

**Parenthetical CALEEMOD Assumptions  
For: Morongo Creek Interim Project Improvements  
Date: August 2015**

**CONSTRUCTION**

**Grading (Grading and Concrete Lining) (2017)**

- 229,259 cubic yards of cut.
- 2,944 cubic yards of fill.
- 1 year.
- 226,314 cubic yards exported soil.

**Equipment:**

Quantity	Type	Hours of Daily Operation
1	Excavator	6
1	Grader	6
1	Off-Highway Tractor	6
1	Off-Highway Truck	6
1	Rubber Tired Dozer	6
1	Rubber Tired Loaders	6
1	Scraper	6
1	Tractor/Loader/Backhoe	6

## Morongo Creek Interim Project Improvements Salton Sea Air Basin, Winter

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	21.00	Acre	21.00	914,760.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	3.4	<b>Precipitation Freq (Days)</b>	20
<b>Climate Zone</b>	10			<b>Operational Year</b>	2017
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	630.89	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The project includes channel grading and concrete slope lining which is construction emissions only with no operation emissions; therefore,

Construction Phase - Work days.

Off-road Equipment - Construction Equipment.

Off-road Equipment - Construction Equipment.

Grading - Total acreage of disturbed area is approximately 21 acres.

Trips and VMT - Disposal site is 30 miles away.

Construction Off-road Equipment Mitigation - Per SCAQMD rule 403.

On-road Fugitive Dust - Unpaved road is only 3.3% of total haul route.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	26
tblConstructionPhase	NumDays	35.00	283.00

tblGrading	AcresOfGrading	318.38	21.00
tblGrading	MaterialExported	0.00	226,314.00
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOnRoadDust	HaulingPercentPave	50.00	96.70
tblOnRoadDust	VendorPercentPave	50.00	96.70
tblOnRoadDust	WorkerPercentPave	50.00	96.70
tblProjectCharacteristics	OperationalYear	2014	2017
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	30.00

## 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					
2016	7.1052	88.7231	64.1728	0.1532	292.7457	3.2572	296.0029	31.9723	2.9965	34.9688	0.0000	15,537.8844	15,537.8844	1.5361	0.0000	15,570.1425
2017	6.5940	80.7764	61.2166	0.1530	341.0371	2.9766	344.0137	36.8822	2.7383	39.6205	0.0000	15,269.1899	15,269.1899	1.5313	0.0000	15,301.3463

<b>Total</b>	13.6992	169.4995	125.3894	0.3062	633.7829	6.2337	640.0166	68.8545	5.7348	74.5893	0.0000	30,807.07 44	30,807.074 4	3.0674	0.0000	30,871.48 87
--------------	---------	----------	----------	--------	----------	--------	----------	---------	--------	---------	--------	-----------------	-----------------	--------	--------	-----------------

### 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
<b>Year</b>	lb/day										lb/day					
2016	7.1052	88.7231	64.1728	0.1532	97.1208	3.2572	100.3779	10.9846	2.9965	13.9810	0.0000	15,537.88 44	15,537.884 4	1.5361	0.0000	15,570.14 25
2017	6.5940	80.7764	61.2166	0.1530	113.0355	2.9766	116.0121	12.6331	2.7383	15.3714	0.0000	15,269.18 99	15,269.189 9	1.5313	0.0000	15,301.34 63
<b>Total</b>	13.6992	169.4995	125.3894	0.3062	210.1563	6.2337	216.3900	23.6177	5.7348	29.3525	0.0000	30,807.07 43	30,807.074 3	3.0674	0.0000	30,871.48 87

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	0.00	0.00	0.00	0.00	66.84	0.00	66.19	65.70	0.00	60.65	0.00	0.00	0.00	0.00	0.00	0.00

## 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Category</b>	lb/day										lb/day					
Area	25.3842	2.0000e-005	2.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.8600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	25.3842	2.0000e-005	2.1800e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005	0.0000	4.8600e-003

**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	25.3842	2.0000e-005	2.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.8600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>25.3842</b>	<b>2.0000e-005</b>	<b>2.1800e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>4.6000e-003</b>	<b>4.6000e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.8600e-003</b>

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	6/1/2016	6/30/2017	5	283	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 21**

**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	Off-Highway Tractors	1	6.00	122	0.44
Grading	Off-Highway Trucks	1	6.00	400	0.38
Grading	Rubber Tired Loaders	1	6.00	199	0.36
Grading	Excavators	1	6.00	162	0.38
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Scrapers	1	6.00	361	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
Grading	8	20.00	0.00	28,289.00	14.60	6.20	30.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

### 3.2 Grading - 2016

#### 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					4.7545	0.0000	4.7545	2.5153	0.0000	2.5153			0.0000			0.0000
Off-Road	4.6329	53.3384	31.7004	0.0467		2.4397	2.4397		2.2446	2.2446		4,858.2960	4,858.2960	1.4654		4,889.0701

<b>Total</b>	<b>4.6329</b>	<b>53.3384</b>	<b>31.7004</b>	<b>0.0467</b>	<b>4.7545</b>	<b>2.4397</b>	<b>7.1943</b>	<b>2.5153</b>	<b>2.2446</b>	<b>4.7598</b>		<b>4,858.2960</b>	<b>4,858.2960</b>	<b>1.4654</b>		<b>4,889.0701</b>
--------------	---------------	----------------	----------------	---------------	---------------	---------------	---------------	---------------	---------------	---------------	--	-------------------	-------------------	---------------	--	-------------------

**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
<b>Category</b>	lb/day										lb/day					
Hauling	2.3848	35.2246	31.1357	0.1041	273.5934	0.8160	274.4094	27.9846	0.7506	28.7352		10,485.8309	10,485.8309	0.0581		10,487.0508
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	0.0875	0.1601	1.3368	2.3800e-003	14.3978	1.4000e-003	14.3992	1.4724	1.2900e-003	1.4737		193.7576	193.7576	0.0126		194.0216
<b>Total</b>	<b>2.4723</b>	<b>35.3847</b>	<b>32.4724</b>	<b>0.1065</b>	<b>287.9912</b>	<b>0.8174</b>	<b>288.8086</b>	<b>29.4570</b>	<b>0.7519</b>	<b>30.2089</b>		<b>10,679.5885</b>	<b>10,679.5885</b>	<b>0.0707</b>		<b>10,681.0724</b>

**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
<b>Category</b>	lb/day										lb/day					
Fugitive Dust					1.7616	0.0000	1.7616	0.9319	0.0000	0.9319			0.0000			0.0000
Off-Road	4.6329	53.3384	31.7004	0.0467		2.4397	2.4397		2.2446	2.2446	0.0000	4,858.2959	4,858.2959	1.4654		4,889.0701
<b>Total</b>	<b>4.6329</b>	<b>53.3384</b>	<b>31.7004</b>	<b>0.0467</b>	<b>1.7616</b>	<b>2.4397</b>	<b>4.2013</b>	<b>0.9319</b>	<b>2.2446</b>	<b>3.1765</b>	<b>0.0000</b>	<b>4,858.2959</b>	<b>4,858.2959</b>	<b>1.4654</b>		<b>4,889.0701</b>

**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	2.3848	35.2246	31.1357	0.1041	90.5949	0.8160	91.4109	9.5507	0.7506	10.3013		10,485.8309	10,485.8309	0.0581		10,487.0508
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	0.0875	0.1601	1.3368	2.3800e-003	4.7643	1.4000e-003	4.7657	0.5020	1.2900e-003	0.5033		193.7576	193.7576	0.0126		194.0216
<b>Total</b>	<b>2.4723</b>	<b>35.3847</b>	<b>32.4724</b>	<b>0.1065</b>	<b>95.3592</b>	<b>0.8174</b>	<b>96.1766</b>	<b>10.0527</b>	<b>0.7519</b>	<b>10.8046</b>		<b>10,679.5885</b>	<b>10,679.5885</b>	<b>0.0707</b>		<b>10,681.0724</b>

### 3.2 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					4.7545	0.0000	4.7545	2.5153	0.0000	2.5153			0.0000			0.0000
Off-Road	4.3506	49.3999	30.2649	0.0467		2.2497	2.2497		2.0697	2.0697		4,780.5395	4,780.5395	1.4648		4,811.2992
<b>Total</b>	<b>4.3506</b>	<b>49.3999</b>	<b>30.2649</b>	<b>0.0467</b>	<b>4.7545</b>	<b>2.2497</b>	<b>7.0042</b>	<b>2.5153</b>	<b>2.0697</b>	<b>4.5850</b>		<b>4,780.5395</b>	<b>4,780.5395</b>	<b>1.4648</b>		<b>4,811.2992</b>

#### 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	2.1652	31.2308	29.7473	0.1039	321.8848	0.7255	322.6103	32.8945	0.6674	33.5619		10,302.8338	10,302.8338	0.0549		10,303.9860
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	0.0782	0.1457	1.2044	2.3800e-003	14.3978	1.3600e-003	14.3992	1.4724	1.2500e-003	1.4737		185.8166	185.8166	0.0116		186.0611
<b>Total</b>	<b>2.2434</b>	<b>31.3765</b>	<b>30.9517</b>	<b>0.1062</b>	<b>336.2826</b>	<b>0.7269</b>	<b>337.0095</b>	<b>34.3669</b>	<b>0.6687</b>	<b>35.0356</b>		<b>10,488.6504</b>	<b>10,488.6504</b>	<b>0.0665</b>		<b>10,490.0471</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7616	0.0000	1.7616	0.9319	0.0000	0.9319			0.0000			0.0000
Off-Road	4.3506	49.3999	30.2649	0.0467		2.2497	2.2497		2.0697	2.0697	0.0000	4,780.5395	4,780.5395	1.4648		4,811.2992
<b>Total</b>	<b>4.3506</b>	<b>49.3999</b>	<b>30.2649</b>	<b>0.0467</b>	<b>1.7616</b>	<b>2.2497</b>	<b>4.0112</b>	<b>0.9319</b>	<b>2.0697</b>	<b>3.0016</b>	<b>0.0000</b>	<b>4,780.5395</b>	<b>4,780.5395</b>	<b>1.4648</b>		<b>4,811.2992</b>

**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	2.1652	31.2308	29.7473	0.1039	106.5096	0.7255	107.2352	11.1992	0.6674	11.8666		10,302.8338	10,302.8338	0.0549		10,303.9860
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	0.0782	0.1457	1.2044	2.3800e-003	4.7643	1.3600e-003	4.7657	0.5020	1.2500e-003	0.5033		185.8166	185.8166	0.0116		186.0611
<b>Total</b>	<b>2.2434</b>	<b>31.3765</b>	<b>30.9517</b>	<b>0.1062</b>	<b>111.2740</b>	<b>0.7269</b>	<b>112.0009</b>	<b>11.7012</b>	<b>0.6687</b>	<b>12.3698</b>		<b>10,488.6504</b>	<b>10,488.6504</b>	<b>0.0665</b>		<b>10,490.0471</b>

## Morongo Creek Interim Project Improvements Salton Sea Air Basin, Summer

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	21.00	Acre	21.00	914,760.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	3.4	<b>Precipitation Freq (Days)</b>	20
<b>Climate Zone</b>	10			<b>Operational Year</b>	2017
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	630.89	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The project includes channel grading and concrete slope lining which is construction emissions only with no operation emissions; therefore,

Construction Phase - Work days.

Off-road Equipment - Construction Equipment.

Off-road Equipment - Construction Equipment.

Grading - Total acreage of disturbed area is approximately 21 acres.

Trips and VMT - Disposal site is 30 miles away.

Construction Off-road Equipment Mitigation - Per SCAQMD rule 403.

On-road Fugitive Dust - Unpaved road is only 3.3% of total haul route.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	26
tblConstructionPhase	NumDays	35.00	283.00

tblGrading	AcresOfGrading	318.38	21.00
tblGrading	MaterialExported	0.00	226,314.00
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOnRoadDust	HaulingPercentPave	50.00	96.70
tblOnRoadDust	VendorPercentPave	50.00	96.70
tblOnRoadDust	WorkerPercentPave	50.00	96.70
tblProjectCharacteristics	OperationalYear	2014	2017
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	30.00

## 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					
2016	6.9715	86.0192	60.2915	0.1535	292.7457	3.2561	296.0019	31.9723	2.9955	34.9678	0.0000	15,570.76	15,570.762	1.5354	0.0000	15,603.00
												25	5			50
2017	6.4764	78.3798	57.1453	0.1533	341.0371	2.9757	344.0128	36.8822	2.7375	39.6197	0.0000	15,301.20	15,301.201	1.5305	0.0000	15,333.34
												15	5			20

<b>Total</b>	13.4479	164.3990	117.4369	0.3068	633.7829	6.2318	640.0147	68.8545	5.7330	74.5875	0.0000	30,871.9640	30,871.9640	3.0659	0.0000	30,936.3470
--------------	---------	----------	----------	--------	----------	--------	----------	---------	--------	---------	--------	-------------	-------------	--------	--------	-------------

**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
<b>Year</b>	lb/day										lb/day					
2016	6.9715	86.0192	60.2915	0.1535	97.1208	3.2561	100.3769	10.9846	2.9955	13.9801	0.0000	15,570.7625	15,570.7625	1.5354	0.0000	15,603.0050
2017	6.4764	78.3798	57.1453	0.1533	113.0355	2.9757	116.0112	12.6331	2.7375	15.3706	0.0000	15,301.2015	15,301.2015	1.5305	0.0000	15,333.3420
<b>Total</b>	13.4479	164.3990	117.4369	0.3068	210.1563	6.2318	216.3880	23.6177	5.7330	29.3507	0.0000	30,871.9640	30,871.9640	3.0659	0.0000	30,936.3470

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	0.00	0.00	0.00	0.00	66.84	0.00	66.19	65.70	0.00	60.65	0.00	0.00	0.00	0.00	0.00	0.00

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Category</b>	lb/day										lb/day					
Area	25.3842	2.0000e-005	2.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.8600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	25.3842	2.0000e-005	2.1800e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005	0.0000	4.8600e-003

**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	25.3842	2.0000e-005	2.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.8600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>25.3842</b>	<b>2.0000e-005</b>	<b>2.1800e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>4.6000e-003</b>	<b>4.6000e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.8600e-003</b>

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	6/1/2016	6/30/2017	5	283	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 21**

**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	Off-Highway Tractors	1	6.00	122	0.44
Grading	Off-Highway Trucks	1	6.00	400	0.38
Grading	Rubber Tired Loaders	1	6.00	199	0.36
Grading	Excavators	1	6.00	162	0.38
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Scrapers	1	6.00	361	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
Grading	8	20.00	0.00	28,289.00	14.60	6.20	30.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

### 3.2 Grading - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.7545	0.0000	4.7545	2.5153	0.0000	2.5153			0.0000			0.0000
Off-Road	4.6329	53.3384	31.7004	0.0467		2.4397	2.4397		2.2446	2.2446		4,858.2960	4,858.2960	1.4654		4,889.0701

<b>Total</b>	<b>4.6329</b>	<b>53.3384</b>	<b>31.7004</b>	<b>0.0467</b>	<b>4.7545</b>	<b>2.4397</b>	<b>7.1943</b>	<b>2.5153</b>	<b>2.2446</b>	<b>4.7598</b>		<b>4,858.2960</b>	<b>4,858.2960</b>	<b>1.4654</b>		<b>4,889.0701</b>
--------------	---------------	----------------	----------------	---------------	---------------	---------------	---------------	---------------	---------------	---------------	--	-------------------	-------------------	---------------	--	-------------------

**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
<b>Category</b>	<b>lb/day</b>										<b>lb/day</b>					
Hauling	2.2229	32.5368	26.9485	0.1042	273.5934	0.8150	274.4084	27.9846	0.7496	28.7343		10,503.5001	10,503.5001	0.0574		10,504.7045
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	0.1158	0.1440	1.6427	2.5700e-003	14.3978	1.4000e-003	14.3992	1.4724	1.2900e-003	1.4737		208.9665	208.9665	0.0126		209.2304
<b>Total</b>	<b>2.3387</b>	<b>32.6808</b>	<b>28.5911</b>	<b>0.1068</b>	<b>287.9912</b>	<b>0.8164</b>	<b>288.8076</b>	<b>29.4570</b>	<b>0.7509</b>	<b>30.2080</b>		<b>10,712.4666</b>	<b>10,712.4666</b>	<b>0.0699</b>		<b>10,713.9350</b>

**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
<b>Category</b>	<b>lb/day</b>										<b>lb/day</b>					
Fugitive Dust					1.7616	0.0000	1.7616	0.9319	0.0000	0.9319			0.0000			0.0000
Off-Road	4.6329	53.3384	31.7004	0.0467		2.4397	2.4397		2.2446	2.2446	0.0000	4,858.2959	4,858.2959	1.4654		4,889.0701
<b>Total</b>	<b>4.6329</b>	<b>53.3384</b>	<b>31.7004</b>	<b>0.0467</b>	<b>1.7616</b>	<b>2.4397</b>	<b>4.2013</b>	<b>0.9319</b>	<b>2.2446</b>	<b>3.1765</b>	<b>0.0000</b>	<b>4,858.2959</b>	<b>4,858.2959</b>	<b>1.4654</b>		<b>4,889.0701</b>

**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	2.2229	32.5368	26.9485	0.1042	90.5949	0.8150	91.4098	9.5507	0.7496	10.3003		10,503.5001	10,503.5001	0.0574		10,504.7045
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	0.1158	0.1440	1.6427	2.5700e-003	4.7643	1.4000e-003	4.7657	0.5020	1.2900e-003	0.5033		208.9665	208.9665	0.0126		209.2304
<b>Total</b>	<b>2.3387</b>	<b>32.6808</b>	<b>28.5911</b>	<b>0.1068</b>	<b>95.3592</b>	<b>0.8164</b>	<b>96.1756</b>	<b>10.0527</b>	<b>0.7509</b>	<b>10.8036</b>		<b>10,712.4666</b>	<b>10,712.4666</b>	<b>0.0699</b>		<b>10,713.9350</b>

### 3.2 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					4.7545	0.0000	4.7545	2.5153	0.0000	2.5153			0.0000			0.0000
Off-Road	4.3506	49.3999	30.2649	0.0467		2.2497	2.2497		2.0697	2.0697		4,780.5395	4,780.5395	1.4648		4,811.2992
<b>Total</b>	<b>4.3506</b>	<b>49.3999</b>	<b>30.2649</b>	<b>0.0467</b>	<b>4.7545</b>	<b>2.2497</b>	<b>7.0042</b>	<b>2.5153</b>	<b>2.0697</b>	<b>4.5850</b>		<b>4,780.5395</b>	<b>4,780.5395</b>	<b>1.4648</b>		<b>4,811.2992</b>

#### 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	2.0218	28.8487	25.3974	0.1040	321.8848	0.7247	322.6095	32.8945	0.6666	33.5611		10,320.2251	10,320.2251	0.0541		10,321.3614
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	0.1040	0.1312	1.4830	2.5700e-003	14.3978	1.3600e-003	14.3992	1.4724	1.2500e-003	1.4737		200.4369	200.4369	0.0116		200.6814
<b>Total</b>	<b>2.1258</b>	<b>28.9799</b>	<b>26.8804</b>	<b>0.1065</b>	<b>336.2826</b>	<b>0.7260</b>	<b>337.0086</b>	<b>34.3669</b>	<b>0.6678</b>	<b>35.0348</b>		<b>10,520.6620</b>	<b>10,520.6620</b>	<b>0.0658</b>		<b>10,522.0428</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7616	0.0000	1.7616	0.9319	0.0000	0.9319			0.0000			0.0000
Off-Road	4.3506	49.3999	30.2649	0.0467		2.2497	2.2497		2.0697	2.0697	0.0000	4,780.5395	4,780.5395	1.4648		4,811.2992
<b>Total</b>	<b>4.3506</b>	<b>49.3999</b>	<b>30.2649</b>	<b>0.0467</b>	<b>1.7616</b>	<b>2.2497</b>	<b>4.0112</b>	<b>0.9319</b>	<b>2.0697</b>	<b>3.0016</b>	<b>0.0000</b>	<b>4,780.5395</b>	<b>4,780.5395</b>	<b>1.4648</b>		<b>4,811.2992</b>

**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	2.0218	28.8487	25.3974	0.1040	106.5096	0.7247	107.2343	11.1992	0.6666	11.8658		10,320.2251	10,320.2251	0.0541		10,321.3614
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	0.1040	0.1312	1.4830	2.5700e-003	4.7643	1.3600e-003	4.7657	0.5020	1.2500e-003	0.5033		200.4369	200.4369	0.0116		200.6814
<b>Total</b>	<b>2.1258</b>	<b>28.9799</b>	<b>26.8804</b>	<b>0.1065</b>	<b>111.2740</b>	<b>0.7260</b>	<b>112.0000</b>	<b>11.7012</b>	<b>0.6678</b>	<b>12.3690</b>		<b>10,520.6620</b>	<b>10,520.6620</b>	<b>0.0658</b>		<b>10,522.0428</b>

## Morongo Creek Interim Project Improvements Salton Sea Air Basin, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	21.00	Acre	21.00	914,760.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	3.4	<b>Precipitation Freq (Days)</b>	20
<b>Climate Zone</b>	10			<b>Operational Year</b>	2017
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	630.89	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The project includes channel grading and concrete slope lining which is construction emissions only with no operation emissions; therefore,

Construction Phase - Work days.

Off-road Equipment - Construction Equipment.

Off-road Equipment - Construction Equipment.

Grading - Total acreage of disturbed area is approximately 21 acres.

Trips and VMT - Disposal site is 30 miles away.

Construction Off-road Equipment Mitigation - Per SCAQMD rule 403.

On-road Fugitive Dust - Unpaved road is only 3.3% of total haul route.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	26
tblConstructionPhase	NumDays	35.00	283.00

tblGrading	AcresOfGrading	318.38	21.00
tblGrading	MaterialExported	0.00	226,314.00
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOnRoadDust	HaulingPercentPave	50.00	96.70
tblOnRoadDust	VendorPercentPave	50.00	96.70
tblOnRoadDust	WorkerPercentPave	50.00	96.70
tblProjectCharacteristics	OperationalYear	2014	2017
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	30.00

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.5332	6.7523	4.6707	0.0117	21.5114	0.2491	21.7606	2.4898	0.2292	2.7190	0.0000	1,079.8198	1,079.8198	0.1066	0.0000	1,082.0579
2017	0.4210	5.2239	3.7735	9.9600e-003	21.3475	0.1934	21.5409	2.4711	0.1780	2.6491	0.0000	901.6141	901.6141	0.0903	0.0000	903.5097



Total	4.6326	0.0000	2.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.8000e-004	3.8000e-004	0.0000	0.0000	4.0000e-004
-------	--------	--------	-------------	--------	--------	--------	--------	--------	--------	--------	--------	--------	-------------	-------------	--------	--------	-------------

**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	4.6326	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.8000e-004	3.8000e-004	0.0000	0.0000	4.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.6326</b>	<b>0.0000</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>3.8000e-004</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-004</b>

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	6/1/2016	6/30/2017	5	283	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 21



Category	tons/yr										MT/yr					
Fugitive Dust					0.6728	0.0000	0.6728	0.3559	0.0000	0.3559	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3544	4.0804	2.4251	3.5800e-003		0.1866	0.1866		0.1717	0.1717	0.0000	337.1640	337.1640	0.1017	0.0000	339.2997
<b>Total</b>	<b>0.3544</b>	<b>4.0804</b>	<b>2.4251</b>	<b>3.5800e-003</b>	<b>0.6728</b>	<b>0.1866</b>	<b>0.8594</b>	<b>0.3559</b>	<b>0.1717</b>	<b>0.5276</b>	<b>0.0000</b>	<b>337.1640</b>	<b>337.1640</b>	<b>0.1017</b>	<b>0.0000</b>	<b>339.2997</b>

**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	0.1716	2.6601	2.1338	7.9700e-003	19.7969	0.0624	19.8593	2.0272	0.0574	2.0846	0.0000	728.4240	728.4240	4.0000e-003	0.0000	728.5081
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	7.2300e-003	0.0118	0.1118	1.9000e-004	1.0418	1.1000e-004	1.0419	0.1067	1.0000e-004	0.1068	0.0000	14.2318	14.2318	8.7000e-004	0.0000	14.2501
<b>Total</b>	<b>0.1788</b>	<b>2.6719</b>	<b>2.2456</b>	<b>8.1600e-003</b>	<b>20.8387</b>	<b>0.0625</b>	<b>20.9012</b>	<b>2.1339</b>	<b>0.0575</b>	<b>2.1914</b>	<b>0.0000</b>	<b>742.6559</b>	<b>742.6559</b>	<b>4.8700e-003</b>	<b>0.0000</b>	<b>742.7582</b>

**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					0.2493	0.0000	0.2493	0.1319	0.0000	0.1319	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3544	4.0804	2.4251	3.5800e-003		0.1866	0.1866		0.1717	0.1717	0.0000	337.1636	337.1636	0.1017	0.0000	339.2993
<b>Total</b>	<b>0.3544</b>	<b>4.0804</b>	<b>2.4251</b>	<b>3.5800e-003</b>	<b>0.2493</b>	<b>0.1866</b>	<b>0.4359</b>	<b>0.1319</b>	<b>0.1717</b>	<b>0.3036</b>	<b>0.0000</b>	<b>337.1636</b>	<b>337.1636</b>	<b>0.1017</b>	<b>0.0000</b>	<b>339.2993</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1716	2.6601	2.1338	7.9700e-003	6.5617	0.0624	6.6241	0.6936	0.0574	0.7510	0.0000	728.4240	728.4240	4.0000e-003	0.0000	728.5081
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	7.2300e-003	0.0118	0.1118	1.9000e-004	0.3451	1.1000e-004	0.3452	0.0365	1.0000e-004	0.0366	0.0000	14.2318	14.2318	8.7000e-004	0.0000	14.2501
<b>Total</b>	<b>0.1788</b>	<b>2.6719</b>	<b>2.2456</b>	<b>8.1600e-003</b>	<b>6.9068</b>	<b>0.0625</b>	<b>6.9692</b>	<b>0.7300</b>	<b>0.0575</b>	<b>0.7875</b>	<b>0.0000</b>	<b>742.6559</b>	<b>742.6559</b>	<b>4.8700e-003</b>	<b>0.0000</b>	<b>742.7582</b>

**3.2 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					0.6728	0.0000	0.6728	0.3559	0.0000	0.3559	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2828	3.2110	1.9672	3.0400e-003		0.1462	0.1462		0.1345	0.1345	0.0000	281.8941	281.8941	0.0864	0.0000	283.7079
<b>Total</b>	<b>0.2828</b>	<b>3.2110</b>	<b>1.9672</b>	<b>3.0400e-003</b>	<b>0.6728</b>	<b>0.1462</b>	<b>0.8190</b>	<b>0.3559</b>	<b>0.1345</b>	<b>0.4904</b>	<b>0.0000</b>	<b>281.8941</b>	<b>281.8941</b>	<b>0.0864</b>	<b>0.0000</b>	<b>283.7079</b>

**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	0.1327	2.0037	1.7205	6.7500e-003	19.7895	0.0471	19.8366	2.0246	0.0434	2.0679	0.0000	608.1221	608.1221	3.2100e-003	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	5.5100e-003	9.1600e-003	0.0858	1.6000e-004	0.8852	9.0000e-005	0.8853	0.0906	8.0000e-005	0.0907	0.0000	11.5979	11.5979	6.9000e-004	0.0000	11.6123
<b>Total</b>	<b>0.1382</b>	<b>2.0129</b>	<b>1.8063</b>	<b>6.9100e-003</b>	<b>20.6747</b>	<b>0.0472</b>	<b>20.7219</b>	<b>2.1152</b>	<b>0.0434</b>	<b>2.1586</b>	<b>0.0000</b>	<b>619.7200</b>	<b>619.7200</b>	<b>3.9000e-003</b>	<b>0.0000</b>	<b>619.8018</b>

### 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					0.2493	0.0000	0.2493	0.1319	0.0000	0.1319	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2828	3.2110	1.9672	3.0400e-003		0.1462	0.1462		0.1345	0.1345	0.0000	281.8938	281.8938	0.0864	0.0000	283.7076
<b>Total</b>	<b>0.2828</b>	<b>3.2110</b>	<b>1.9672</b>	<b>3.0400e-003</b>	<b>0.2493</b>	<b>0.1462</b>	<b>0.3955</b>	<b>0.1319</b>	<b>0.1345</b>	<b>0.2664</b>	<b>0.0000</b>	<b>281.8938</b>	<b>281.8938</b>	<b>0.0864</b>	<b>0.0000</b>	<b>283.7076</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1327	2.0037	1.7205	6.7500e-003	6.5543	0.0471	6.6014	0.6909	0.0434	0.7343	0.0000	608.1221	608.1221	3.2100e-003	0.0000	608.1895
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	5.5100e-003	9.1600e-003	0.0858	1.6000e-004	0.2932	9.0000e-005	0.2933	0.0310	8.0000e-005	0.0311	0.0000	11.5979	11.5979	6.9000e-004	0.0000	11.6123

Total	0.1382	2.0129	1.8063	6.9100e-003	6.8475	0.0472	6.8947	0.7219	0.0434	0.7653	0.0000	619.7200	619.7200	3.9000e-003	0.0000	619.8018
-------	--------	--------	--------	-------------	--------	--------	--------	--------	--------	--------	--------	----------	----------	-------------	--------	----------