004	0.0828	0.0218	5.6000e-004	0.0224		88.7850	88.7850	5.8000e-003		88.9068
Total	**0.0806**	**0.2540**	**1.1811**	**1.4800e-003**	**0.0953**	**5.3300e-003**	**0.1006**	**0.0255**	**4.8900e-003**	**0.0304**		**132.9369**	**132.9369**	**6.0800e-003**		**133.0646**

3.3 Grading - 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					7.0930	0.0000	7.0930	3.7584	0.0000	3.7584			0.0000			0.0000
Off-Road	3.9087	41.6343	27.2978	0.0300		2.3185	2.3185		2.1330	2.1330		3,154.8442	3,154.8442	0.9419		3,174.6231
Total	**3.9087**	**41.6343**	**27.2978**	**0.0300**	**7.0930**	**2.3185**	**9.4115**	**3.7584**	**2.1330**	**5.8914**		**3,154.8442**	**3,154.8442**	**0.9419**		**3,174.6231**

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	0.0290	0.1824	0.3478	4.4000e-004	0.0131	4.7100e-003	0.0179	3.7300e-003	4.3300e-003	8.0600e-003		44.1519	44.1519	2.8000e-004		44.1578
Worker	0.0670	0.0932	1.0833	1.3500e-003	0.1068	8.0000e-004	0.1076	0.0283	7.3000e-004	0.0291		115.4205	115.4205	7.5400e-003		115.5789
Total	**0.0961**	**0.2755**	**1.4311**	**1.7900e-003**	**0.1199**	**5.5100e-003**	**0.1254**	**0.0321**	**5.0600e-003**	**0.0371**		**159.5724**	**159.5724**	**7.8200e-003**		**159.7367**

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					7.0930	0.0000	7.0930	3.7584	0.0000	3.7584			0.0000			0.0000
Off-Road	3.9087	41.6343	27.2978	0.0300		2.3185	2.3185		2.1330	2.1330	0.0000	3,154.8442	3,154.8442	0.9419		3,174.6231
Total	**3.9087**	**41.6343**	**27.2978**	**0.0300**	**7.0930**	**2.3185**	**9.4115**	**3.7584**	**2.1330**	**5.8914**	**0.0000**	**3,154.8442**	**3,154.8442**	**0.9419**		**3,174.6231**

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	0.0290	0.1824	0.3478	4.4000e-004	0.0131	4.7100e-003	0.0179	3.7300e-003	4.3300e-003	8.0600e-003		44.1519	44.1519	2.8000e-004		44.1578
Worker	0.0670	0.0932	1.0833	1.3500e-003	0.1068	8.0000e-004	0.1076	0.0283	7.3000e-004	0.0291		115.4205	115.4205	7.5400e-003		115.5789
Total	**0.0961**	**0.2755**	**1.4311**	**1.7900e-003**	**0.1199**	**5.5100e-003**	**0.1254**	**0.0321**	**5.0600e-003**	**0.0371**		**159.5724**	**159.5724**	**7.8200e-003**		**159.7367**

3.4 Building Construction - 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	5.1048	34.4781	22.9471	0.0328		2.4064	2.4064		2.2905	2.2905		3,165.2224	3,165.2224	0.7879		3,181.7690
Total	**5.1048**	**34.4781**	**22.9471**	**0.0328**		**2.4064**	**2.4064**		**2.2905**	**2.2905**		**3,165.2224**	**3,165.2224**	**0.7879**		**3,181.7690**

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	0.2902	1.8236	3.4780	4.3900e-003	0.1314	0.0471	0.1785	0.0373	0.0433	0.0806		441.5194	441.5194	2.7800e-003		441.5779
Worker	0.2630	0.3656	4.2497	5.3000e-003	0.4190	3.1400e-003	0.4221	0.1111	2.8500e-003	0.1140		452.8035	452.8035	0.0296		453.4248
Total	**0.5532**	**2.1892**	**7.7277**	**9.6900e-003**	**0.5503**	**0.0503**	**0.6006**	**0.1484**	**0.0462**	**0.1946**		**894.3229**	**894.3229**	**0.0324**		**895.0026**

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	5.1048	34.4781	22.9471	0.0328		2.4064	2.4064		2.2905	2.2905	0.0000	3,165.2224	3,165.2224	0.7879		3,181.7690
Total	**5.1048**	**34.4781**	**22.9471**	**0.0328**		**2.4064**	**2.4064**		**2.2905**	**2.2905**	**0.0000**	**3,165.2224**	**3,165.2224**	**0.7879**		**3,181.7690**

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	0.2902	1.8236	3.4780	4.3900e-003	0.1314	0.0471	0.1785	0.0373	0.0433	0.0806		441.5194	441.5194	2.7800e-003		441.5779
Worker	0.2630	0.3656	4.2497	5.3000e-003	0.4190	3.1400e-003	0.4221	0.1111	2.8500e-003	0.1140		452.8035	452.8035	0.0296		453.4248
Total	**0.5532**	**2.1892**	**7.7277**	**9.6900e-003**	**0.5503**	**0.0503**	**0.6006**	**0.1484**	**0.0462**	**0.1946**		**894.3229**	**894.3229**	**0.0324**		**895.0026**

Linda Vista Tank and TM

San Bernardino-Mojave Desert County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	2.80	Acre	2.80	121,968.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2015
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 - see table

Off-road Equipment - see table

Off-road Equipment - see table

Off-road Equipment - see table

Trips and VMT - water truck trips added

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	71.00
tblConstructionPhase	NumDays	6.00	10.00
tblConstructionPhase	NumDays	3.00	5.00
tblConstructionPhase	PhaseEndDate	2/20/2015	2/22/2015
tblConstructionPhase	PhaseEndDate	2/6/2015	2/8/2015
tblGrading	AcresOfGrading	5.63	3.00
tblGrading	AcresOfGrading	8.44	4.50
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	7.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	6.00	9.00
tblOffRoadEquipment	UsageHours	7.00	9.00
tblOffRoadEquipment	UsageHours	7.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.6544	41.9204	30.3659	0.0418	7.2129	2.4571	9.5370	3.7904	2.3370	5.9286	0.0000	4,001.0049	4,001.0049	0.9722	0.0000	4,021.4217
Total	**5.6544**	**41.9204**	**30.3659**	**0.0418**	**7.2129**	**2.4571**	**9.5370**	**3.7904**	**2.3370**	**5.9286**	**0.0000**	**4,001.0049**	**4,001.0049**	**0.9722**	**0.0000**	**4,021.4217**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.6544	41.9204	30.3659	0.0418	7.2129	2.4571	9.5370	3.7904	2.3370	5.9286	0.0000	4,001.0049	4,001.0049	0.9722	0.0000	4,021.4217
Total	**5.6544**	**41.9204**	**30.3659**	**0.0418**	**7.2129**	**2.4571**	**9.5370**	**3.7904**	**2.3370**	**5.9286**	**0.0000**	**4,001.0049**	**4,001.0049**	**0.9722**	**0.0000**	**4,021.4217**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2015	2/8/2015	5	5	
2	Grading	Grading	2/9/2015	2/22/2015	5	10	
3	Building Construction	Building Construction	2/23/2015	6/1/2015	5	71	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

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
Grading	Excavators	1	9.00	162	0.38
Building Construction	Generator Sets	1	9.00	84	0.74
Building Construction	Cranes	1	9.00	226	0.29
Building Construction	Forklifts	2	9.00	89	0.20
Site Preparation	Graders	1	9.00	174	0.41
Grading	Rubber Tired Dozers	1	9.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	9.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	9.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	2	9.00	97	0.37
Grading	Graders	1	9.00	174	0.41
Site Preparation	Scrapers	1	9.00	361	0.48
Building Construction	Welders	3	9.00	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	4	10.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	51.00	20.00	0.00	10.80	7.30	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					0.9545	0.0000	0.9545	0.1031	0.0000	0.1031			0.0000			0.0000
Off-Road	3.6289	40.8724	24.0846	0.0308		2.1370	2.1370		1.9660	1.9660		3,236.1996	3,236.1996	0.9661		3,256.4885
Total	**3.6289**	**40.8724**	**24.0846**	**0.0308**	**0.9545**	**2.1370**	**3.0914**	**0.1031**	**1.9660**	**2.0691**		**3,236.1996**	**3,236.1996**	**0.9661**		**3,256.4885**

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	0.0316	0.1885	0.3947	4.4000e-004	0.0131	4.7500e-003	0.0179	3.7300e-003	4.3700e-003	8.1000e-003		43.7841	43.7841	2.9000e-004		43.7901
Worker	0.0458	0.0751	0.6808	9.1000e-004	0.0822	6.2000e-004	0.0828	0.0218	5.6000e-004	0.0224		78.0278	78.0278	5.8000e-003		78.1496
Total	**0.0774**	**0.2636**	**1.0755**	**1.3500e-003**	**0.0953**	**5.3700e-003**	**0.1007**	**0.0255**	**4.9300e-003**	**0.0305**		**121.8119**	**121.8119**	**6.0900e-003**		**121.9397**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9545	0.0000	0.9545	0.1031	0.0000	0.1031			0.0000			0.0000
Off-Road	3.6289	40.8724	24.0846	0.0308		2.1370	2.1370		1.9660	1.9660	0.0000	3,236.1996	3,236.1996	0.9661		3,256.4885
Total	**3.6289**	**40.8724**	**24.0846**	**0.0308**	**0.9545**	**2.1370**	**3.0914**	**0.1031**	**1.9660**	**2.0691**	**0.0000**	**3,236.1996**	**3,236.1996**	**0.9661**		**3,256.4885**

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	0.0316	0.1885	0.3947	4.4000e-004	0.0131	4.7500e-003	0.0179	3.7300e-003	4.3700e-003	8.1000e-003		43.7841	43.7841	2.9000e-004		43.7901
Worker	0.0458	0.0751	0.6808	9.1000e-004	0.0822	6.2000e-004	0.0828	0.0218	5.6000e-004	0.0224		78.0278	78.0278	5.8000e-003		78.1496
Total	**0.0774**	**0.2636**	**1.0755**	**1.3500e-003**	**0.0953**	**5.3700e-003**	**0.1007**	**0.0255**	**4.9300e-003**	**0.0305**		**121.8119**	**121.8119**	**6.0900e-003**		**121.9397**

3.3 Grading - 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					7.0930	0.0000	7.0930	3.7584	0.0000	3.7584			0.0000			0.0000
Off-Road	3.9087	41.6343	27.2978	0.0300		2.3185	2.3185		2.1330	2.1330		3,154.8442	3,154.8442	0.9419		3,174.6231
Total	**3.9087**	**41.6343**	**27.2978**	**0.0300**	**7.0930**	**2.3185**	**9.4115**	**3.7584**	**2.1330**	**5.8914**		**3,154.8442**	**3,154.8442**	**0.9419**		**3,174.6231**

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	0.0316	0.1885	0.3947	4.4000e-004	0.0131	4.7500e-003	0.0179	3.7300e-003	4.3700e-003	8.1000e-003		43.7841	43.7841	2.9000e-004		43.7901
Worker	0.0596	0.0976	0.8851	1.1900e-003	0.1068	8.0000e-004	0.1076	0.0283	7.3000e-004	0.0291		101.4361	101.4361	7.5400e-003		101.5945
Total	**0.0912**	**0.2861**	**1.2797**	**1.6300e-003**	**0.1199**	**5.5500e-003**	**0.1255**	**0.0321**	**5.1000e-003**	**0.0372**		**145.2202**	**145.2202**	**7.8300e-003**		**145.3846**

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					7.0930	0.0000	7.0930	3.7584	0.0000	3.7584			0.0000			0.0000
Off-Road	3.9087	41.6343	27.2978	0.0300		2.3185	2.3185		2.1330	2.1330	0.0000	3,154.8442	3,154.8442	0.9419		3,174.6231
Total	**3.9087**	**41.6343**	**27.2978**	**0.0300**	**7.0930**	**2.3185**	**9.4115**	**3.7584**	**2.1330**	**5.8914**	**0.0000**	**3,154.8442**	**3,154.8442**	**0.9419**		**3,174.6231**

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	0.0316	0.1885	0.3947	4.4000e-004	0.0131	4.7500e-003	0.0179	3.7300e-003	4.3700e-003	8.1000e-003		43.7841	43.7841	2.9000e-004		43.7901
Worker	0.0596	0.0976	0.8851	1.1900e-003	0.1068	8.0000e-004	0.1076	0.0283	7.3000e-004	0.0291		101.4361	101.4361	7.5400e-003		101.5945
Total	**0.0912**	**0.2861**	**1.2797**	**1.6300e-003**	**0.1199**	**5.5500e-003**	**0.1255**	**0.0321**	**5.1000e-003**	**0.0372**		**145.2202**	**145.2202**	**7.8300e-003**		**145.3846**

3.4 Building Construction - 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	5.1048	34.4781	22.9471	0.0328		2.4064	2.4064		2.2905	2.2905		3,165.2224	3,165.2224	0.7879		3,181.7690
Total	**5.1048**	**34.4781**	**22.9471**	**0.0328**		**2.4064**	**2.4064**		**2.2905**	**2.2905**		**3,165.2224**	**3,165.2224**	**0.7879**		**3,181.7690**

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	0.3158	1.8853	3.9466	4.3600e-003	0.1314	0.0475	0.1789	0.0373	0.0437	0.0810		437.8409	437.8409	2.8800e-003		437.9014
Worker	0.2337	0.3829	3.4722	4.6500e-003	0.4190	3.1400e-003	0.4221	0.1111	2.8500e-003	0.1140		397.9416	397.9416	0.0296		398.5629
Total	**0.5495**	**2.2682**	**7.4187**	**9.0100e-003**	**0.5503**	**0.0507**	**0.6010**	**0.1484**	**0.0466**	**0.1949**		**835.7825**	**835.7825**	**0.0325**		**836.4643**

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	5.1048	34.4781	22.9471	0.0328		2.4064	2.4064		2.2905	2.2905	0.0000	3,165.2224	3,165.2224	0.7879		3,181.7690
Total	**5.1048**	**34.4781**	**22.9471**	**0.0328**		**2.4064**	**2.4064**		**2.2905**	**2.2905**	**0.0000**	**3,165.2224**	**3,165.2224**	**0.7879**		**3,181.7690**

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	0.3158	1.8853	3.9466	4.3600e-003	0.1314	0.0475	0.1789	0.0373	0.0437	0.0810		437.8409	437.8409	2.8800e-003		437.9014
Worker	0.2337	0.3829	3.4722	4.6500e-003	0.4190	3.1400e-003	0.4221	0.1111	2.8500e-003	0.1140		397.9416	397.9416	0.0296		398.5629
Total	**0.5495**	**2.2682**	**7.4187**	**9.0100e-003**	**0.5503**	**0.0507**	**0.6010**	**0.1484**	**0.0466**	**0.1949**		**835.7825**	**835.7825**	**0.0325**		**836.4643**