

Southland Pipe - 2019-00012 - South Coast Air Basin, Summer

**Southland Pipe - 2019-00012**  
**South Coast Air Basin, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	7.80	1000sqft	1.95	7,800.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	10			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<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 - 7800 sf Metal Bldg on 1.95 ac lot

Construction Phase - No demolition phase

Construction Off-road Equipment Mitigation - Rule 401 & 403 compliance

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	10
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	25
tblLandUse	LotAcreage	0.18	1.95
tblProjectCharacteristics	OperationalYear	2018	2021

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**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					
2020	2.0473	18.3707	13.3360	0.0226	5.8890	0.8216	6.7106	2.9774	0.7696	3.7333	0.0000	2,062.753 7	2,062.753 7	0.5419	0.0000	2,072.109 3
2021	7.4537	13.7400	13.0353	0.0226	0.1453	0.6848	0.7247	0.0385	0.6612	0.6720	0.0000	2,061.501 3	2,061.501 3	0.4150	0.0000	2,070.497 3
<b>Maximum</b>	<b>7.4537</b>	<b>18.3707</b>	<b>13.3360</b>	<b>0.0226</b>	<b>5.8890</b>	<b>0.8216</b>	<b>6.7106</b>	<b>2.9774</b>	<b>0.7696</b>	<b>3.7333</b>	<b>0.0000</b>	<b>2,062.753 7</b>	<b>2,062.753 7</b>	<b>0.5419</b>	<b>0.0000</b>	<b>2,072.109 3</b>

**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					
2020	2.0473	18.3707	13.3360	0.0226	2.3435	0.8216	3.1651	1.1738	0.7696	1.9297	0.0000	2,062.753 7	2,062.753 7	0.5419	0.0000	2,072.109 3
2021	7.4537	13.7400	13.0353	0.0226	0.1327	0.6848	0.7214	0.0354	0.6612	0.6711	0.0000	2,061.501 3	2,061.501 3	0.4150	0.0000	2,070.497 3
<b>Maximum</b>	<b>7.4537</b>	<b>18.3707</b>	<b>13.3360</b>	<b>0.0226</b>	<b>2.3435</b>	<b>0.8216</b>	<b>3.1651</b>	<b>1.1738</b>	<b>0.7696</b>	<b>1.9297</b>	<b>0.0000</b>	<b>2,062.753 7</b>	<b>2,062.753 7</b>	<b>0.5419</b>	<b>0.0000</b>	<b>2,072.109 3</b>

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	ROG	NOx	CO	SO2	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	58.97	0.00	47.73	59.91	0.00	40.96	0.00	0.00	0.00	0.00	0.00	0.00

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**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1743	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7100e-003	1.7100e-003	0.0000		1.8200e-003
Energy	7.5000e-003	0.0682	0.0573	4.1000e-004		5.1800e-003	5.1800e-003		5.1800e-003	5.1800e-003		81.8592	81.8592	1.5700e-003	1.5000e-003	82.3456
Mobile	0.1130	0.5743	1.7068	6.2500e-003	0.5117	4.8600e-003	0.5165	0.1369	4.5400e-003	0.1414		635.5668	635.5668	0.0294		636.3027
<b>Total</b>	<b>0.2949</b>	<b>0.6426</b>	<b>1.7649</b>	<b>6.6600e-003</b>	<b>0.5117</b>	<b>0.0100</b>	<b>0.5217</b>	<b>0.1369</b>	<b>9.7200e-003</b>	<b>0.1466</b>		<b>717.4277</b>	<b>717.4277</b>	<b>0.0310</b>	<b>1.5000e-003</b>	<b>718.6501</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1743	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7100e-003	1.7100e-003	0.0000		1.8200e-003
Energy	7.5000e-003	0.0682	0.0573	4.1000e-004		5.1800e-003	5.1800e-003		5.1800e-003	5.1800e-003		81.8592	81.8592	1.5700e-003	1.5000e-003	82.3456
Mobile	0.1130	0.5743	1.7068	6.2500e-003	0.5117	4.8600e-003	0.5165	0.1369	4.5400e-003	0.1414		635.5668	635.5668	0.0294		636.3027
<b>Total</b>	<b>0.2949</b>	<b>0.6426</b>	<b>1.7649</b>	<b>6.6600e-003</b>	<b>0.5117</b>	<b>0.0100</b>	<b>0.5217</b>	<b>0.1369</b>	<b>9.7200e-003</b>	<b>0.1466</b>		<b>717.4277</b>	<b>717.4277</b>	<b>0.0310</b>	<b>1.5000e-003</b>	<b>718.6501</b>

## Southland Pipe - 2019-00012 - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	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

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/28/2020	3/31/2020	5	2	
2	Grading	Grading	4/1/2020	4/6/2020	5	4	
3	Building Construction	Building Construction	4/7/2020	1/11/2021	5	200	
4	Paving	Paving	1/12/2021	1/25/2021	5	10	
5	Architectural Coating	Architectural Coating	1/26/2021	2/8/2021	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,700; Non-Residential Outdoor: 3,900; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	3.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2020**

**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					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553		1,667.4119	1,667.4119	0.5393		1,680.8937
<b>Total</b>	<b>1.6299</b>	<b>18.3464</b>	<b>7.7093</b>	<b>0.0172</b>	<b>5.7996</b>	<b>0.8210</b>	<b>6.6205</b>	<b>2.9537</b>	<b>0.7553</b>	<b>3.7090</b>		<b>1,667.4119</b>	<b>1,667.4119</b>	<b>0.5393</b>		<b>1,680.8937</b>

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**3.2 Site Preparation - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0359	0.0243	0.3261	9.2000e-004	0.0894	6.8000e-004	0.0901	0.0237	6.3000e-004	0.0243		91.5069	91.5069	2.6400e-003		91.5728
<b>Total</b>	<b>0.0359</b>	<b>0.0243</b>	<b>0.3261</b>	<b>9.2000e-004</b>	<b>0.0894</b>	<b>6.8000e-004</b>	<b>0.0901</b>	<b>0.0237</b>	<b>6.3000e-004</b>	<b>0.0243</b>		<b>91.5069</b>	<b>91.5069</b>	<b>2.6400e-003</b>		<b>91.5728</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					2.2618	0.0000	2.2618	1.1519	0.0000	1.1519			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553	0.0000	1,667.4119	1,667.4119	0.5393		1,680.8937
<b>Total</b>	<b>1.6299</b>	<b>18.3464</b>	<b>7.7093</b>	<b>0.0172</b>	<b>2.2618</b>	<b>0.8210</b>	<b>3.0828</b>	<b>1.1519</b>	<b>0.7553</b>	<b>1.9072</b>	<b>0.0000</b>	<b>1,667.4119</b>	<b>1,667.4119</b>	<b>0.5393</b>		<b>1,680.8937</b>



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**3.2 Site Preparation - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0359	0.0243	0.3261	9.2000e-004	0.0817	6.8000e-004	0.0823	0.0218	6.3000e-004	0.0224		91.5069	91.5069	2.6400e-003		91.5728
<b>Total</b>	<b>0.0359</b>	<b>0.0243</b>	<b>0.3261</b>	<b>9.2000e-004</b>	<b>0.0817</b>	<b>6.8000e-004</b>	<b>0.0823</b>	<b>0.0218</b>	<b>6.3000e-004</b>	<b>0.0224</b>		<b>91.5069</b>	<b>91.5069</b>	<b>2.6400e-003</b>		<b>91.5728</b>

**3.3 Grading - 2020**

**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					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296		1,365.7183	1,365.7183	0.4417		1,376.7609
<b>Total</b>	<b>1.3498</b>	<b>15.0854</b>	<b>6.4543</b>	<b>0.0141</b>	<b>4.9143</b>	<b>0.6844</b>	<b>5.5986</b>	<b>2.5256</b>	<b>0.6296</b>	<b>3.1552</b>		<b>1,365.7183</b>	<b>1,365.7183</b>	<b>0.4417</b>		<b>1,376.7609</b>

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**3.3 Grading - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0359	0.0243	0.3261	9.2000e-004	0.0894	6.8000e-004	0.0901	0.0237	6.3000e-004	0.0243		91.5069	91.5069	2.6400e-003		91.5728
<b>Total</b>	<b>0.0359</b>	<b>0.0243</b>	<b>0.3261</b>	<b>9.2000e-004</b>	<b>0.0894</b>	<b>6.8000e-004</b>	<b>0.0901</b>	<b>0.0237</b>	<b>6.3000e-004</b>	<b>0.0243</b>		<b>91.5069</b>	<b>91.5069</b>	<b>2.6400e-003</b>		<b>91.5728</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					1.9166	0.0000	1.9166	0.9850	0.0000	0.9850			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296	0.0000	1,365.7183	1,365.7183	0.4417		1,376.7609
<b>Total</b>	<b>1.3498</b>	<b>15.0854</b>	<b>6.4543</b>	<b>0.0141</b>	<b>1.9166</b>	<b>0.6844</b>	<b>2.6009</b>	<b>0.9850</b>	<b>0.6296</b>	<b>1.6146</b>	<b>0.0000</b>	<b>1,365.7183</b>	<b>1,365.7183</b>	<b>0.4417</b>		<b>1,376.7609</b>

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**3.3 Grading - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0359	0.0243	0.3261	9.2000e-004	0.0817	6.8000e-004	0.0823	0.0218	6.3000e-004	0.0224		91.5069	91.5069	2.6400e-003		91.5728
<b>Total</b>	<b>0.0359</b>	<b>0.0243</b>	<b>0.3261</b>	<b>9.2000e-004</b>	<b>0.0817</b>	<b>6.8000e-004</b>	<b>0.0823</b>	<b>0.0218</b>	<b>6.3000e-004</b>	<b>0.0224</b>		<b>91.5069</b>	<b>91.5069</b>	<b>2.6400e-003</b>		<b>91.5728</b>

**3.4 Building Construction - 2020**

**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	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>		<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>

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**3.4 Building Construction - 2020**

**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	3.3200e-003	0.1053	0.0256	2.6000e-004	6.4000e-003	5.2000e-004	6.9200e-003	1.8400e-003	5.0000e-004	2.3400e-003		27.2791	27.2791	1.7500e-003		27.3228
Worker	0.0135	9.1000e-003	0.1223	3.4000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1300e-003		34.3151	34.3151	9.9000e-004		34.3398
<b>Total</b>	<b>0.0168</b>	<b>0.1144</b>	<b>0.1479</b>	<b>6.0000e-004</b>	<b>0.0399</b>	<b>7.8000e-004</b>	<b>0.0407</b>	<b>0.0107</b>	<b>7.4000e-004</b>	<b>0.0115</b>		<b>61.5942</b>	<b>61.5942</b>	<b>2.7400e-003</b>		<b>61.6626</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					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>	<b>0.0000</b>	<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>

Southland Pipe - 2019-00012 - South Coast Air Basin, Summer

**3.4 Building Construction - 2020**

**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	3.3200e-003	0.1053	0.0256	2.6000e-004	5.9400e-003	5.2000e-004	6.4600e-003	1.7300e-003	5.0000e-004	2.2300e-003		27.2791	27.2791	1.7500e-003		27.3228
Worker	0.0135	9.1000e-003	0.1223	3.4000e-004	0.0306	2.6000e-004	0.0309	8.1800e-003	2.4000e-004	8.4100e-003		34.3151	34.3151	9.9000e-004		34.3398
<b>Total</b>	<b>0.0168</b>	<b>0.1144</b>	<b>0.1479</b>	<b>6.0000e-004</b>	<b>0.0366</b>	<b>7.8000e-004</b>	<b>0.0373</b>	<b>9.9100e-003</b>	<b>7.4000e-004</b>	<b>0.0106</b>		<b>61.5942</b>	<b>61.5942</b>	<b>2.7400e-003</b>		<b>61.6626</b>

**3.4 Building Construction - 2021**

**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	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
<b>Total</b>	<b>1.8125</b>	<b>13.6361</b>	<b>12.8994</b>	<b>0.0221</b>		<b>0.6843</b>	<b>0.6843</b>		<b>0.6608</b>	<b>0.6608</b>		<b>2,001.2200</b>	<b>2,001.2200</b>	<b>0.3573</b>		<b>2,010.1517</b>

Southland Pipe - 2019-00012 - South Coast Air Basin, Summer

**3.4 Building Construction - 2021**

**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	2.8100e-003	0.0958	0.0233	2.5000e-004	6.4000e-003	2.0000e-004	6.5900e-003	1.8400e-003	1.9000e-004	2.0300e-003		27.0744	27.0744	1.6700e-003		27.1162
Worker	0.0126	8.1900e-003	0.1126	3.3000e-004	0.0335	2.5000e-004	0.0338	8.8900e-003	2.3000e-004	9.1200e-003		33.2070	33.2070	9.0000e-004		33.2293
<b>Total</b>	<b>0.0154</b>	<b>0.1040</b>	<b>0.1359</b>	<b>5.8000e-004</b>	<b>0.0399</b>	<b>4.5000e-004</b>	<b>0.0404</b>	<b>0.0107</b>	<b>4.2000e-004</b>	<b>0.0112</b>		<b>60.2813</b>	<b>60.2813</b>	<b>2.5700e-003</b>		<b>60.3456</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					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517
<b>Total</b>	<b>1.8125</b>	<b>13.6361</b>	<b>12.8994</b>	<b>0.0221</b>		<b>0.6843</b>	<b>0.6843</b>		<b>0.6608</b>	<b>0.6608</b>	<b>0.0000</b>	<b>2,001.2200</b>	<b>2,001.2200</b>	<b>0.3573</b>		<b>2,010.1517</b>

Southland Pipe - 2019-00012 - South Coast Air Basin, Summer

**3.4 Building Construction - 2021**

**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	2.8100e-003	0.0958	0.0233	2.5000e-004	5.9400e-003	2.0000e-004	6.1400e-003	1.7300e-003	1.9000e-004	1.9200e-003		27.0744	27.0744	1.6700e-003		27.1162
Worker	0.0126	8.1900e-003	0.1126	3.3000e-004	0.0306	2.5000e-004	0.0309	8.1800e-003	2.3000e-004	8.4100e-003		33.2070	33.2070	9.0000e-004		33.2293
<b>Total</b>	<b>0.0154</b>	<b>0.1040</b>	<b>0.1359</b>	<b>5.8000e-004</b>	<b>0.0366</b>	<b>4.5000e-004</b>	<b>0.0370</b>	<b>9.9100e-003</b>	<b>4.2000e-004</b>	<b>0.0103</b>		<b>60.2813</b>	<b>60.2813</b>	<b>2.5700e-003</b>		<b>60.3456</b>

**3.5 Paving - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830		1,296.8664	1,296.8664	0.4111		1,307.1442
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.7739</b>	<b>7.7422</b>	<b>8.8569</b>	<b>0.0135</b>		<b>0.4153</b>	<b>0.4153</b>		<b>0.3830</b>	<b>0.3830</b>		<b>1,296.8664</b>	<b>1,296.8664</b>	<b>0.4111</b>		<b>1,307.1442</b>

Southland Pipe - 2019-00012 - South Coast Air Basin, Summer

**3.5 Paving - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0544	0.0355	0.4881	1.4400e-003	0.1453	1.0800e-003	0.1464	0.0385	9.9000e-004	0.0395		143.8968	143.8968	3.8800e-003		143.9937
<b>Total</b>	<b>0.0544</b>	<b>0.0355</b>	<b>0.4881</b>	<b>1.4400e-003</b>	<b>0.1453</b>	<b>1.0800e-003</b>	<b>0.1464</b>	<b>0.0385</b>	<b>9.9000e-004</b>	<b>0.0395</b>		<b>143.8968</b>	<b>143.8968</b>	<b>3.8800e-003</b>		<b>143.9937</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					
Off-Road	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830	0.0000	1,296.8664	1,296.8664	0.4111		1,307.1442
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.7739</b>	<b>7.7422</b>	<b>8.8569</b>	<b>0.0135</b>		<b>0.4153</b>	<b>0.4153</b>		<b>0.3830</b>	<b>0.3830</b>	<b>0.0000</b>	<b>1,296.8664</b>	<b>1,296.8664</b>	<b>0.4111</b>		<b>1,307.1442</b>



Southland Pipe - 2019-00012 - South Coast Air Basin, Summer

**3.5 Paving - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0544	0.0355	0.4881	1.4400e-003	0.1327	1.0800e-003	0.1338	0.0354	9.9000e-004	0.0364		143.8968	143.8968	3.8800e-003		143.9937
<b>Total</b>	<b>0.0544</b>	<b>0.0355</b>	<b>0.4881</b>	<b>1.4400e-003</b>	<b>0.1327</b>	<b>1.0800e-003</b>	<b>0.1338</b>	<b>0.0354</b>	<b>9.9000e-004</b>	<b>0.0364</b>		<b>143.8968</b>	<b>143.8968</b>	<b>3.8800e-003</b>		<b>143.9937</b>

**3.6 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.2306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>7.4495</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

Southland Pipe - 2019-00012 - South Coast Air Basin, Summer

**3.6 Architectural Coating - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.1900e-003	2.7300e-003	0.0376	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.0690	11.0690	3.0000e-004		11.0764
<b>Total</b>	<b>4.1900e-003</b>	<b>2.7300e-003</b>	<b>0.0376</b>	<b>1.1000e-004</b>	<b>0.0112</b>	<b>8.0000e-005</b>	<b>0.0113</b>	<b>2.9600e-003</b>	<b>8.0000e-005</b>	<b>3.0400e-003</b>		<b>11.0690</b>	<b>11.0690</b>	<b>3.0000e-004</b>		<b>11.0764</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					
Archit. Coating	7.2306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>7.4495</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

Southland Pipe - 2019-00012 - South Coast Air Basin, Summer

**3.6 Architectural Coating - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.1900e-003	2.7300e-003	0.0376	1.1000e-004	0.0102	8.0000e-005	0.0103	2.7300e-003	8.0000e-005	2.8000e-003		11.0690	11.0690	3.0000e-004		11.0764
<b>Total</b>	<b>4.1900e-003</b>	<b>2.7300e-003</b>	<b>0.0376</b>	<b>1.1000e-004</b>	<b>0.0102</b>	<b>8.0000e-005</b>	<b>0.0103</b>	<b>2.7300e-003</b>	<b>8.0000e-005</b>	<b>2.8000e-003</b>		<b>11.0690</b>	<b>11.0690</b>	<b>3.0000e-004</b>		<b>11.0764</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Southland Pipe - 2019-00012 - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1130	0.5743	1.7068	6.2500e-003	0.5117	4.8600e-003	0.5165	0.1369	4.5400e-003	0.1414		635.5668	635.5668	0.0294		636.3027
Unmitigated	0.1130	0.5743	1.7068	6.2500e-003	0.5117	4.8600e-003	0.5165	0.1369	4.5400e-003	0.1414		635.5668	635.5668	0.0294		636.3027

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	54.37	10.30	5.30	181,831	181,831
Total	54.37	10.30	5.30	181,831	181,831

4.3 Trip Type Information

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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.551391	0.043400	0.201050	0.120272	0.016162	0.005864	0.021029	0.030512	0.002059	0.001866	0.004766	0.000706	0.000924

5.0 Energy Detail

Historical Energy Use: N

Southland Pipe - 2019-00012 - South Coast Air Basin, Summer

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	7.5000e-003	0.0682	0.0573	4.1000e-004		5.1800e-003	5.1800e-003		5.1800e-003	5.1800e-003		81.8592	81.8592	1.5700e-003	1.5000e-003	82.3456
NaturalGas Unmitigated	7.5000e-003	0.0682	0.0573	4.1000e-004		5.1800e-003	5.1800e-003		5.1800e-003	5.1800e-003		81.8592	81.8592	1.5700e-003	1.5000e-003	82.3456

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	695.803	7.5000e-003	0.0682	0.0573	4.1000e-004		5.1800e-003	5.1800e-003		5.1800e-003	5.1800e-003		81.8592	81.8592	1.5700e-003	1.5000e-003	82.3456
<b>Total</b>		<b>7.5000e-003</b>	<b>0.0682</b>	<b>0.0573</b>	<b>4.1000e-004</b>		<b>5.1800e-003</b>	<b>5.1800e-003</b>		<b>5.1800e-003</b>	<b>5.1800e-003</b>		<b>81.8592</b>	<b>81.8592</b>	<b>1.5700e-003</b>	<b>1.5000e-003</b>	<b>82.3456</b>

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**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.695803	7.5000e-003	0.0682	0.0573	4.1000e-004		5.1800e-003	5.1800e-003		5.1800e-003	5.1800e-003		81.8592	81.8592	1.5700e-003	1.5000e-003	82.3456
<b>Total</b>		<b>7.5000e-003</b>	<b>0.0682</b>	<b>0.0573</b>	<b>4.1000e-004</b>		<b>5.1800e-003</b>	<b>5.1800e-003</b>		<b>5.1800e-003</b>	<b>5.1800e-003</b>		<b>81.8592</b>	<b>81.8592</b>	<b>1.5700e-003</b>	<b>1.5000e-003</b>	<b>82.3456</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1743	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7100e-003	1.7100e-003	0.0000		1.8200e-003
Unmitigated	0.1743	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7100e-003	1.7100e-003	0.0000		1.8200e-003

Southland Pipe - 2019-00012 - South Coast Air Basin, Summer

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1544					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7100e-003	1.7100e-003	0.0000		1.8200e-003
<b>Total</b>	<b>0.1743</b>	<b>1.0000e-005</b>	<b>8.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>1.7100e-003</b>	<b>1.7100e-003</b>	<b>0.0000</b>		<b>1.8200e-003</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1544					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7100e-003	1.7100e-003	0.0000		1.8200e-003
<b>Total</b>	<b>0.1743</b>	<b>1.0000e-005</b>	<b>8.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>1.7100e-003</b>	<b>1.7100e-003</b>	<b>0.0000</b>		<b>1.8200e-003</b>

**7.0 Water Detail**

## Southland Pipe - 2019-00012 - South Coast Air Basin, Summer

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**7.1 Mitigation Measures Water****8.0 Waste Detail**

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**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

**Southland Pipe - 2019-00012**  
**South Coast Air Basin, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	7.80	1000sqft	1.95	7,800.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	10			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<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 - 7800 sf Metal Bldg on 1.95 ac lot

Construction Phase - No demolition phase

Construction Off-road Equipment Mitigation - Rule 401 & 403 compliance

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	10
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	25
tblLandUse	LotAcreage	0.18	1.95
tblProjectCharacteristics	OperationalYear	2018	2021

Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

**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					
2020	2.0488	18.3731	13.3273	0.0226	5.8890	0.8216	6.7106	2.9774	0.7696	3.7333	0.0000	2,059.8828	2,059.8828	0.5417	0.0000	2,069.2398
2021	7.4541	13.7406	13.0272	0.0226	0.1453	0.6848	0.7247	0.0385	0.6612	0.6720	0.0000	2,058.7019	2,058.7019	0.4147	0.0000	2,067.6993
<b>Maximum</b>	<b>7.4541</b>	<b>18.3731</b>	<b>13.3273</b>	<b>0.0226</b>	<b>5.8890</b>	<b>0.8216</b>	<b>6.7106</b>	<b>2.9774</b>	<b>0.7696</b>	<b>3.7333</b>	<b>0.0000</b>	<b>2,059.8828</b>	<b>2,059.8828</b>	<b>0.5417</b>	<b>0.0000</b>	<b>2,069.2398</b>

**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					
2020	2.0488	18.3731	13.3273	0.0226	2.3435	0.8216	3.1651	1.1738	0.7696	1.9297	0.0000	2,059.8828	2,059.8828	0.5417	0.0000	2,069.2398
2021	7.4541	13.7406	13.0272	0.0226	0.1327	0.6848	0.7214	0.0354	0.6612	0.6711	0.0000	2,058.7019	2,058.7019	0.4147	0.0000	2,067.6993
<b>Maximum</b>	<b>7.4541</b>	<b>18.3731</b>	<b>13.3273</b>	<b>0.0226</b>	<b>2.3435</b>	<b>0.8216</b>	<b>3.1651</b>	<b>1.1738</b>	<b>0.7696</b>	<b>1.9297</b>	<b>0.0000</b>	<b>2,059.8828</b>	<b>2,059.8828</b>	<b>0.5417</b>	<b>0.0000</b>	<b>2,069.2398</b>

## Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

	ROG	NOx	CO	SO2	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	58.97	0.00	47.73	59.91	0.00	40.96	0.00	0.00	0.00	0.00	0.00	0.00

Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1743	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7100e-003	1.7100e-003	0.0000		1.8200e-003
Energy	7.5000e-003	0.0682	0.0573	4.1000e-004		5.1800e-003	5.1800e-003		5.1800e-003	5.1800e-003		81.8592	81.8592	1.5700e-003	1.5000e-003	82.3456
Mobile	0.1088	0.5907	1.5892	5.9300e-003	0.5117	4.8800e-003	0.5166	0.1369	4.5600e-003	0.1415		603.4536	603.4536	0.0292		604.1832
<b>Total</b>	<b>0.2906</b>	<b>0.6589</b>	<b>1.6473</b>	<b>6.3400e-003</b>	<b>0.5117</b>	<b>0.0101</b>	<b>0.5217</b>	<b>0.1369</b>	<b>9.7400e-003</b>	<b>0.1466</b>		<b>685.3145</b>	<b>685.3145</b>	<b>0.0308</b>	<b>1.5000e-003</b>	<b>686.5306</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1743	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7100e-003	1.7100e-003	0.0000		1.8200e-003
Energy	7.5000e-003	0.0682	0.0573	4.1000e-004		5.1800e-003	5.1800e-003		5.1800e-003	5.1800e-003		81.8592	81.8592	1.5700e-003	1.5000e-003	82.3456
Mobile	0.1088	0.5907	1.5892	5.9300e-003	0.5117	4.8800e-003	0.5166	0.1369	4.5600e-003	0.1415		603.4536	603.4536	0.0292		604.1832
<b>Total</b>	<b>0.2906</b>	<b>0.6589</b>	<b>1.6473</b>	<b>6.3400e-003</b>	<b>0.5117</b>	<b>0.0101</b>	<b>0.5217</b>	<b>0.1369</b>	<b>9.7400e-003</b>	<b>0.1466</b>		<b>685.3145</b>	<b>685.3145</b>	<b>0.0308</b>	<b>1.5000e-003</b>	<b>686.5306</b>

## Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

	ROG	NOx	CO	SO2	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

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/28/2020	3/31/2020	5	2	
2	Grading	Grading	4/1/2020	4/6/2020	5	4	
3	Building Construction	Building Construction	4/7/2020	1/11/2021	5	200	
4	Paving	Paving	1/12/2021	1/25/2021	5	10	
5	Architectural Coating	Architectural Coating	1/26/2021	2/8/2021	5	10	

**Acres of Grading (Site Preparation Phase): 1**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,700; Non-Residential Outdoor: 3,900; Striped Parking Area: 0 (Architectural Coating – sqft)**

#### OffRoad Equipment

Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	3.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2020**

**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					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553		1,667.4119	1,667.4119	0.5393		1,680.8937
<b>Total</b>	<b>1.6299</b>	<b>18.3464</b>	<b>7.7093</b>	<b>0.0172</b>	<b>5.7996</b>	<b>0.8210</b>	<b>6.6205</b>	<b>2.9537</b>	<b>0.7553</b>	<b>3.7090</b>		<b>1,667.4119</b>	<b>1,667.4119</b>	<b>0.5393</b>		<b>1,680.8937</b>

Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

**3.2 Site Preparation - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0395	0.0267	0.2957	8.6000e-004	0.0894	6.8000e-004	0.0901	0.0237	6.3000e-004	0.0243		85.8281	85.8281	2.4700e-003		85.8899
<b>Total</b>	<b>0.0395</b>	<b>0.0267</b>	<b>0.2957</b>	<b>8.6000e-004</b>	<b>0.0894</b>	<b>6.8000e-004</b>	<b>0.0901</b>	<b>0.0237</b>	<b>6.3000e-004</b>	<b>0.0243</b>		<b>85.8281</b>	<b>85.8281</b>	<b>2.4700e-003</b>		<b>85.8899</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					2.2618	0.0000	2.2618	1.1519	0.0000	1.1519			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553	0.0000	1,667.4119	1,667.4119	0.5393		1,680.8937
<b>Total</b>	<b>1.6299</b>	<b>18.3464</b>	<b>7.7093</b>	<b>0.0172</b>	<b>2.2618</b>	<b>0.8210</b>	<b>3.0828</b>	<b>1.1519</b>	<b>0.7553</b>	<b>1.9072</b>	<b>0.0000</b>	<b>1,667.4119</b>	<b>1,667.4119</b>	<b>0.5393</b>		<b>1,680.8937</b>



Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

**3.2 Site Preparation - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0395	0.0267	0.2957	8.6000e-004	0.0817	6.8000e-004	0.0823	0.0218	6.3000e-004	0.0224		85.8281	85.8281	2.4700e-003		85.8899
<b>Total</b>	<b>0.0395</b>	<b>0.0267</b>	<b>0.2957</b>	<b>8.6000e-004</b>	<b>0.0817</b>	<b>6.8000e-004</b>	<b>0.0823</b>	<b>0.0218</b>	<b>6.3000e-004</b>	<b>0.0224</b>		<b>85.8281</b>	<b>85.8281</b>	<b>2.4700e-003</b>		<b>85.8899</b>

**3.3 Grading - 2020**

**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					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296		1,365.7183	1,365.7183	0.4417		1,376.7609
<b>Total</b>	<b>1.3498</b>	<b>15.0854</b>	<b>6.4543</b>	<b>0.0141</b>	<b>4.9143</b>	<b>0.6844</b>	<b>5.5986</b>	<b>2.5256</b>	<b>0.6296</b>	<b>3.1552</b>		<b>1,365.7183</b>	<b>1,365.7183</b>	<b>0.4417</b>		<b>1,376.7609</b>

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**3.3 Grading - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0395	0.0267	0.2957	8.6000e-004	0.0894	6.8000e-004	0.0901	0.0237	6.3000e-004	0.0243		85.8281	85.8281	2.4700e-003		85.8899
<b>Total</b>	<b>0.0395</b>	<b>0.0267</b>	<b>0.2957</b>	<b>8.6000e-004</b>	<b>0.0894</b>	<b>6.8000e-004</b>	<b>0.0901</b>	<b>0.0237</b>	<b>6.3000e-004</b>	<b>0.0243</b>		<b>85.8281</b>	<b>85.8281</b>	<b>2.4700e-003</b>		<b>85.8899</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					1.9166	0.0000	1.9166	0.9850	0.0000	0.9850			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296	0.0000	1,365.7183	1,365.7183	0.4417		1,376.7609
<b>Total</b>	<b>1.3498</b>	<b>15.0854</b>	<b>6.4543</b>	<b>0.0141</b>	<b>1.9166</b>	<b>0.6844</b>	<b>2.6009</b>	<b>0.9850</b>	<b>0.6296</b>	<b>1.6146</b>	<b>0.0000</b>	<b>1,365.7183</b>	<b>1,365.7183</b>	<b>0.4417</b>		<b>1,376.7609</b>

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**3.3 Grading - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0395	0.0267	0.2957	8.6000e-004	0.0817	6.8000e-004	0.0823	0.0218	6.3000e-004	0.0224		85.8281	85.8281	2.4700e-003		85.8899
<b>Total</b>	<b>0.0395</b>	<b>0.0267</b>	<b>0.2957</b>	<b>8.6000e-004</b>	<b>0.0817</b>	<b>6.8000e-004</b>	<b>0.0823</b>	<b>0.0218</b>	<b>6.3000e-004</b>	<b>0.0224</b>		<b>85.8281</b>	<b>85.8281</b>	<b>2.4700e-003</b>		<b>85.8899</b>

**3.4 Building Construction - 2020**

**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	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>		<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>

Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

**3.4 Building Construction - 2020**

**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	3.4700e-003	0.1053	0.0284	2.5000e-004	6.4000e-003	5.3000e-004	6.9300e-003	1.8400e-003	5.1000e-004	2.3500e-003		26.5377	26.5377	1.8700e-003		26.5844
Worker	0.0148	9.9900e-003	0.1109	3.2000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1300e-003		32.1855	32.1855	9.3000e-004		32.2087
<b>Total</b>	<b>0.0183</b>	<b>0.1153</b>	<b>0.1393</b>	<b>5.7000e-004</b>	<b>0.0399</b>	<b>7.9000e-004</b>	<b>0.0407</b>	<b>0.0107</b>	<b>7.5000e-004</b>	<b>0.0115</b>		<b>58.7233</b>	<b>58.7233</b>	<b>2.8000e-003</b>		<b>58.7931</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					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>	<b>0.0000</b>	<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>

Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

**3.4 Building Construction - 2020**

**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	3.4700e-003	0.1053	0.0284	2.5000e-004	5.9400e-003	5.3000e-004	6.4700e-003	1.7300e-003	5.1000e-004	2.2400e-003		26.5377	26.5377	1.8700e-003		26.5844
Worker	0.0148	9.9900e-003	0.1109	3.2000e-004	0.0306	2.6000e-004	0.0309	8.1800e-003	2.4000e-004	8.4100e-003		32.1855	32.1855	9.3000e-004		32.2087
<b>Total</b>	<b>0.0183</b>	<b>0.1153</b>	<b>0.1393</b>	<b>5.7000e-004</b>	<b>0.0366</b>	<b>7.9000e-004</b>	<b>0.0373</b>	<b>9.9100e-003</b>	<b>7.5000e-004</b>	<b>0.0107</b>		<b>58.7233</b>	<b>58.7233</b>	<b>2.8000e-003</b>		<b>58.7931</b>

**3.4 Building Construction - 2021**

**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	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
<b>Total</b>	<b>1.8125</b>	<b>13.6361</b>	<b>12.8994</b>	<b>0.0221</b>		<b>0.6843</b>	<b>0.6843</b>		<b>0.6608</b>	<b>0.6608</b>		<b>2,001.2200</b>	<b>2,001.2200</b>	<b>0.3573</b>		<b>2,010.1517</b>

Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

**3.4 Building Construction - 2021**

**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	2.9600e-003	0.0955	0.0259	2.5000e-004	6.4000e-003	2.0000e-004	6.6000e-003	1.8400e-003	1.9000e-004	2.0300e-003		26.3374	26.3374	1.7900e-003		26.3821
Worker	0.0138	8.9900e-003	0.1020	3.1000e-004	0.0335	2.5000e-004	0.0338	8.8900e-003	2.3000e-004	9.1200e-003		31.1445	31.1445	8.4000e-004		31.1655
<b>Total</b>	<b>0.0168</b>	<b>0.1045</b>	<b>0.1278</b>	<b>5.6000e-004</b>	<b>0.0399</b>	<b>4.5000e-004</b>	<b>0.0404</b>	<b>0.0107</b>	<b>4.2000e-004</b>	<b>0.0112</b>		<b>57.4819</b>	<b>57.4819</b>	<b>2.6300e-003</b>		<b>57.5476</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					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517
<b>Total</b>	<b>1.8125</b>	<b>13.6361</b>	<b>12.8994</b>	<b>0.0221</b>		<b>0.6843</b>	<b>0.6843</b>		<b>0.6608</b>	<b>0.6608</b>	<b>0.0000</b>	<b>2,001.2200</b>	<b>2,001.2200</b>	<b>0.3573</b>		<b>2,010.1517</b>

Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

**3.4 Building Construction - 2021**

**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	2.9600e-003	0.0955	0.0259	2.5000e-004	5.9400e-003	2.0000e-004	6.1400e-003	1.7300e-003	1.9000e-004	1.9200e-003		26.3374	26.3374	1.7900e-003		26.3821
Worker	0.0138	8.9900e-003	0.1020	3.1000e-004	0.0306	2.5000e-004	0.0309	8.1800e-003	2.3000e-004	8.4100e-003		31.1445	31.1445	8.4000e-004		31.1655
<b>Total</b>	<b>0.0168</b>	<b>0.1045</b>	<b>0.1278</b>	<b>5.6000e-004</b>	<b>0.0366</b>	<b>4.5000e-004</b>	<b>0.0370</b>	<b>9.9100e-003</b>	<b>4.2000e-004</b>	<b>0.0103</b>		<b>57.4819</b>	<b>57.4819</b>	<b>2.6300e-003</b>		<b>57.5476</b>

**3.5 Paving - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830		1,296.8664	1,296.8664	0.4111		1,307.1442
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.7739</b>	<b>7.7422</b>	<b>8.8569</b>	<b>0.0135</b>		<b>0.4153</b>	<b>0.4153</b>		<b>0.3830</b>	<b>0.3830</b>		<b>1,296.8664</b>	<b>1,296.8664</b>	<b>0.4111</b>		<b>1,307.1442</b>

Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

**3.5 Paving - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0600	0.0390	0.4418	1.3500e-003	0.1453	1.0800e-003	0.1464	0.0385	9.9000e-004	0.0395		134.9597	134.9597	3.6300e-003		135.0504
<b>Total</b>	<b>0.0600</b>	<b>0.0390</b>	<b>0.4418</b>	<b>1.3500e-003</b>	<b>0.1453</b>	<b>1.0800e-003</b>	<b>0.1464</b>	<b>0.0385</b>	<b>9.9000e-004</b>	<b>0.0395</b>		<b>134.9597</b>	<b>134.9597</b>	<b>3.6300e-003</b>		<b>135.0504</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					
Off-Road	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830	0.0000	1,296.8664	1,296.8664	0.4111		1,307.1442
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.7739</b>	<b>7.7422</b>	<b>8.8569</b>	<b>0.0135</b>		<b>0.4153</b>	<b>0.4153</b>		<b>0.3830</b>	<b>0.3830</b>	<b>0.0000</b>	<b>1,296.8664</b>	<b>1,296.8664</b>	<b>0.4111</b>		<b>1,307.1442</b>



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**3.5 Paving - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0600	0.0390	0.4418	1.3500e-003	0.1327	1.0800e-003	0.1338	0.0354	9.9000e-004	0.0364		134.9597	134.9597	3.6300e-003		135.0504
<b>Total</b>	<b>0.0600</b>	<b>0.0390</b>	<b>0.4418</b>	<b>1.3500e-003</b>	<b>0.1327</b>	<b>1.0800e-003</b>	<b>0.1338</b>	<b>0.0354</b>	<b>9.9000e-004</b>	<b>0.0364</b>		<b>134.9597</b>	<b>134.9597</b>	<b>3.6300e-003</b>		<b>135.0504</b>

**3.6 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.2306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>7.4495</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

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**3.6 Architectural Coating - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.6100e-003	3.0000e-003	0.0340	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		10.3815	10.3815	2.8000e-004		10.3885
<b>Total</b>	<b>4.6100e-003</b>	<b>3.0000e-003</b>	<b>0.0340</b>	<b>1.0000e-004</b>	<b>0.0112</b>	<b>8.0000e-005</b>	<b>0.0113</b>	<b>2.9600e-003</b>	<b>8.0000e-005</b>	<b>3.0400e-003</b>		<b>10.3815</b>	<b>10.3815</b>	<b>2.8000e-004</b>		<b>10.3885</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					
Archit. Coating	7.2306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>7.4495</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

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**3.6 Architectural Coating - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.6100e-003	3.0000e-003	0.0340	1.0000e-004	0.0102	8.0000e-005	0.0103	2.7300e-003	8.0000e-005	2.8000e-003		10.3815	10.3815	2.8000e-004		10.3885
<b>Total</b>	<b>4.6100e-003</b>	<b>3.0000e-003</b>	<b>0.0340</b>	<b>1.0000e-004</b>	<b>0.0102</b>	<b>8.0000e-005</b>	<b>0.0103</b>	<b>2.7300e-003</b>	<b>8.0000e-005</b>	<b>2.8000e-003</b>		<b>10.3815</b>	<b>10.3815</b>	<b>2.8000e-004</b>		<b>10.3885</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1088	0.5907	1.5892	5.9300e-003	0.5117	4.8800e-003	0.5166	0.1369	4.5600e-003	0.1415		603.4536	603.4536	0.0292		604.1832
Unmitigated	0.1088	0.5907	1.5892	5.9300e-003	0.5117	4.8800e-003	0.5166	0.1369	4.5600e-003	0.1415		603.4536	603.4536	0.0292		604.1832

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	54.37	10.30	5.30	181,831	181,831
Total	54.37	10.30	5.30	181,831	181,831

4.3 Trip Type Information

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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.551391	0.043400	0.201050	0.120272	0.016162	0.005864	0.021029	0.030512	0.002059	0.001866	0.004766	0.000706	0.000924

5.0 Energy Detail

Historical Energy Use: N

Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	7.5000e-003	0.0682	0.0573	4.1000e-004		5.1800e-003	5.1800e-003		5.1800e-003	5.1800e-003		81.8592	81.8592	1.5700e-003	1.5000e-003	82.3456
NaturalGas Unmitigated	7.5000e-003	0.0682	0.0573	4.1000e-004		5.1800e-003	5.1800e-003		5.1800e-003	5.1800e-003		81.8592	81.8592	1.5700e-003	1.5000e-003	82.3456

**5.2 Energy by Land Use - NaturalGas**

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	695.803	7.5000e-003	0.0682	0.0573	4.1000e-004		5.1800e-003	5.1800e-003		5.1800e-003	5.1800e-003		81.8592	81.8592	1.5700e-003	1.5000e-003	82.3456
<b>Total</b>		<b>7.5000e-003</b>	<b>0.0682</b>	<b>0.0573</b>	<b>4.1000e-004</b>		<b>5.1800e-003</b>	<b>5.1800e-003</b>		<b>5.1800e-003</b>	<b>5.1800e-003</b>		<b>81.8592</b>	<b>81.8592</b>	<b>1.5700e-003</b>	<b>1.5000e-003</b>	<b>82.3456</b>

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**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.695803	7.5000e-003	0.0682	0.0573	4.1000e-004		5.1800e-003	5.1800e-003		5.1800e-003	5.1800e-003		81.8592	81.8592	1.5700e-003	1.5000e-003	82.3456
<b>Total</b>		<b>7.5000e-003</b>	<b>0.0682</b>	<b>0.0573</b>	<b>4.1000e-004</b>		<b>5.1800e-003</b>	<b>5.1800e-003</b>		<b>5.1800e-003</b>	<b>5.1800e-003</b>		<b>81.8592</b>	<b>81.8592</b>	<b>1.5700e-003</b>	<b>1.5000e-003</b>	<b>82.3456</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1743	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7100e-003	1.7100e-003	0.0000		1.8200e-003
Unmitigated	0.1743	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7100e-003	1.7100e-003	0.0000		1.8200e-003

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**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.0198					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Consumer Products	0.1544					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Landscaping	7.0000e-005	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7100e-003	1.7100e-003	0.0000			1.8200e-003
<b>Total</b>	<b>0.1743</b>	<b>1.0000e-005</b>	<b>8.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>1.7100e-003</b>	<b>1.7100e-003</b>	<b>0.0000</b>			<b>1.8200e-003</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.0198					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Consumer Products	0.1544					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Landscaping	7.0000e-005	1.0000e-005	8.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7100e-003	1.7100e-003	0.0000			1.8200e-003
<b>Total</b>	<b>0.1743</b>	<b>1.0000e-005</b>	<b>8.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>1.7100e-003</b>	<b>1.7100e-003</b>	<b>0.0000</b>			<b>1.8200e-003</b>

**7.0 Water Detail**

## Southland Pipe - 2019-00012 - South Coast Air Basin, Winter

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**7.1 Mitigation Measures Water****8.0 Waste Detail**

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**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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**Southland Pipe - 2019-00012**  
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**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	7.80	1000sqft	1.95	7,800.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	10			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<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 - 7800 sf Metal Bldg on 1.95 ac lot

Construction Phase - No demolition phase

Construction Off-road Equipment Mitigation - Rule 401 & 403 compliance

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	10
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	25
tblLandUse	LotAcreage	0.18	1.95
tblProjectCharacteristics	OperationalYear	2018	2021

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**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					
2020	0.2020	1.4870	1.3078	2.2300e-003	0.0197	0.0791	0.0988	9.0900e-003	0.0763	0.0854	0.0000	184.6389	184.6389	0.0341	0.0000	185.4904
2021	0.0478	0.0947	0.1014	1.7000e-004	9.1000e-004	4.9500e-003	5.8500e-003	2.4000e-004	4.7000e-003	4.9500e-003	0.0000	14.3684	14.3684	3.1100e-003	0.0000	14.4462
<b>Maximum</b>	<b>0.2020</b>	<b>1.4870</b>	<b>1.3078</b>	<b>2.2300e-003</b>	<b>0.0197</b>	<b>0.0791</b>	<b>0.0988</b>	<b>9.0900e-003</b>	<b>0.0763</b>	<b>0.0854</b>	<b>0.0000</b>	<b>184.6389</b>	<b>184.6389</b>	<b>0.0341</b>	<b>0.0000</b>	<b>185.4904</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.2020	1.4870	1.3078	2.2300e-003	9.8000e-003	0.0791	0.0889	4.1300e-003	0.0763	0.0804	0.0000	184.6387	184.6387	0.0341	0.0000	185.4902
2021	0.0478	0.0947	0.1014	1.7000e-004	8.3000e-004	4.9500e-003	5.7800e-003	2.2000e-004	4.7000e-003	4.9300e-003	0.0000	14.3684	14.3684	3.1100e-003	0.0000	14.4462
<b>Maximum</b>	<b>0.2020</b>	<b>1.4870</b>	<b>1.3078</b>	<b>2.2300e-003</b>	<b>9.8000e-003</b>	<b>0.0791</b>	<b>0.0889</b>	<b>4.1300e-003</b>	<b>0.0763</b>	<b>0.0804</b>	<b>0.0000</b>	<b>184.6387</b>	<b>184.6387</b>	<b>0.0341</b>	<b>0.0000</b>	<b>185.4902</b>

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	ROG	NOx	CO	SO2	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	48.37	0.00	9.50	53.38	0.00	5.51	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-2-2020	6-1-2020	0.4030	0.4030
2	6-2-2020	9-1-2020	0.5569	0.5569
3	9-2-2020	12-1-2020	0.5509	0.5509
4	12-2-2020	3-1-2021	0.3308	0.3308
		Highest	0.5569	0.5569

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0318	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9000e-004	1.9000e-004	0.0000	0.0000	2.1000e-004
Energy	1.3700e-003	0.0125	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	39.2502	39.2502	1.3200e-003	4.7000e-004	39.4226
Mobile	0.0146	0.0827	0.2223	8.3000e-004	0.0691	6.7000e-004	0.0697	0.0185	6.2000e-004	0.0191	0.0000	76.2147	76.2147	3.6300e-003	0.0000	76.3054
Waste						0.0000	0.0000		0.0000	0.0000	1.9629	0.0000	1.9629	0.1160	0.0000	4.8631
Water						0.0000	0.0000		0.0000	0.0000	0.5723	7.4833	8.0556	0.0591	1.4500e-003	9.9653
<b>Total</b>	<b>0.0478</b>	<b>0.0952</b>	<b>0.2328</b>	<b>9.0000e-004</b>	<b>0.0691</b>	<b>1.6200e-003</b>	<b>0.0707</b>	<b>0.0185</b>	<b>1.5700e-003</b>	<b>0.0201</b>	<b>2.5352</b>	<b>122.9484</b>	<b>125.4835</b>	<b>0.1800</b>	<b>1.9200e-003</b>	<b>130.5566</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0318	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9000e-004	1.9000e-004	0.0000	0.0000	2.1000e-004
Energy	1.3700e-003	0.0125	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	39.2502	39.2502	1.3200e-003	4.7000e-004	39.4226
Mobile	0.0146	0.0827	0.2223	8.3000e-004	0.0691	6.7000e-004	0.0697	0.0185	6.2000e-004	0.0191	0.0000	76.2147	76.2147	3.6300e-003	0.0000	76.3054
Waste						0.0000	0.0000		0.0000	0.0000	1.9629	0.0000	1.9629	0.1160	0.0000	4.8631
Water						0.0000	0.0000		0.0000	0.0000	0.5723	7.4833	8.0556	0.0591	1.4500e-003	9.9653
<b>Total</b>	<b>0.0478</b>	<b>0.0952</b>	<b>0.2328</b>	<b>9.0000e-004</b>	<b>0.0691</b>	<b>1.6200e-003</b>	<b>0.0707</b>	<b>0.0185</b>	<b>1.5700e-003</b>	<b>0.0201</b>	<b>2.5352</b>	<b>122.9484</b>	<b>125.4835</b>	<b>0.1800</b>	<b>1.9200e-003</b>	<b>130.5566</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**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/28/2020	3/31/2020	5	2	
2	Grading	Grading	4/1/2020	4/6/2020	5	4	
3	Building Construction	Building Construction	4/7/2020	1/11/2021	5	200	
4	Paving	Paving	1/12/2021	1/25/2021	5	10	
5	Architectural Coating	Architectural Coating	1/26/2021	2/8/2021	5	10	

**Acres of Grading (Site Preparation Phase): 1**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,700; Non-Residential Outdoor: 3,900; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	3.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2020**

**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					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6300e-003	0.0184	7.7100e-003	2.0000e-005		8.2000e-004	8.2000e-004		7.6000e-004	7.6000e-004	0.0000	1.5127	1.5127	4.9000e-004	0.0000	1.5249
<b>Total</b>	<b>1.6300e-003</b>	<b>0.0184</b>	<b>7.7100e-003</b>	<b>2.0000e-005</b>	<b>5.8000e-003</b>	<b>8.2000e-004</b>	<b>6.6200e-003</b>	<b>2.9500e-003</b>	<b>7.6000e-004</b>	<b>3.7100e-003</b>	<b>0.0000</b>	<b>1.5127</b>	<b>1.5127</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>1.5249</b>

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**3.2 Site Preparation - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.0000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0791	0.0791	0.0000	0.0000	0.0792
<b>Total</b>	<b>4.0000e-005</b>	<b>3.0000e-005</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0791</b>	<b>0.0791</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0792</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					2.2600e-003	0.0000	2.2600e-003	1.1500e-003	0.0000	1.1500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6300e-003	0.0184	7.7100e-003	2.0000e-005		8.2000e-004	8.2000e-004		7.6000e-004	7.6000e-004	0.0000	1.5127	1.5127	4.9000e-004	0.0000	1.5249
<b>Total</b>	<b>1.6300e-003</b>	<b>0.0184</b>	<b>7.7100e-003</b>	<b>2.0000e-005</b>	<b>2.2600e-003</b>	<b>8.2000e-004</b>	<b>3.0800e-003</b>	<b>1.1500e-003</b>	<b>7.6000e-004</b>	<b>1.9100e-003</b>	<b>0.0000</b>	<b>1.5127</b>	<b>1.5127</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>1.5249</b>



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**3.2 Site Preparation - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.0000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0791	0.0791	0.0000	0.0000	0.0792
<b>Total</b>	<b>4.0000e-005</b>	<b>3.0000e-005</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0791</b>	<b>0.0791</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0792</b>

**3.3 Grading - 2020**

**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					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-003	0.0302	0.0129	3.0000e-005		1.3700e-003	1.3700e-003		1.2600e-003	1.2600e-003	0.0000	2.4779	2.4779	8.0000e-004	0.0000	2.4980
<b>Total</b>	<b>2.7000e-003</b>	<b>0.0302</b>	<b>0.0129</b>	<b>3.0000e-005</b>	<b>9.8300e-003</b>	<b>1.3700e-003</b>	<b>0.0112</b>	<b>5.0500e-003</b>	<b>1.2600e-003</b>	<b>6.3100e-003</b>	<b>0.0000</b>	<b>2.4779</b>	<b>2.4779</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>2.4980</b>

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**3.3 Grading - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	6.1000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1582	0.1582	0.0000	0.0000	0.1583
<b>Total</b>	<b>7.0000e-005</b>	<b>5.0000e-005</b>	<b>6.1000e-004</b>	<b>0.0000</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>1.8000e-004</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.1582</b>	<b>0.1582</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1583</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					3.8300e-003	0.0000	3.8300e-003	1.9700e-003	0.0000	1.9700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-003	0.0302	0.0129	3.0000e-005		1.3700e-003	1.3700e-003		1.2600e-003	1.2600e-003	0.0000	2.4779	2.4779	8.0000e-004	0.0000	2.4980
<b>Total</b>	<b>2.7000e-003</b>	<b>0.0302</b>	<b>0.0129</b>	<b>3.0000e-005</b>	<b>3.8300e-003</b>	<b>1.3700e-003</b>	<b>5.2000e-003</b>	<b>1.9700e-003</b>	<b>1.2600e-003</b>	<b>3.2300e-003</b>	<b>0.0000</b>	<b>2.4779</b>	<b>2.4779</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>2.4980</b>

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**3.3 Grading - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	6.1000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1582	0.1582	0.0000	0.0000	0.1583
<b>Total</b>	<b>7.0000e-005</b>	<b>5.0000e-005</b>	<b>6.1000e-004</b>	<b>0.0000</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>1.6000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1582</b>	<b>0.1582</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1583</b>

**3.4 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1959	1.4271	1.2727	2.1300e-003		0.0768	0.0768		0.0742	0.0742	0.0000	175.1882	175.1882	0.0325	0.0000	176.0012
<b>Total</b>	<b>0.1959</b>	<b>1.4271</b>	<b>1.2727</b>	<b>2.1300e-003</b>		<b>0.0768</b>	<b>0.0768</b>		<b>0.0742</b>	<b>0.0742</b>	<b>0.0000</b>	<b>175.1882</b>	<b>175.1882</b>	<b>0.0325</b>	<b>0.0000</b>	<b>176.0012</b>

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**3.4 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3000e-004	0.0104	2.6100e-003	2.0000e-005	6.1000e-004	5.0000e-005	6.6000e-004	1.8000e-004	5.0000e-005	2.2000e-004	0.0000	2.3609	2.3609	1.6000e-004	0.0000	2.3648
Worker	1.2900e-003	9.9000e-004	0.0110	3.0000e-005	3.1800e-003	2.0000e-005	3.2000e-003	8.4000e-004	2.0000e-005	8.7000e-004	0.0000	2.8621	2.8621	8.0000e-005	0.0000	2.8641
<b>Total</b>	<b>1.6200e-003</b>	<b>0.0113</b>	<b>0.0136</b>	<b>5.0000e-005</b>	<b>3.7900e-003</b>	<b>7.0000e-005</b>	<b>3.8600e-003</b>	<b>1.0200e-003</b>	<b>7.0000e-005</b>	<b>1.0900e-003</b>	<b>0.0000</b>	<b>5.2229</b>	<b>5.2229</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>5.2289</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					
Off-Road	0.1959	1.4271	1.2727	2.1300e-003		0.0768	0.0768		0.0742	0.0742	0.0000	175.1880	175.1880	0.0325	0.0000	176.0010
<b>Total</b>	<b>0.1959</b>	<b>1.4271</b>	<b>1.2727</b>	<b>2.1300e-003</b>		<b>0.0768</b>	<b>0.0768</b>		<b>0.0742</b>	<b>0.0742</b>	<b>0.0000</b>	<b>175.1880</b>	<b>175.1880</b>	<b>0.0325</b>	<b>0.0000</b>	<b>176.0010</b>

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**3.4 Building Construction - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3000e-004	0.0104	2.6100e-003	2.0000e-005	5.7000e-004	5.0000e-005	6.2000e-004	1.6000e-004	5.0000e-005	2.1000e-004	0.0000	2.3609	2.3609	1.6000e-004	0.0000	2.3648
Worker	1.2900e-003	9.9000e-004	0.0110	3.0000e-005	2.9000e-003	2.0000e-005	2.9300e-003	7.8000e-004	2.0000e-005	8.0000e-004	0.0000	2.8621	2.8621	8.0000e-005	0.0000	2.8641
<b>Total</b>	<b>1.6200e-003</b>	<b>0.0113</b>	<b>0.0136</b>	<b>5.0000e-005</b>	<b>3.4700e-003</b>	<b>7.0000e-005</b>	<b>3.5500e-003</b>	<b>9.4000e-004</b>	<b>7.0000e-005</b>	<b>1.0100e-003</b>	<b>0.0000</b>	<b>5.2229</b>	<b>5.2229</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>5.2289</b>

**3.4 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3400e-003	0.0477	0.0452	8.0000e-005		2.4000e-003	2.4000e-003		2.3100e-003	2.3100e-003	0.0000	6.3542	6.3542	1.1300e-003	0.0000	6.3825
<b>Total</b>	<b>6.3400e-003</b>	<b>0.0477</b>	<b>0.0452</b>	<b>8.0000e-005</b>		<b>2.4000e-003</b>	<b>2.4000e-003</b>		<b>2.3100e-003</b>	<b>2.3100e-003</b>	<b>0.0000</b>	<b>6.3542</b>	<b>6.3542</b>	<b>1.1300e-003</b>	<b>0.0000</b>	<b>6.3825</b>

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**3.4 Building Construction - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	3.4000e-004	9.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0850	0.0850	1.0000e-005	0.0000	0.0851
Worker	4.0000e-005	3.0000e-005	3.7000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1005	0.1005	0.0000	0.0000	0.1005
<b>Total</b>	<b>5.0000e-005</b>	<b>3.7000e-004</b>	<b>4.6000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1854</b>	<b>0.1854</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1856</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					
Off-Road	6.3400e-003	0.0477	0.0452	8.0000e-005		2.4000e-003	2.4000e-003		2.3100e-003	2.3100e-003	0.0000	6.3542	6.3542	1.1300e-003	0.0000	6.3825
<b>Total</b>	<b>6.3400e-003</b>	<b>0.0477</b>	<b>0.0452</b>	<b>8.0000e-005</b>		<b>2.4000e-003</b>	<b>2.4000e-003</b>		<b>2.3100e-003</b>	<b>2.3100e-003</b>	<b>0.0000</b>	<b>6.3542</b>	<b>6.3542</b>	<b>1.1300e-003</b>	<b>0.0000</b>	<b>6.3825</b>

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**3.4 Building Construction - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	3.4000e-004	9.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0850	0.0850	1.0000e-005	0.0000	0.0851
Worker	4.0000e-005	3.0000e-005	3.7000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1005	0.1005	0.0000	0.0000	0.1005
<b>Total</b>	<b>5.0000e-005</b>	<b>3.7000e-004</b>	<b>4.6000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1854</b>	<b>0.1854</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1856</b>

**3.5 Paving - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8700e-003	0.0387	0.0443	7.0000e-005		2.0800e-003	2.0800e-003		1.9100e-003	1.9100e-003	0.0000	5.8825	5.8825	1.8600e-003	0.0000	5.9291
Paving	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>3.8700e-003</b>	<b>0.0387</b>	<b>0.0443</b>	<b>7.0000e-005</b>		<b>2.0800e-003</b>	<b>2.0800e-003</b>		<b>1.9100e-003</b>	<b>1.9100e-003</b>	<b>0.0000</b>	<b>5.8825</b>	<b>5.8825</b>	<b>1.8600e-003</b>	<b>0.0000</b>	<b>5.9291</b>

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**3.5 Paving - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	2.0000e-004	2.2700e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6218	0.6218	2.0000e-005	0.0000	0.6222
<b>Total</b>	<b>2.7000e-004</b>	<b>2.0000e-004</b>	<b>2.2700e-003</b>	<b>1.0000e-005</b>	<b>7.1000e-004</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.6218</b>	<b>0.6218</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6222</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					
Off-Road	3.8700e-003	0.0387	0.0443	7.0000e-005		2.0800e-003	2.0800e-003		1.9100e-003	1.9100e-003	0.0000	5.8825	5.8825	1.8600e-003	0.0000	5.9291
Paving	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>3.8700e-003</b>	<b>0.0387</b>	<b>0.0443</b>	<b>7.0000e-005</b>		<b>2.0800e-003</b>	<b>2.0800e-003</b>		<b>1.9100e-003</b>	<b>1.9100e-003</b>	<b>0.0000</b>	<b>5.8825</b>	<b>5.8825</b>	<b>1.8600e-003</b>	<b>0.0000</b>	<b>5.9291</b>



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**3.5 Paving - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	2.0000e-004	2.2700e-003	1.0000e-005	6.5000e-004	1.0000e-005	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.6218	0.6218	2.0000e-005	0.0000	0.6222
<b>Total</b>	<b>2.7000e-004</b>	<b>2.0000e-004</b>	<b>2.2700e-003</b>	<b>1.0000e-005</b>	<b>6.5000e-004</b>	<b>1.0000e-005</b>	<b>6.6000e-004</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>0.6218</b>	<b>0.6218</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6222</b>

**3.6 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0362					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
<b>Total</b>	<b>0.0372</b>	<b>7.6300e-003</b>	<b>9.0900e-003</b>	<b>1.0000e-005</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.2788</b>

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**3.6 Architectural Coating - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.7000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0478	0.0478	0.0000	0.0000	0.0479
<b>Total</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0478</b>	<b>0.0478</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0479</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					
Archit. Coating	0.0362					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
<b>Total</b>	<b>0.0372</b>	<b>7.6300e-003</b>	<b>9.0900e-003</b>	<b>1.0000e-005</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.2788</b>

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**3.6 Architectural Coating - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.7000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0478	0.0478	0.0000	0.0000	0.0479
<b>Total</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>5.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0478</b>	<b>0.0478</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0479</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0146	0.0827	0.2223	8.3000e-004	0.0691	6.7000e-004	0.0697	0.0185	6.2000e-004	0.0191	0.0000	76.2147	76.2147	3.6300e-003	0.0000	76.3054
Unmitigated	0.0146	0.0827	0.2223	8.3000e-004	0.0691	6.7000e-004	0.0697	0.0185	6.2000e-004	0.0191	0.0000	76.2147	76.2147	3.6300e-003	0.0000	76.3054

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	54.37	10.30	5.30	181,831	181,831
Total	54.37	10.30	5.30	181,831	181,831

4.3 Trip Type Information

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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.551391	0.043400	0.201050	0.120272	0.016162	0.005864	0.021029	0.030512	0.002059	0.001866	0.004766	0.000706	0.000924

5.0 Energy Detail

Historical Energy Use: N

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**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	25.6975	25.6975	1.0600e-003	2.2000e-004	25.7894
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	25.6975	25.6975	1.0600e-003	2.2000e-004	25.7894
NaturalGas Mitigated	1.3700e-003	0.0125	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	13.5527	13.5527	2.6000e-004	2.5000e-004	13.6332
NaturalGas Unmitigated	1.3700e-003	0.0125	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	13.5527	13.5527	2.6000e-004	2.5000e-004	13.6332

**5.2 Energy by Land Use - NaturalGas**

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	253968	1.3700e-003	0.0125	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	13.5527	13.5527	2.6000e-004	2.5000e-004	13.6332
<b>Total</b>		<b>1.3700e-003</b>	<b>0.0125</b>	<b>0.0105</b>	<b>7.0000e-005</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>	<b>0.0000</b>	<b>13.5527</b>	<b>13.5527</b>	<b>2.6000e-004</b>	<b>2.5000e-004</b>	<b>13.6332</b>

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**5.2 Energy by Land Use - Natural Gas**

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	253968	1.3700e-003	0.0125	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	13.5527	13.5527	2.6000e-004	2.5000e-004	13.6332
<b>Total</b>		<b>1.3700e-003</b>	<b>0.0125</b>	<b>0.0105</b>	<b>7.0000e-005</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>	<b>0.0000</b>	<b>13.5527</b>	<b>13.5527</b>	<b>2.6000e-004</b>	<b>2.5000e-004</b>	<b>13.6332</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	80652	25.6975	1.0600e-003	2.2000e-004	25.7894
<b>Total</b>		<b>25.6975</b>	<b>1.0600e-003</b>	<b>2.2000e-004</b>	<b>25.7894</b>

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**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	80652	25.6975	1.0600e-003	2.2000e-004	25.7894
<b>Total</b>		<b>25.6975</b>	<b>1.0600e-003</b>	<b>2.2000e-004</b>	<b>25.7894</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0318	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9000e-004	1.9000e-004	0.0000	0.0000	2.1000e-004
Unmitigated	0.0318	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9000e-004	1.9000e-004	0.0000	0.0000	2.1000e-004

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**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0282					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9000e-004	1.9000e-004	0.0000	0.0000	2.1000e-004
<b>Total</b>	<b>0.0318</b>	<b>0.0000</b>	<b>1.0000e-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>1.9000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.1000e-004</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0282					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9000e-004	1.9000e-004	0.0000	0.0000	2.1000e-004
<b>Total</b>	<b>0.0318</b>	<b>0.0000</b>	<b>1.0000e-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>1.9000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.1000e-004</b>

**7.0 Water Detail**



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### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	8.0556	0.0591	1.4500e-003	9.9653
Unmitigated	8.0556	0.0591	1.4500e-003	9.9653

### 7.2 Water by Land Use

#### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	1.80375 / 0	8.0556	0.0591	1.4500e-003	9.9653
<b>Total</b>		<b>8.0556</b>	<b>0.0591</b>	<b>1.4500e-003</b>	<b>9.9653</b>

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**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	1.80375 / 0	8.0556	0.0591	1.4500e-003	9.9653
<b>Total</b>		<b>8.0556</b>	<b>0.0591</b>	<b>1.4500e-003</b>	<b>9.9653</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.9629	0.1160	0.0000	4.8631
Unmitigated	1.9629	0.1160	0.0000	4.8631

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**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	9.67	1.9629	0.1160	0.0000	4.8631
<b>Total</b>		<b>1.9629</b>	<b>0.1160</b>	<b>0.0000</b>	<b>4.8631</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	9.67	1.9629	0.1160	0.0000	4.8631
<b>Total</b>		<b>1.9629</b>	<b>0.1160</b>	<b>0.0000</b>	<b>4.8631</b>

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Southland Pipe - 2019-00012 - South Coast Air Basin, Annual

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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**Southland Pipe - 2019-00012**  
**South Coast Air Basin, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	2	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	4	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	1	No Change	0.00
Welders	Diesel	No Change	0	3	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	1.09000E-003	7.63000E-003	9.09000E-003	1.00000E-005	4.70000E-004	4.70000E-004	0.00000E+000	1.27663E+000	1.27663E+000	9.00000E-005	0.00000E+000	1.27882E+000
Cement and Mortar Mixers	2.20000E-004	1.38000E-003	1.16000E-003	0.00000E+000	5.00000E-005	5.00000E-005	0.00000E+000	1.71850E-001	1.71850E-001	2.00000E-005	0.00000E+000	1.72300E-001
Cranes	3.39000E-002	4.02940E-001	1.58300E-001	4.30000E-004	1.66000E-002	1.52800E-002	0.00000E+000	3.80193E+001	3.80193E+001	1.23000E-002	0.00000E+000	3.83267E+001
Forklifts	1.07600E-002	9.70000E-002	8.84900E-002	1.10000E-004	7.22000E-003	6.64000E-003	0.00000E+000	1.00719E+001	1.00719E+001	3.26000E-003	0.00000E+000	1.01533E+001
Generator Sets	3.97600E-002	3.46770E-001	3.70480E-001	6.60000E-004	1.95200E-002	1.95200E-002	0.00000E+000	5.65208E+001	5.65208E+001	3.17000E-003	0.00000E+000	5.66001E+001
Graders	1.19000E-003	1.58100E-002	4.54000E-003	2.00000E-005	5.10000E-004	4.70000E-004	0.00000E+000	1.45766E+000	1.45766E+000	4.70000E-004	0.00000E+000	1.46945E+000
Pavers	9.20000E-004	9.73000E-003	1.08900E-002	2.00000E-005	4.70000E-004	4.30000E-004	0.00000E+000	1.54809E+000	1.54809E+000	5.00000E-004	0.00000E+000	1.56061E+000
Paving Equipment	9.60000E-004	9.70000E-003	1.27100E-002	2.00000E-005	4.80000E-004	4.40000E-004	0.00000E+000	1.78922E+000	1.78922E+000	5.80000E-004	0.00000E+000	1.80369E+000
Rollers	8.30000E-004	8.42000E-003	8.23000E-003	1.00000E-005	5.10000E-004	4.70000E-004	0.00000E+000	1.00846E+000	1.00846E+000	3.30000E-004	0.00000E+000	1.01662E+000
Rubber Tired Dozers	2.56000E-003	2.69100E-002	9.81000E-003	2.00000E-005	1.32000E-003	1.21000E-003	0.00000E+000	1.78256E+000	1.78256E+000	5.80000E-004	0.00000E+000	1.79698E+000
Tractors/Loaders/Backhoes	1.71700E-002	1.72600E-001	1.88500E-001	2.60000E-004	1.08500E-002	9.98000E-003	0.00000E+000	2.25795E+001	2.25795E+001	7.30000E-003	0.00000E+000	2.27620E+001
Welders	1.02210E-001	4.70740E-001	5.29600E-001	7.70000E-004	2.59300E-002	2.59300E-002	0.00000E+000	5.64662E+001	5.64662E+001	8.31000E-003	0.00000E+000	5.66740E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	1.09000E-003	7.63000E-003	9.09000E-003	1.00000E-005	4.70000E-004	4.70000E-004	0.00000E+000	1.27663E+000	1.27663E+000	9.00000E-005	0.00000E+000	1.27882E+000
Cement and Mortar Mixers	2.20000E-004	1.38000E-003	1.16000E-003	0.00000E+000	5.00000E-005	5.00000E-005	0.00000E+000	1.71850E-001	1.71850E-001	2.00000E-005	0.00000E+000	1.72300E-001
Cranes	3.39000E-002	4.02940E-001	1.58300E-001	4.30000E-004	1.66000E-002	1.52800E-002	0.00000E+000	3.80192E+001	3.80192E+001	1.23000E-002	0.00000E+000	3.83267E+001
Forklifts	1.07600E-002	9.70000E-002	8.84900E-002	1.10000E-004	7.22000E-003	6.64000E-003	0.00000E+000	1.00718E+001	1.00718E+001	3.26000E-003	0.00000E+000	1.01533E+001
Generator Sets	3.97600E-002	3.46770E-001	3.70480E-001	6.60000E-004	1.95200E-002	1.95200E-002	0.00000E+000	5.65207E+001	5.65207E+001	3.17000E-003	0.00000E+000	5.66000E+001
Graders	1.19000E-003	1.58100E-002	4.54000E-003	2.00000E-005	5.10000E-004	4.70000E-004	0.00000E+000	1.45766E+000	1.45766E+000	4.70000E-004	0.00000E+000	1.46945E+000
Pavers	9.20000E-004	9.73000E-003	1.08900E-002	2.00000E-005	4.70000E-004	4.30000E-004	0.00000E+000	1.54809E+000	1.54809E+000	5.00000E-004	0.00000E+000	1.56061E+000
Paving Equipment	9.60000E-004	9.70000E-003	1.27100E-002	2.00000E-005	4.80000E-004	4.40000E-004	0.00000E+000	1.78922E+000	1.78922E+000	5.80000E-004	0.00000E+000	1.80369E+000
Rollers	8.30000E-004	8.42000E-003	8.23000E-003	1.00000E-005	5.10000E-004	4.70000E-004	0.00000E+000	1.00846E+000	1.00846E+000	3.30000E-004	0.00000E+000	1.01661E+000
Rubber Tired Dozers	2.56000E-003	2.69100E-002	9.81000E-003	2.00000E-005	1.32000E-003	1.21000E-003	0.00000E+000	1.78256E+000	1.78256E+000	5.80000E-004	0.00000E+000	1.79697E+000
Tractors/Loaders/Balckhoes	1.71700E-002	1.72600E-001	1.88500E-001	2.60000E-004	1.08500E-002	9.98000E-003	0.00000E+000	2.25794E+001	2.25794E+001	7.30000E-003	0.00000E+000	2.27620E+001
Welders	1.02210E-001	4.70740E-001	5.29600E-001	7.70000E-004	2.59300E-002	2.59300E-002	0.00000E+000	5.64661E+001	5.64661E+001	8.31000E-003	0.00000E+000	5.66739E+001



Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.31512E-006	1.31512E-006	0.00000E+000	0.00000E+000	1.04366E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.92866E-007	9.92866E-007	0.00000E+000	0.00000E+000	9.84903E-007
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23848E-006	1.23848E-006	0.00000E+000	0.00000E+000	1.23675E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.83652E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	5.56489E-006
Tractors/Loaders/Balckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.85761E-007	8.85761E-007	0.00000E+000	0.00000E+000	1.31798E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23968E-006	1.23968E-006	0.00000E+000	0.00000E+000	1.23513E-006

**Fugitive Dust Mitigation**

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00	
Yes	Water Exposed Area	PM10 Reduction	61.00	PM2.5 Reduction	61.00	Frequency (per day) 3.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	25.00	

Yes	Clean Paved Road	% PM Reduction	10.00				
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Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.00	0.00	0.00	0.00	0.08	0.08
Grading	Fugitive Dust	0.01	0.01	0.00	0.00	0.61	0.61
Grading	Roads	0.00	0.00	0.00	0.00	0.11	0.20
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.08	0.11
Site Preparation	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.61
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.11	0.00

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	50.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

**Energy Mitigation Measures**

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

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

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

**Solid Waste Mitigation**

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