

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

P201600581 TTM 10-14-2017
San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	17

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

Project Characteristics - SFR Project 6 Lots 4 lots approximatley 1 acre 2 lots approximately 5 acres

Land Use -

Construction Phase - Demolition phase removed from project

Construction Off-road Equipment Mitigation - Mitigation to comply with SCAQMD Rule 401 and 403

Off-road Equipment - Project construction defaults changed to reflect equipment that is commonly used for small SFR projects

Off-road Equipment - Construction equipment defaults changed to reflect similar SFR size projects

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Off-road Equipment - Construction equipment defaults changes to reflect similar SFR size projects

Off-road Equipment -

Grading - Total acres graded default changed from as each parcel will likely be graded individually

Trips and VMT -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	25
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	25
tblGrading	AcresOfGrading	1.50	1.00
tblGrading	AcresOfGrading	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00

2.0 Emissions Summary

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

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					
2019	1.4671	16.0673	7.3804	0.0150	5.8555	0.7371	6.5270	2.9685	0.6781	3.5864	0.0000	1,489.704 1	1,489.704 1	0.4449	0.0000	1,500.827 4
2020	0.9122	6.7413	7.2929	0.0120	0.0288	0.3836	0.4124	7.7700e-003	0.3756	0.3834	0.0000	1,107.300 5	1,107.300 5	0.1413	0.0000	1,110.8318
2021	6.9767	7.7830	9.3951	0.0150	0.1453	0.4162	0.5616	0.0385	0.3838	0.4223	0.0000	1,439.096 9	1,439.096 9	0.4152	0.0000	1,449.475 9
Maximum	6.9767	16.0673	9.3951	0.0150	5.8555	0.7371	6.5270	2.9685	0.6781	3.5864	0.0000	1,489.704 1	1,489.704 1	0.4449	0.0000	1,500.827 4

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					
2019	1.4671	16.0673	7.3804	0.0150	2.0794	0.7371	2.7510	1.0486	0.6781	1.6664	0.0000	1,489.704 1	1,489.704 1	0.4449	0.0000	1,500.827 4
2020	0.9122	6.7413	7.2929	0.0120	0.0228	0.3836	0.4064	6.3000e-003	0.3756	0.3819	0.0000	1,107.300 5	1,107.300 5	0.1413	0.0000	1,110.8318
2021	6.9767	7.7830	9.3951	0.0150	0.1137	0.4162	0.5300	0.0308	0.3838	0.4146	0.0000	1,439.096 9	1,439.096 9	0.4152	0.0000	1,449.475 9
Maximum	6.9767	16.0673	9.3951	0.0150	2.0794	0.7371	2.7510	1.0486	0.6781	1.6664	0.0000	1,489.704 1	1,489.704 1	0.4449	0.0000	1,500.827 4

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	63.25	0.00	50.84	63.99	0.00	43.92	0.00	0.00	0.00	0.00	0.00	0.00

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

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	1.8199	0.1303	3.5498	7.8100e-003		0.4611	0.4611		0.4611	0.4611	56.2015	108.8913	165.0928	0.1685	3.8100e-003	170.4417
Energy	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263
Mobile	0.1768	1.0388	2.1585	6.4400e-003	0.4332	6.6800e-003	0.4399	0.1160	6.3100e-003	0.1223		654.3308	654.3308	0.0363		655.2369
Total	2.0033	1.2253	5.7322	0.0146	0.4332	0.4723	0.9055	0.1160	0.4719	0.5879	56.2015	835.0217	891.2233	0.2061	5.1300e-003	897.9050

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	1.8199	0.1303	3.5498	7.8100e-003		0.4611	0.4611		0.4611	0.4611	56.2015	108.8913	165.0928	0.1685	3.8100e-003	170.4417
Energy	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263
Mobile	0.1768	1.0388	2.1585	6.4400e-003	0.4332	6.6800e-003	0.4399	0.1160	6.3100e-003	0.1223		654.3308	654.3308	0.0363		655.2369
Total	2.0033	1.2253	5.7322	0.0146	0.4332	0.4723	0.9055	0.1160	0.4719	0.5879	56.2015	835.0217	891.2233	0.2061	5.1300e-003	897.9050

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/30/2019	10/11/2019	5	2	
2	Grading	Grading	10/12/2019	11/22/2019	5	4	
3	Building Construction	Building Construction	11/23/2019	1/15/2021	5	200	
4	Paving	Paving	1/16/2021	2/12/2021	5	10	
5	Architectural Coating	Architectural Coating	2/13/2021	3/12/2021	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1

Acres of Paving: 0

Residential Indoor: 21,870; Residential Outdoor: 7,290; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	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
Building Construction	3	2.00	1.00	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
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2019

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	1.2256	12.9025	6.0513	0.0106		0.6712	0.6712		0.6175	0.6175		1,047.2918	1,047.2918	0.3314		1,055.5756
Total	1.2256	12.9025	6.0513	0.0106	5.7996	0.6712	6.4708	2.9537	0.6175	3.5712		1,047.2918	1,047.2918	0.3314		1,055.5756

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

3.2 Site Preparation - 2019

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	0.0296	0.0197	0.2492	5.9000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152		58.3208	58.3208	1.9600e-003		58.3697
Total	0.0296	0.0197	0.2492	5.9000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152		58.3208	58.3208	1.9600e-003		58.3697

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					2.0357	0.0000	2.0357	1.0368	0.0000	1.0368			0.0000			0.0000
Off-Road	1.2256	12.9025	6.0513	0.0106		0.6712	0.6712		0.6175	0.6175	0.0000	1,047.2918	1,047.2918	0.3314		1,055.5756
Total	1.2256	12.9025	6.0513	0.0106	2.0357	0.6712	2.7068	1.0368	0.6175	1.6542	0.0000	1,047.2918	1,047.2918	0.3314		1,055.5756

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

3.2 Site Preparation - 2019

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	0.0296	0.0197	0.2492	5.9000e-004	0.0437	3.8000e-004	0.0441	0.0118	3.5000e-004	0.0122		58.3208	58.3208	1.9600e-003		58.3697
Total	0.0296	0.0197	0.2492	5.9000e-004	0.0437	3.8000e-004	0.0441	0.0118	3.5000e-004	0.0122		58.3208	58.3208	1.9600e-003		58.3697

3.3 Grading - 2019

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					4.7817	0.0000	4.7817	2.5113	0.0000	2.5113			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775		1,396.3909	1,396.3909	0.4418		1,407.4359
Total	1.4197	16.0357	6.6065	0.0141	4.7817	0.7365	5.5182	2.5113	0.6775	3.1888		1,396.3909	1,396.3909	0.4418		1,407.4359

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

3.3 Grading - 2019

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	0.0474	0.0316	0.3988	9.4000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		93.3133	93.3133	3.1300e-003		93.3915
Total	0.0474	0.0316	0.3988	9.4000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		93.3133	93.3133	3.1300e-003		93.3915

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					1.6784	0.0000	1.6784	0.8815	0.0000	0.8815			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775	0.0000	1,396.3909	1,396.3909	0.4418		1,407.4359
Total	1.4197	16.0357	6.6065	0.0141	1.6784	0.7365	2.4148	0.8815	0.6775	1.5590	0.0000	1,396.3909	1,396.3909	0.4418		1,407.4359

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

3.3 Grading - 2019

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	0.0474	0.0316	0.3988	9.4000e-004	0.0700	6.0000e-004	0.0706	0.0189	5.5000e-004	0.0195		93.3133	93.3133	3.1300e-003		93.3915
Total	0.0474	0.0316	0.3988	9.4000e-004	0.0700	6.0000e-004	0.0706	0.0189	5.5000e-004	0.0195		93.3133	93.3133	3.1300e-003		93.3915

3.4 Building Construction - 2019

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	1.0038	7.1552	7.2573	0.0115		0.4425	0.4425		0.4332	0.4332		1,061.1687	1,061.1687	0.1471		1,064.8469
Total	1.0038	7.1552	7.2573	0.0115		0.4425	0.4425		0.4332	0.4332		1,061.1687	1,061.1687	0.1471		1,064.8469

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

3.4 Building Construction - 2019

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	3.5900e-003	0.1152	0.0234	2.7000e-004	6.4000e-003	7.2000e-004	7.1300e-003	1.8400e-003	6.9000e-004	2.5300e-003		28.8048	28.8048	1.9500e-003		28.8535
Worker	0.0119	7.8900e-003	0.0997	2.3000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0700e-003		23.3283	23.3283	7.8000e-004		23.3479
Total	0.0155	0.1230	0.1231	5.0000e-004	0.0288	8.7000e-004	0.0296	7.7700e-003	8.3000e-004	8.6000e-003		52.1331	52.1331	2.7300e-003		52.2013

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	1.0038	7.1552	7.2573	0.0115		0.4425	0.4425		0.4332	0.4332	0.0000	1,061.1687	1,061.1687	0.1471		1,064.8469
Total	1.0038	7.1552	7.2573	0.0115		0.4425	0.4425		0.4332	0.4332	0.0000	1,061.1687	1,061.1687	0.1471		1,064.8469

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

3.4 Building Construction - 2019

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	3.5900e-003	0.1152	0.0234	2.7000e-004	5.2600e-003	7.2000e-004	5.9800e-003	1.5600e-003	6.9000e-004	2.2500e-003		28.8048	28.8048	1.9500e-003		28.8535
Worker	0.0119	7.8900e-003	0.0997	2.3000e-004	0.0175	1.5000e-004	0.0177	4.7400e-003	1.4000e-004	4.8700e-003		23.3283	23.3283	7.8000e-004		23.3479
Total	0.0155	0.1230	0.1231	5.0000e-004	0.0228	8.7000e-004	0.0236	6.3000e-003	8.3000e-004	7.1200e-003		52.1331	52.1331	2.7300e-003		52.2013

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	0.8983	6.6288	7.1823	0.0115		0.3830	0.3830		0.3750	0.3750		1,056.0887	1,056.0887	0.1387		1,059.5563
Total	0.8983	6.6288	7.1823	0.0115		0.3830	0.3830		0.3750	0.3750		1,056.0887	1,056.0887	0.1387		1,059.5563

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

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	3.0400e-003	0.1055	0.0206	2.7000e-004	6.4000e-003	4.9000e-004	6.8900e-003	1.8400e-003	4.6000e-004	2.3100e-003		28.6101	28.6101	1.8600e-003		28.6566
Worker	0.0109	7.0100e-003	0.0900	2.3000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.3000e-004	6.0600e-003		22.6017	22.6017	6.9000e-004		22.6189
Total	0.0140	0.1125	0.1105	5.0000e-004	0.0288	6.4000e-004	0.0294	7.7700e-003	5.9000e-004	8.3700e-003		51.2118	51.2118	2.5500e-003		51.2755

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	0.8983	6.6288	7.1823	0.0115		0.3830	0.3830		0.3750	0.3750	0.0000	1,056.0887	1,056.0887	0.1387		1,059.5563
Total	0.8983	6.6288	7.1823	0.0115		0.3830	0.3830		0.3750	0.3750	0.0000	1,056.0887	1,056.0887	0.1387		1,059.5563

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	3.0400e-003	0.1055	0.0206	2.7000e-004	5.2600e-003	4.9000e-004	5.7500e-003	1.5600e-003	4.6000e-004	2.0300e-003		28.6101	28.6101	1.8600e-003		28.6566
Worker	0.0109	7.0100e-003	0.0900	2.3000e-004	0.0175	1.5000e-004	0.0176	4.7400e-003	1.3000e-004	4.8700e-003		22.6017	22.6017	6.9000e-004		22.6189
Total	0.0140	0.1125	0.1105	5.0000e-004	0.0228	6.4000e-004	0.0234	6.3000e-003	5.9000e-004	6.9000e-003		51.2118	51.2118	2.5500e-003		51.2755

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	0.8005	6.0969	7.0987	0.0115		0.3257	0.3257		0.3190	0.3190		1,056.1874	1,056.1874	0.1318		1,059.4823
Total	0.8005	6.0969	7.0987	0.0115		0.3257	0.3257		0.3190	0.3190		1,056.1874	1,056.1874	0.1318		1,059.4823

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	2.5900e-003	0.0964	0.0182	2.7000e-004	6.4000e-003	1.7000e-004	6.5700e-003	1.8400e-003	1.6000e-004	2.0000e-003		28.4589	28.4589	1.8000e-003		28.5039
Worker	0.0102	6.2800e-003	0.0828	2.2000e-004	0.0224	1.4000e-004	0.0225	5.9300e-003	1.3000e-004	6.0600e-003		21.8816	21.8816	6.2000e-004		21.8972
Total	0.0128	0.1027	0.1010	4.9000e-004	0.0288	3.1000e-004	0.0291	7.7700e-003	2.9000e-004	8.0600e-003		50.3405	50.3405	2.4200e-003		50.4011

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	0.8005	6.0969	7.0987	0.0115		0.3257	0.3257		0.3190	0.3190	0.0000	1,056.1874	1,056.1874	0.1318		1,059.4823
Total	0.8005	6.0969	7.0987	0.0115		0.3257	0.3257		0.3190	0.3190	0.0000	1,056.1874	1,056.1874	0.1318		1,059.4823

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	2.5900e-003	0.0964	0.0182	2.7000e-004	5.2600e-003	1.7000e-004	5.4300e-003	1.5600e-003	1.6000e-004	1.7200e-003		28.4589	28.4589	1.8000e-003		28.5039
Worker	0.0102	6.2800e-003	0.0828	2.2000e-004	0.0175	1.4000e-004	0.0176	4.7400e-003	1.3000e-004	4.8700e-003		21.8816	21.8816	6.2000e-004		21.8972
Total	0.0128	0.1027	0.1010	4.9000e-004	0.0228	3.1000e-004	0.0231	6.3000e-003	2.9000e-004	6.5900e-003		50.3405	50.3405	2.4200e-003		50.4011

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
Total	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

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	0.0661	0.0408	0.5382	1.4300e-003	0.1453	9.3000e-004	0.1462	0.0385	8.6000e-004	0.0394		142.2305	142.2305	4.0500e-003		142.3317
Total	0.0661	0.0408	0.5382	1.4300e-003	0.1453	9.3000e-004	0.1462	0.0385	8.6000e-004	0.0394		142.2305	142.2305	4.0500e-003		142.3317

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
Total	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

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	0.0661	0.0408	0.5382	1.4300e-003	0.1137	9.3000e-004	0.1147	0.0308	8.6000e-004	0.0316		142.2305	142.2305	4.0500e-003		142.3317
Total	0.0661	0.0408	0.5382	1.4300e-003	0.1137	9.3000e-004	0.1147	0.0308	8.6000e-004	0.0316		142.2305	142.2305	4.0500e-003		142.3317

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	6.7578					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
Total	6.9767	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

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	6.7578					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
Total	6.9767	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

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	0.1768	1.0388	2.1585	6.4400e-003	0.4332	6.6800e-003	0.4399	0.1160	6.3100e-003	0.1223		654.3308	654.3308	0.0363		655.2369
Unmitigated	0.1768	1.0388	2.1585	6.4400e-003	0.4332	6.6800e-003	0.4399	0.1160	6.3100e-003	0.1223		654.3308	654.3308	0.0363		655.2369

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	57.12	59.46	51.72	193,694	193,694
Total	57.12	59.46	51.72	193,694	193,694

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
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251

5.0 Energy Detail

Historical Energy Use: N

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263
NaturalGas Unmitigated	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263

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					
Single Family Housing	610.297	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263
Total		6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

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	lb/day										lb/day					
Single Family Housing	0.610297	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263
Total		6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263

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	1.8199	0.1303	3.5498	7.8100e-003		0.4611	0.4611		0.4611	0.4611	56.2015	108.8913	165.0928	0.1685	3.8100e-003	170.4417
Unmitigated	1.8199	0.1303	3.5498	7.8100e-003		0.4611	0.4611		0.4611	0.4611	56.2015	108.8913	165.0928	0.1685	3.8100e-003	170.4417

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	0.0185					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2138					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.5722	0.1245	3.0513	7.7800e-003		0.4583	0.4583		0.4583	0.4583	56.2015	108.0000	164.2015	0.1676	3.8100e-003	169.5283
Landscaping	0.0154	5.7900e-003	0.4985	3.0000e-005		2.7200e-003	2.7200e-003		2.7200e-003	2.7200e-003		0.8913	0.8913	8.8000e-004		0.9134
Total	1.8199	0.1303	3.5498	7.8100e-003		0.4611	0.4611		0.4611	0.4611	56.2015	108.8913	165.0928	0.1685	3.8100e-003	170.4417

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0185					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2138					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.5722	0.1245	3.0513	7.7800e-003		0.4583	0.4583		0.4583	0.4583	56.2015	108.0000	164.2015	0.1676	3.8100e-003	169.5283
Landscaping	0.0154	5.7900e-003	0.4985	3.0000e-005		2.7200e-003	2.7200e-003		2.7200e-003	2.7200e-003		0.8913	0.8913	8.8000e-004		0.9134
Total	1.8199	0.1303	3.5498	7.8100e-003		0.4611	0.4611		0.4611	0.4611	56.2015	108.8913	165.0928	0.1685	3.8100e-003	170.4417

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Summer

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

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

P201600581 TTM 10-14-2017
San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	17

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

Project Characteristics - SFR Project 6 Lots 4 lots approximatley 1 acre 2 lots approximately 5 acres

Land Use -

Construction Phase - Demolition phase removed from project

Construction Off-road Equipment Mitigation - Mitigation to comply with SCAQMD Rule 401 and 403

Off-road Equipment - Project construction defaults changed to reflect equipment that is commonly used for small SFR projects

Off-road Equipment - Construction equipment defaults changed to reflect similar SFR size projects

Off-road Equipment - Construction equipment defaults changes to reflect similar SFR size projects

Off-road Equipment - Construction equipment defaults changes to reflect similar SFR size projects

Off-road Equipment -

Grading - Total acres graded default changed from as each parcel will likely be graded individually

Trips and VMT -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	25
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	25
tblGrading	AcresOfGrading	1.50	1.00
tblGrading	AcresOfGrading	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00

2.0 Emissions Summary

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

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					
2019	1.4671	16.0689	7.3663	0.0149	5.8555	0.7371	6.5270	2.9685	0.6781	3.5864	0.0000	1,480.1013	1,480.1013	0.4446	0.0000	1,491.2150
2020	0.9124	6.7408	7.2801	0.0119	0.0288	0.3836	0.4124	7.7700e-003	0.3756	0.3834	0.0000	1,103.8637	1,103.8637	0.1414	0.0000	1,107.3978
2021	6.9767	7.7851	9.2983	0.0148	0.1453	0.4162	0.5616	0.0385	0.3838	0.4223	0.0000	1,424.4611	1,424.4611	0.4147	0.0000	1,434.8277
Maximum	6.9767	16.0689	9.2983	0.0149	5.8555	0.7371	6.5270	2.9685	0.6781	3.5864	0.0000	1,480.1013	1,480.1013	0.4446	0.0000	1,491.2150

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					
2019	1.4671	16.0689	7.3663	0.0149	2.0794	0.7371	2.7510	1.0486	0.6781	1.6664	0.0000	1,480.1013	1,480.1013	0.4446	0.0000	1,491.2150
2020	0.9124	6.7408	7.2801	0.0119	0.0228	0.3836	0.4064	6.3000e-003	0.3756	0.3819	0.0000	1,103.8637	1,103.8637	0.1414	0.0000	1,107.3978
2021	6.9767	7.7851	9.2983	0.0148	0.1137	0.4162	0.5300	0.0308	0.3838	0.4146	0.0000	1,424.4611	1,424.4611	0.4147	0.0000	1,434.8277
Maximum	6.9767	16.0689	9.2983	0.0149	2.0794	0.7371	2.7510	1.0486	0.6781	1.6664	0.0000	1,480.1013	1,480.1013	0.4446	0.0000	1,491.2150

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	63.25	0.00	50.84	63.99	0.00	43.92	0.00	0.00	0.00	0.00	0.00	0.00

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	1.8199	0.1303	3.5498	7.8100e-003		0.4611	0.4611		0.4611	0.4611	56.2015	108.8913	165.0928	0.1685	3.8100e-003	170.4417
Energy	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263
Mobile	0.1555	1.0486	1.8911	5.9300e-003	0.4332	6.7500e-003	0.4400	0.1160	6.3700e-003	0.1223		602.7155	602.7155	0.0362		603.6201
Total	1.9820	1.2352	5.4649	0.0141	0.4332	0.4724	0.9056	0.1160	0.4720	0.5879	56.2015	783.4065	839.6080	0.2061	5.1300e-003	846.2882

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	1.8199	0.1303	3.5498	7.8100e-003		0.4611	0.4611		0.4611	0.4611	56.2015	108.8913	165.0928	0.1685	3.8100e-003	170.4417
Energy	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263
Mobile	0.1555	1.0486	1.8911	5.9300e-003	0.4332	6.7500e-003	0.4400	0.1160	6.3700e-003	0.1223		602.7155	602.7155	0.0362		603.6201
Total	1.9820	1.2352	5.4649	0.0141	0.4332	0.4724	0.9056	0.1160	0.4720	0.5879	56.2015	783.4065	839.6080	0.2061	5.1300e-003	846.2882

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/30/2019	10/11/2019	5	2	
2	Grading	Grading	10/12/2019	11/22/2019	5	4	
3	Building Construction	Building Construction	11/23/2019	1/15/2021	5	200	
4	Paving	Paving	1/16/2021	2/12/2021	5	10	
5	Architectural Coating	Architectural Coating	2/13/2021	3/12/2021	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1

Acres of Paving: 0

Residential Indoor: 21,870; Residential Outdoor: 7,290; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	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
Building Construction	3	2.00	1.00	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
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2019

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	1.2256	12.9025	6.0513	0.0106		0.6712	0.6712		0.6175	0.6175		1,047.2918	1,047.2918	0.3314		1,055.5756
Total	1.2256	12.9025	6.0513	0.0106	5.7996	0.6712	6.4708	2.9537	0.6175	3.5712		1,047.2918	1,047.2918	0.3314		1,055.5756

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

3.2 Site Preparation - 2019

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	0.0296	0.0208	0.2052	5.3000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152		52.3190	52.3190	1.7200e-003		52.3619
Total	0.0296	0.0208	0.2052	5.3000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152		52.3190	52.3190	1.7200e-003		52.3619

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					2.0357	0.0000	2.0357	1.0368	0.0000	1.0368			0.0000			0.0000
Off-Road	1.2256	12.9025	6.0513	0.0106		0.6712	0.6712		0.6175	0.6175	0.0000	1,047.2918	1,047.2918	0.3314		1,055.5756
Total	1.2256	12.9025	6.0513	0.0106	2.0357	0.6712	2.7068	1.0368	0.6175	1.6542	0.0000	1,047.2918	1,047.2918	0.3314		1,055.5756

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

3.2 Site Preparation - 2019

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	0.0296	0.0208	0.2052	5.3000e-004	0.0437	3.8000e-004	0.0441	0.0118	3.5000e-004	0.0122		52.3190	52.3190	1.7200e-003		52.3619
Total	0.0296	0.0208	0.2052	5.3000e-004	0.0437	3.8000e-004	0.0441	0.0118	3.5000e-004	0.0122		52.3190	52.3190	1.7200e-003		52.3619

3.3 Grading - 2019

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					4.7817	0.0000	4.7817	2.5113	0.0000	2.5113			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775		1,396.3909	1,396.3909	0.4418		1,407.4359
Total	1.4197	16.0357	6.6065	0.0141	4.7817	0.7365	5.5182	2.5113	0.6775	3.1888		1,396.3909	1,396.3909	0.4418		1,407.4359

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

3.3 Grading - 2019

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	0.0474	0.0332	0.3284	8.4000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		83.7104	83.7104	2.7500e-003		83.7791
Total	0.0474	0.0332	0.3284	8.4000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		83.7104	83.7104	2.7500e-003		83.7791

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					1.6784	0.0000	1.6784	0.8815	0.0000	0.8815			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775	0.0000	1,396.3909	1,396.3909	0.4418		1,407.4359
Total	1.4197	16.0357	6.6065	0.0141	1.6784	0.7365	2.4148	0.8815	0.6775	1.5590	0.0000	1,396.3909	1,396.3909	0.4418		1,407.4359

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

3.3 Grading - 2019

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	0.0474	0.0332	0.3284	8.4000e-004	0.0700	6.0000e-004	0.0706	0.0189	5.5000e-004	0.0195		83.7104	83.7104	2.7500e-003		83.7791
Total	0.0474	0.0332	0.3284	8.4000e-004	0.0700	6.0000e-004	0.0706	0.0189	5.5000e-004	0.0195		83.7104	83.7104	2.7500e-003		83.7791

3.4 Building Construction - 2019

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	1.0038	7.1552	7.2573	0.0115		0.4425	0.4425		0.4332	0.4332		1,061.1687	1,061.1687	0.1471		1,064.8469
Total	1.0038	7.1552	7.2573	0.0115		0.4425	0.4425		0.4332	0.4332		1,061.1687	1,061.1687	0.1471		1,064.8469

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

3.4 Building Construction - 2019

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	3.7700e-003	0.1145	0.0269	2.6000e-004	6.4000e-003	7.3000e-004	7.1300e-003	1.8400e-003	7.0000e-004	2.5400e-003		27.6949	27.6949	2.1500e-003		27.7486
Worker	0.0118	8.3000e-003	0.0821	2.1000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0700e-003		20.9276	20.9276	6.9000e-004		20.9448
Total	0.0156	0.1228	0.1090	4.7000e-004	0.0288	8.8000e-004	0.0296	7.7700e-003	8.4000e-004	8.6100e-003		48.6225	48.6225	2.8400e-003		48.6934

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	1.0038	7.1552	7.2573	0.0115		0.4425	0.4425		0.4332	0.4332	0.0000	1,061.1687	1,061.1687	0.1471		1,064.8469
Total	1.0038	7.1552	7.2573	0.0115		0.4425	0.4425		0.4332	0.4332	0.0000	1,061.1687	1,061.1687	0.1471		1,064.8469

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

3.4 Building Construction - 2019

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	3.7700e-003	0.1145	0.0269	2.6000e-004	5.2600e-003	7.3000e-004	5.9900e-003	1.5600e-003	7.0000e-004	2.2600e-003		27.6949	27.6949	2.1500e-003		27.7486
Worker	0.0118	8.3000e-003	0.0821	2.1000e-004	0.0175	1.5000e-004	0.0177	4.7400e-003	1.4000e-004	4.8700e-003		20.9276	20.9276	6.9000e-004		20.9448
Total	0.0156	0.1228	0.1090	4.7000e-004	0.0228	8.8000e-004	0.0236	6.3000e-003	8.4000e-004	7.1300e-003		48.6225	48.6225	2.8400e-003		48.6934

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	0.8983	6.6288	7.1823	0.0115		0.3830	0.3830		0.3750	0.3750		1,056.0887	1,056.0887	0.1387		1,059.5563
Total	0.8983	6.6288	7.1823	0.0115		0.3830	0.3830		0.3750	0.3750		1,056.0887	1,056.0887	0.1387		1,059.5563

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	3.2000e-003	0.1047	0.0238	2.6000e-004	6.4000e-003	4.9000e-004	6.9000e-003	1.8400e-003	4.7000e-004	2.3100e-003		27.5000	27.5000	2.0500e-003		27.5514
Worker	0.0109	7.3700e-003	0.0739	2.0000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.3000e-004	6.0600e-003		20.2750	20.2750	6.1000e-004		20.2901
Total	0.0141	0.1120	0.0978	4.6000e-004	0.0288	6.4000e-004	0.0294	7.7700e-003	6.0000e-004	8.3700e-003		47.7750	47.7750	2.6600e-003		47.8415

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	0.8983	6.6288	7.1823	0.0115		0.3830	0.3830		0.3750	0.3750	0.0000	1,056.0887	1,056.0887	0.1387		1,059.5563
Total	0.8983	6.6288	7.1823	0.0115		0.3830	0.3830		0.3750	0.3750	0.0000	1,056.0887	1,056.0887	0.1387		1,059.5563

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	3.2000e-003	0.1047	0.0238	2.6000e-004	5.2600e-003	4.9000e-004	5.7600e-003	1.5600e-003	4.7000e-004	2.0300e-003		27.5000	27.5000	2.0500e-003		27.5514
Worker	0.0109	7.3700e-003	0.0739	2.0000e-004	0.0175	1.5000e-004	0.0176	4.7400e-003	1.3000e-004	4.8700e-003		20.2750	20.2750	6.1000e-004		20.2901
Total	0.0141	0.1120	0.0978	4.6000e-004	0.0228	6.4000e-004	0.0234	6.3000e-003	6.0000e-004	6.9000e-003		47.7750	47.7750	2.6600e-003		47.8415

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	0.8005	6.0969	7.0987	0.0115		0.3257	0.3257		0.3190	0.3190		1,056.1874	1,056.1874	0.1318		1,059.4823
Total	0.8005	6.0969	7.0987	0.0115		0.3257	0.3257		0.3190	0.3190		1,056.1874	1,056.1874	0.1318		1,059.4823

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	2.7400e-003	0.0954	0.0212	2.6000e-004	6.4000e-003	1.7000e-004	6.5700e-003	1.8400e-003	1.6000e-004	2.0100e-003		27.3535	27.3535	1.9900e-003		27.4034
Worker	0.0102	6.6100e-003	0.0679	2.0000e-004	0.0224	1.4000e-004	0.0225	5.9300e-003	1.3000e-004	6.0600e-003		19.6300	19.6300	5.5000e-004		19.6436
Total	0.0129	0.1020	0.0891	4.6000e-004	0.0288	3.1000e-004	0.0291	7.7700e-003	2.9000e-004	8.0700e-003		46.9835	46.9835	2.5400e-003		47.0470

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	0.8005	6.0969	7.0987	0.0115		0.3257	0.3257		0.3190	0.3190	0.0000	1,056.1874	1,056.1874	0.1318		1,059.4823
Total	0.8005	6.0969	7.0987	0.0115		0.3257	0.3257		0.3190	0.3190	0.0000	1,056.1874	1,056.1874	0.1318		1,059.4823

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	2.7400e-003	0.0954	0.0212	2.6000e-004	5.2600e-003	1.7000e-004	5.4300e-003	1.5600e-003	1.6000e-004	1.7300e-003		27.3535	27.3535	1.9900e-003		27.4034
Worker	0.0102	6.6100e-003	0.0679	2.0000e-004	0.0175	1.4000e-004	0.0176	4.7400e-003	1.3000e-004	4.8700e-003		19.6300	19.6300	5.5000e-004		19.6436
Total	0.0129	0.1020	0.0891	4.6000e-004	0.0228	3.1000e-004	0.0231	6.3000e-003	2.9000e-004	6.6000e-003		46.9835	46.9835	2.5400e-003		47.0470

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
Total	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

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	0.0662	0.0429	0.4414	1.2800e-003	0.1453	9.3000e-004	0.1462	0.0385	8.6000e-004	0.0394		127.5947	127.5947	3.5500e-003		127.6835
Total	0.0662	0.0429	0.4414	1.2800e-003	0.1453	9.3000e-004	0.1462	0.0385	8.6000e-004	0.0394		127.5947	127.5947	3.5500e-003		127.6835

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
Total	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

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

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	0.0662	0.0429	0.4414	1.2800e-003	0.1137	9.3000e-004	0.1147	0.0308	8.6000e-004	0.0316		127.5947	127.5947	3.5500e-003		127.6835
Total	0.0662	0.0429	0.4414	1.2800e-003	0.1137	9.3000e-004	0.1147	0.0308	8.6000e-004	0.0316		127.5947	127.5947	3.5500e-003		127.6835

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	6.7578					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
Total	6.9767	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

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	6.7578					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
Total	6.9767	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

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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
Category	lb/day										lb/day					
Mitigated	0.1555	1.0486	1.8911	5.9300e-003	0.4332	6.7500e-003	0.4400	0.1160	6.3700e-003	0.1223		602.7155	602.7155	0.0362		603.6201
Unmitigated	0.1555	1.0486	1.8911	5.9300e-003	0.4332	6.7500e-003	0.4400	0.1160	6.3700e-003	0.1223		602.7155	602.7155	0.0362		603.6201

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	57.12	59.46	51.72	193,694	193,694
Total	57.12	59.46	51.72	193,694	193,694

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
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251

5.0 Energy Detail

Historical Energy Use: N

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, 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	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263
NaturalGas Unmitigated	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263

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					
Single Family Housing	610.297	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263
Total		6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

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					
Single Family Housing	0.610297	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263
Total		6.5800e-003	0.0562	0.0239	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.7997	71.7997	1.3800e-003	1.3200e-003	72.2263

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	1.8199	0.1303	3.5498	7.8100e-003		0.4611	0.4611		0.4611	0.4611	56.2015	108.8913	165.0928	0.1685	3.8100e-003	170.4417
Unmitigated	1.8199	0.1303	3.5498	7.8100e-003		0.4611	0.4611		0.4611	0.4611	56.2015	108.8913	165.0928	0.1685	3.8100e-003	170.4417

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

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	0.0185					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2138					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.5722	0.1245	3.0513	7.7800e-003		0.4583	0.4583		0.4583	0.4583	56.2015	108.0000	164.2015	0.1676	3.8100e-003	169.5283
Landscaping	0.0154	5.7900e-003	0.4985	3.0000e-005		2.7200e-003	2.7200e-003		2.7200e-003	2.7200e-003		0.8913	0.8913	8.8000e-004		0.9134
Total	1.8199	0.1303	3.5498	7.8100e-003		0.4611	0.4611		0.4611	0.4611	56.2015	108.8913	165.0928	0.1685	3.8100e-003	170.4417

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0185					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2138					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.5722	0.1245	3.0513	7.7800e-003		0.4583	0.4583		0.4583	0.4583	56.2015	108.0000	164.2015	0.1676	3.8100e-003	169.5283
Landscaping	0.0154	5.7900e-003	0.4985	3.0000e-005		2.7200e-003	2.7200e-003		2.7200e-003	2.7200e-003		0.8913	0.8913	8.8000e-004		0.9134
Total	1.8199	0.1303	3.5498	7.8100e-003		0.4611	0.4611		0.4611	0.4611	56.2015	108.8913	165.0928	0.1685	3.8100e-003	170.4417

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Winter

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

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

P201600581 TTM 10-14-2017
San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	17

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

Project Characteristics - SFR Project 6 Lots 4 lots approximatley 1 acre 2 lots approximately 5 acres

Land Use -

Construction Phase - Demolition phase removed from project

Construction Off-road Equipment Mitigation - Mitigation to comply with SCAQMD Rule 401 and 403

Off-road Equipment - Project construction defaults changed to reflect equipment that is commonly used for small SFR projects

Off-road Equipment - Construction equipment defaults changed to reflect similar SFR size projects

Off-road Equipment - Construction equipment defaults changes to reflect similar SFR size projects

Off-road Equipment - Construction equipment defaults changes to reflect similar SFR size projects

Off-road Equipment -

Grading - Total acres graded default changed from as each parcel will likely be graded individually

Trips and VMT -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	25
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	25
tblGrading	AcresOfGrading	1.50	1.00
tblGrading	AcresOfGrading	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00

2.0 Emissions Summary

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

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					
2019	0.0420	0.4040	0.2351	4.4000e-004	0.1027	0.0204	0.1231	0.0530	0.0191	0.0721	0.0000	38.7639	38.7639	9.4000e-003	0.0000	38.9988
2020	0.1194	0.8834	0.9540	1.5600e-003	3.7000e-003	0.0503	0.0540	1.0000e-003	0.0492	0.0502	0.0000	131.3138	131.3138	0.0168	0.0000	131.7336
2021	0.0826	0.1273	0.1509	2.4000e-004	1.5800e-003	6.9000e-003	8.4800e-003	4.2000e-004	6.5300e-003	6.9600e-003	0.0000	21.0107	21.0107	4.6100e-003	0.0000	21.1259
Maximum	0.1194	0.8834	0.9540	1.5600e-003	0.1027	0.0503	0.1231	0.0530	0.0492	0.0721	0.0000	131.3138	131.3138	0.0168	0.0000	131.7336

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					
2019	0.0420	0.4040	0.2351	4.4000e-004	0.0369	0.0204	0.0573	0.0188	0.0191	0.0380	0.0000	38.7639	38.7639	9.4000e-003	0.0000	38.9988
2020	0.1194	0.8834	0.9540	1.5600e-003	2.9300e-003	0.0503	0.0532	8.1000e-004	0.0492	0.0500	0.0000	131.3137	131.3137	0.0168	0.0000	131.7334
2021	0.0826	0.1273	0.1509	2.4000e-004	1.2400e-003	6.9000e-003	8.1400e-003	3.4000e-004	6.5300e-003	6.8700e-003	0.0000	21.0107	21.0107	4.6100e-003	0.0000	21.1259
Maximum	0.1194	0.8834	0.9540	1.5600e-003	0.0369	0.0503	0.0573	0.0188	0.0492	0.0500	0.0000	131.3137	131.3137	0.0168	0.0000	131.7334

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

	ROG	NOx	CO	SO2	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	61.96	0.00	36.06	63.26	0.00	26.62	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	9-30-2019	12-29-2019	0.4334	0.4334
2	12-30-2019	3-29-2020	0.2492	0.2492
3	3-30-2020	6-29-2020	0.2515	0.2515
4	6-30-2020	9-29-2020	0.2515	0.2515
5	9-30-2020	12-29-2020	0.2487	0.2487
6	12-30-2020	3-29-2021	0.2143	0.2143
		Highest	0.4334	0.4334

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	0.0640	2.2800e-003	0.1005	1.0000e-004		6.0700e-003	6.0700e-003		6.0700e-003	6.0700e-003	0.6373	1.3258	1.9631	2.0000e-003	4.0000e-005	2.0260
Energy	1.2000e-003	0.0103	4.3700e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	29.7944	29.7944	9.7000e-004	3.7000e-004	29.9291
Mobile	0.0264	0.1864	0.3398	1.0500e-003	0.0738	1.1600e-003	0.0749	0.0198	1.1000e-003	0.0209	0.0000	96.7670	96.7670	5.6300e-003	0.0000	96.9078
Waste						0.0000	0.0000		0.0000	0.0000	1.4149	0.0000	1.4149	0.0836	0.0000	3.5052
Water						0.0000	0.0000		0.0000	0.0000	0.1240	2.4943	2.6183	0.0128	3.2000e-004	3.0353
Total	0.0916	0.1989	0.4446	1.2200e-003	0.0738	8.0600e-003	0.0818	0.0198	8.0000e-003	0.0278	2.1762	130.3815	132.5577	0.1051	7.3000e-004	135.4035

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

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	0.0640	2.2800e-003	0.1005	1.0000e-004		6.0700e-003	6.0700e-003		6.0700e-003	6.0700e-003	0.6373	1.3258	1.9631	2.0000e-003	4.0000e-005	2.0260
Energy	1.2000e-003	0.0103	4.3700e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	29.7944	29.7944	9.7000e-004	3.7000e-004	29.9291
Mobile	0.0264	0.1864	0.3398	1.0500e-003	0.0738	1.1600e-003	0.0749	0.0198	1.1000e-003	0.0209	0.0000	96.7670	96.7670	5.6300e-003	0.0000	96.9078
Waste						0.0000	0.0000		0.0000	0.0000	1.4149	0.0000	1.4149	0.0836	0.0000	3.5052
Water						0.0000	0.0000		0.0000	0.0000	0.1240	2.4943	2.6183	0.0128	3.2000e-004	3.0353
Total	0.0916	0.1989	0.4446	1.2200e-003	0.0738	8.0600e-003	0.0818	0.0198	8.0000e-003	0.0278	2.1762	130.3815	132.5577	0.1051	7.3000e-004	135.4035

	ROG	NOx	CO	SO2	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

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/30/2019	10/11/2019	5	2	
2	Grading	Grading	10/12/2019	11/22/2019	5	4	
3	Building Construction	Building Construction	11/23/2019	1/15/2021	5	200	
4	Paving	Paving	1/16/2021	2/12/2021	5	10	
5	Architectural Coating	Architectural Coating	2/13/2021	3/12/2021	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1

Acres of Paving: 0

Residential Indoor: 21,870; Residential Outdoor: 7,290; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	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
Building Construction	3	2.00	1.00	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
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0290	0.0000	0.0290	0.0148	0.0000	0.0148	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1300e-003	0.0645	0.0303	5.0000e-005		3.3600e-003	3.3600e-003		3.0900e-003	3.0900e-003	0.0000	4.7504	4.7504	1.5000e-003	0.0000	4.7880
Total	6.1300e-003	0.0645	0.0303	5.0000e-005	0.0290	3.3600e-003	0.0324	0.0148	3.0900e-003	0.0179	0.0000	4.7504	4.7504	1.5000e-003	0.0000	4.7880

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

3.2 Site Preparation - 2019

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	1.3000e-004	1.1000e-004	1.0800e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2425	0.2425	1.0000e-005	0.0000	0.2427
Total	1.3000e-004	1.1000e-004	1.0800e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2425	0.2425	1.0000e-005	0.0000	0.2427

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0102	0.0000	0.0102	5.1800e-003	0.0000	5.1800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1300e-003	0.0645	0.0303	5.0000e-005		3.3600e-003	3.3600e-003		3.0900e-003	3.0900e-003	0.0000	4.7504	4.7504	1.5000e-003	0.0000	4.7880
Total	6.1300e-003	0.0645	0.0303	5.0000e-005	0.0102	3.3600e-003	0.0135	5.1800e-003	3.0900e-003	8.2700e-003	0.0000	4.7504	4.7504	1.5000e-003	0.0000	4.7880

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

3.2 Site Preparation - 2019

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	1.3000e-004	1.1000e-004	1.0800e-003	0.0000	2.1000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2425	0.2425	1.0000e-005	0.0000	0.2427
Total	1.3000e-004	1.1000e-004	1.0800e-003	0.0000	2.1000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2425	0.2425	1.0000e-005	0.0000	0.2427

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0717	0.0000	0.0717	0.0377	0.0000	0.0377	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0213	0.2405	0.0991	2.1000e-004		0.0111	0.0111		0.0102	0.0102	0.0000	19.0018	19.0018	6.0100e-003	0.0000	19.1521
Total	0.0213	0.2405	0.0991	2.1000e-004	0.0717	0.0111	0.0828	0.0377	0.0102	0.0478	0.0000	19.0018	19.0018	6.0100e-003	0.0000	19.1521

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

3.3 Grading - 2019

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	6.4000e-004	5.2000e-004	5.1700e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3200e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.1641	1.1641	4.0000e-005	0.0000	1.1650
Total	6.4000e-004	5.2000e-004	5.1700e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3200e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.1641	1.1641	4.0000e-005	0.0000	1.1650

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0252	0.0000	0.0252	0.0132	0.0000	0.0132	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0213	0.2405	0.0991	2.1000e-004		0.0111	0.0111		0.0102	0.0102	0.0000	19.0017	19.0017	6.0100e-003	0.0000	19.1520
Total	0.0213	0.2405	0.0991	2.1000e-004	0.0252	0.0111	0.0362	0.0132	0.0102	0.0234	0.0000	19.0017	19.0017	6.0100e-003	0.0000	19.1520

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

3.3 Grading - 2019

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	6.4000e-004	5.2000e-004	5.1700e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0400e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.1641	1.1641	4.0000e-005	0.0000	1.1650
Total	6.4000e-004	5.2000e-004	5.1700e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0400e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.1641	1.1641	4.0000e-005	0.0000	1.1650

3.4 Building Construction - 2019

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	0.0136	0.0966	0.0980	1.5000e-004		5.9700e-003	5.9700e-003		5.8500e-003	5.8500e-003	0.0000	12.9961	12.9961	1.8000e-003	0.0000	13.0412
Total	0.0136	0.0966	0.0980	1.5000e-004		5.9700e-003	5.9700e-003		5.8500e-003	5.8500e-003	0.0000	12.9961	12.9961	1.8000e-003	0.0000	13.0412

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

3.4 Building Construction - 2019

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	5.0000e-005	1.5800e-003	3.4000e-004	0.0000	9.0000e-005	1.0000e-005	9.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.3471	0.3471	2.0000e-005	0.0000	0.3477
Worker	1.4000e-004	1.2000e-004	1.1600e-003	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2619	0.2619	1.0000e-005	0.0000	0.2621
Total	1.9000e-004	1.7000e-003	1.5000e-003	0.0000	3.9000e-004	1.0000e-005	3.9000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	0.6090	0.6090	3.0000e-005	0.0000	0.6098

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	0.0136	0.0966	0.0980	1.5000e-004		5.9700e-003	5.9700e-003		5.8500e-003	5.8500e-003	0.0000	12.9961	12.9961	1.8000e-003	0.0000	13.0412
Total	0.0136	0.0966	0.0980	1.5000e-004		5.9700e-003	5.9700e-003		5.8500e-003	5.8500e-003	0.0000	12.9961	12.9961	1.8000e-003	0.0000	13.0412

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

3.4 Building Construction - 2019

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	5.0000e-005	1.5800e-003	3.4000e-004	0.0000	7.0000e-005	1.0000e-005	8.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.3471	0.3471	2.0000e-005	0.0000	0.3477
Worker	1.4000e-004	1.2000e-004	1.1600e-003	0.0000	2.3000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2619	0.2619	1.0000e-005	0.0000	0.2621
Total	1.9000e-004	1.7000e-003	1.5000e-003	0.0000	3.0000e-004	1.0000e-005	3.1000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.6090	0.6090	3.0000e-005	0.0000	0.6098

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	0.1177	0.8684	0.9409	1.5000e-003		0.0502	0.0502		0.0491	0.0491	0.0000	125.5069	125.5069	0.0165	0.0000	125.9189
Total	0.1177	0.8684	0.9409	1.5000e-003		0.0502	0.0502		0.0491	0.0491	0.0000	125.5069	125.5069	0.0165	0.0000	125.9189

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

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	4.1000e-004	0.0140	2.9200e-003	3.0000e-005	8.3000e-004	6.0000e-005	8.9000e-004	2.4000e-004	6.0000e-005	3.0000e-004	0.0000	3.3447	3.3447	2.3000e-004	0.0000	3.3504
Worker	1.2900e-003	1.0200e-003	0.0102	3.0000e-005	2.8700e-003	2.0000e-005	2.8900e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.4623	2.4623	7.0000e-005	0.0000	2.4642
Total	1.7000e-003	0.0150	0.0131	6.0000e-005	3.7000e-003	8.0000e-005	3.7800e-003	1.0000e-003	8.0000e-005	1.0800e-003	0.0000	5.8070	5.8070	3.0000e-004	0.0000	5.8146

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	0.1177	0.8684	0.9409	1.5000e-003		0.0502	0.0502		0.0491	0.0491	0.0000	125.5067	125.5067	0.0165	0.0000	125.9188
Total	0.1177	0.8684	0.9409	1.5000e-003		0.0502	0.0502		0.0491	0.0491	0.0000	125.5067	125.5067	0.0165	0.0000	125.9188

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

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	4.1000e-004	0.0140	2.9200e-003	3.0000e-005	6.8000e-004	6.0000e-005	7.4000e-004	2.0000e-004	6.0000e-005	2.6000e-004	0.0000	3.3447	3.3447	2.3000e-004	0.0000	3.3504
Worker	1.2900e-003	1.0200e-003	0.0102	3.0000e-005	2.2500e-003	2.0000e-005	2.2700e-003	6.1000e-004	2.0000e-005	6.3000e-004	0.0000	2.4623	2.4623	7.0000e-005	0.0000	2.4642
Total	1.7000e-003	0.0150	0.0131	6.0000e-005	2.9300e-003	8.0000e-005	3.0100e-003	8.1000e-004	8.0000e-005	8.9000e-004	0.0000	5.8070	5.8070	3.0000e-004	0.0000	5.8146

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	4.4000e-003	0.0335	0.0390	6.0000e-005		1.7900e-003	1.7900e-003		1.7500e-003	1.7500e-003	0.0000	5.2699	5.2699	6.6000e-004	0.0000	5.2863
Total	4.4000e-003	0.0335	0.0390	6.0000e-005		1.7900e-003	1.7900e-003		1.7500e-003	1.7500e-003	0.0000	5.2699	5.2699	6.6000e-004	0.0000	5.2863

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

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	5.4000e-004	1.1000e-004	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1397	0.1397	1.0000e-005	0.0000	0.1399
Worker	5.0000e-005	4.0000e-005	3.9000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1001	0.1001	0.0000	0.0000	0.1002
Total	6.0000e-005	5.8000e-004	5.0000e-004	0.0000	1.5000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.2398	0.2398	1.0000e-005	0.0000	0.2401

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	4.4000e-003	0.0335	0.0390	6.0000e-005		1.7900e-003	1.7900e-003		1.7500e-003	1.7500e-003	0.0000	5.2699	5.2699	6.6000e-004	0.0000	5.2863
Total	4.4000e-003	0.0335	0.0390	6.0000e-005		1.7900e-003	1.7900e-003		1.7500e-003	1.7500e-003	0.0000	5.2699	5.2699	6.6000e-004	0.0000	5.2863

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

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	5.4000e-004	1.1000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1397	0.1397	1.0000e-005	0.0000	0.1399
Worker	5.0000e-005	4.0000e-005	3.9000e-004	0.0000	9.0000e-005	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1001	0.1001	0.0000	0.0000	0.1002
Total	6.0000e-005	5.8000e-004	5.0000e-004	0.0000	1.2000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.2398	0.2398	1.0000e-005	0.0000	0.2401

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	7.7400e-003	0.0774	0.0886	1.4000e-004		4.1500e-003	4.1500e-003		3.8300e-003	3.8300e-003	0.0000	11.7650	11.7650	3.7300e-003	0.0000	11.8582
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.7400e-003	0.0774	0.0886	1.4000e-004		4.1500e-003	4.1500e-003		3.8300e-003	3.8300e-003	0.0000	11.7650	11.7650	3.7300e-003	0.0000	11.8582

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

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	6.0000e-004	4.5000e-004	4.6300e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1829	1.1829	3.0000e-005	0.0000	1.1837
Total	6.0000e-004	4.5000e-004	4.6300e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1829	1.1829	3.0000e-005	0.0000	1.1837

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	7.7400e-003	0.0774	0.0886	1.4000e-004		4.1500e-003	4.1500e-003		3.8300e-003	3.8300e-003	0.0000	11.7650	11.7650	3.7300e-003	0.0000	11.8582
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.7400e-003	0.0774	0.0886	1.4000e-004		4.1500e-003	4.1500e-003		3.8300e-003	3.8300e-003	0.0000	11.7650	11.7650	3.7300e-003	0.0000	11.8582

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

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	6.0000e-004	4.5000e-004	4.6300e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	1.1829	1.1829	3.0000e-005	0.0000	1.1837
Total	6.0000e-004	4.5000e-004	4.6300e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	1.1829	1.1829	3.0000e-005	0.0000	1.1837

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	0.0676					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	0.0698	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0.0676					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	0.0698	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	0.0264	0.1864	0.3398	1.0500e-003	0.0738	1.1600e-003	0.0749	0.0198	1.1000e-003	0.0209	0.0000	96.7670	96.7670	5.6300e-003	0.0000	96.9078
Unmitigated	0.0264	0.1864	0.3398	1.0500e-003	0.0738	1.1600e-003	0.0749	0.0198	1.1000e-003	0.0209	0.0000	96.7670	96.7670	5.6300e-003	0.0000	96.9078

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	57.12	59.46	51.72	193,694	193,694
Total	57.12	59.46	51.72	193,694	193,694

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
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251

5.0 Energy Detail

Historical Energy Use: N

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

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	17.9072	17.9072	7.4000e-004	1.5000e-004	17.9713
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	17.9072	17.9072	7.4000e-004	1.5000e-004	17.9713
NaturalGas Mitigated	1.2000e-003	0.0103	4.3700e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	11.8872	11.8872	2.3000e-004	2.2000e-004	11.9579
NaturalGas Unmitigated	1.2000e-003	0.0103	4.3700e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	11.8872	11.8872	2.3000e-004	2.2000e-004	11.9579

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					
Single Family Housing	222758	1.2000e-003	0.0103	4.3700e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	11.8872	11.8872	2.3000e-004	2.2000e-004	11.9579
Total		1.2000e-003	0.0103	4.3700e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	11.8872	11.8872	2.3000e-004	2.2000e-004	11.9579

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

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					
Single Family Housing	222758	1.2000e-003	0.0103	4.3700e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	11.8872	11.8872	2.3000e-004	2.2000e-004	11.9579
Total		1.2000e-003	0.0103	4.3700e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	11.8872	11.8872	2.3000e-004	2.2000e-004	11.9579

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	56202.1	17.9072	7.4000e-004	1.5000e-004	17.9713
Total		17.9072	7.4000e-004	1.5000e-004	17.9713

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	56202.1	17.9072	7.4000e-004	1.5000e-004	17.9713
Total		17.9072	7.4000e-004	1.5000e-004	17.9713

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	0.0640	2.2800e-003	0.1005	1.0000e-004		6.0700e-003	6.0700e-003		6.0700e-003	6.0700e-003	0.6373	1.3258	1.9631	2.0000e-003	4.0000e-005	2.0260
Unmitigated	0.0640	2.2800e-003	0.1005	1.0000e-004		6.0700e-003	6.0700e-003		6.0700e-003	6.0700e-003	0.6373	1.3258	1.9631	2.0000e-003	4.0000e-005	2.0260

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

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	3.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0390					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0197	1.5600e-003	0.0381	1.0000e-004		5.7300e-003	5.7300e-003		5.7300e-003	5.7300e-003	0.6373	1.2247	1.8620	1.9000e-003	4.0000e-005	1.9224
Landscaping	1.9200e-003	7.2000e-004	0.0623	0.0000		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	0.1011	0.1011	1.0000e-004	0.0000	0.1036
Total	0.0640	2.2800e-003	0.1005	1.0000e-004		6.0700e-003	6.0700e-003		6.0700e-003	6.0700e-003	0.6373	1.3258	1.9631	2.0000e-003	4.0000e-005	2.0260

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0390					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0197	1.5600e-003	0.0381	1.0000e-004		5.7300e-003	5.7300e-003		5.7300e-003	5.7300e-003	0.6373	1.2247	1.8620	1.9000e-003	4.0000e-005	1.9224
Landscaping	1.9200e-003	7.2000e-004	0.0623	0.0000		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	0.1011	0.1011	1.0000e-004	0.0000	0.1036
Total	0.0640	2.2800e-003	0.1005	1.0000e-004		6.0700e-003	6.0700e-003		6.0700e-003	6.0700e-003	0.6373	1.3258	1.9631	2.0000e-003	4.0000e-005	2.0260

7.0 Water Detail

7.1 Mitigation Measures Water

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.6183	0.0128	3.2000e-004	3.0353
Unmitigated	2.6183	0.0128	3.2000e-004	3.0353

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.390924 / 0.246452	2.6183	0.0128	3.2000e-004	3.0353
Total		2.6183	0.0128	3.2000e-004	3.0353

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.390924 / 0.246452	2.6183	0.0128	3.2000e-004	3.0353
Total		2.6183	0.0128	3.2000e-004	3.0353

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.4149	0.0836	0.0000	3.5052
Unmitigated	1.4149	0.0836	0.0000	3.5052

P201600581 TTM 10-14-2017 - San Bernardino-South Coast County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	6.97	1.4149	0.0836	0.0000	3.5052
Total		1.4149	0.0836	0.0000	3.5052

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	6.97	1.4149	0.0836	0.0000	3.5052
Total		1.4149	0.0836	0.0000	3.5052

9.0 Operational Offroad

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

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

P201600581 TTM 10-14-2017

San Bernardino-South Coast County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
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
	Diesel	No Change	0	0	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	1	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	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
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	2.19000E-003	1.52700E-002	1.81800E-002	3.00000E-005	9.40000E-004	9.40000E-004	0.00000E+000	2.55325E+000	2.55325E+000	1.80000E-004	0.00000E+000	2.55763E+000
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Generator Sets	6.02400E-002	5.24110E-001	5.55950E-001	9.90000E-004	2.96800E-002	2.96800E-002	0.00000E+000	8.47811E+001	8.47811E+001	4.81000E-003	0.00000E+000	8.49014E+001
Graders	5.48000E-003	7.40200E-002	2.06800E-002	7.00000E-005	2.38000E-003	2.19000E-003	0.00000E+000	6.71163E+000	6.71163E+000	2.12000E-003	0.00000E+000	6.76472E+000
Pavers	1.85000E-003	1.94600E-002	2.17900E-002	4.00000E-005	9.40000E-004	8.70000E-004	0.00000E+000	3.09618E+000	3.09618E+000	1.00000E-003	0.00000E+000	3.12122E+000
Paving Equipment	1.92000E-003	1.94000E-002	2.54100E-002	4.00000E-005	9.60000E-004	8.80000E-004	0.00000E+000	3.57844E+000	3.57844E+000	1.16000E-003	0.00000E+000	3.60738E+000
Rollers	1.66000E-003	1.68400E-002	1.64500E-002	2.00000E-005	1.03000E-003	9.50000E-004	0.00000E+000	2.01692E+000	2.01692E+000	6.50000E-004	0.00000E+000	2.03323E+000
Rubber Tired Dozers	1.77300E-002	1.88660E-001	6.69400E-002	1.30000E-004	9.20000E-003	8.46000E-003	0.00000E+000	1.19838E+001	1.19838E+001	3.79000E-003	0.00000E+000	1.20785E+001
Tractors/Loaders/Backhoes	2.98100E-002	2.99640E-001	3.20960E-001	4.40000E-004	1.90700E-002	1.75400E-002	0.00000E+000	3.85452E+001	3.85452E+001	1.24100E-002	0.00000E+000	3.88554E+001
Welders	5.16800E-002	2.36070E-001	2.65330E-001	3.80000E-004	1.31400E-002	1.31400E-002	0.00000E+000	2.82331E+001	2.82331E+001	4.20000E-003	0.00000E+000	2.83382E+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	2.19000E-003	1.52700E-002	1.81800E-002	3.00000E-005	9.40000E-004	9.40000E-004	0.00000E+000	2.55325E+000	2.55325E+000	1.80000E-004	0.00000E+000	2.55763E+000
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Generator Sets	6.02400E-002	5.24110E-001	5.55950E-001	9.90000E-004	2.96800E-002	2.96800E-002	0.00000E+000	8.47810E+001	8.47810E+001	4.81000E-003	0.00000E+000	8.49013E+001
Graders	5.48000E-003	7.40200E-002	2.06800E-002	7.00000E-005	2.38000E-003	2.19000E-003	0.00000E+000	6.71162E+000	6.71162E+000	2.12000E-003	0.00000E+000	6.76471E+000
Pavers	1.85000E-003	1.94600E-002	2.17900E-002	4.00000E-005	9.40000E-004	8.70000E-004	0.00000E+000	3.09618E+000	3.09618E+000	1.00000E-003	0.00000E+000	3.12121E+000
Paving Equipment	1.92000E-003	1.94000E-002	2.54100E-002	4.00000E-005	9.60000E-004	8.80000E-004	0.00000E+000	3.57844E+000	3.57844E+000	1.16000E-003	0.00000E+000	3.60737E+000
Rollers	1.66000E-003	1.68400E-002	1.64500E-002	2.00000E-005	1.03000E-003	9.50000E-004	0.00000E+000	2.01692E+000	2.01692E+000	6.50000E-004	0.00000E+000	2.03323E+000
Rubber Tired Dozers	1.77300E-002	1.88660E-001	6.69400E-002	1.30000E-004	9.20000E-003	8.46000E-003	0.00000E+000	1.19837E+001	1.19837E+001	3.79000E-003	0.00000E+000	1.20785E+001
Tractors/Loaders/Balkhoes	2.98100E-002	2.99640E-001	3.20960E-001	4.40000E-004	1.90700E-002	1.75400E-002	0.00000E+000	3.85451E+001	3.85451E+001	1.24100E-002	0.00000E+000	3.88554E+001
Welders	5.16800E-002	2.36070E-001	2.65330E-001	3.80000E-004	1.31400E-002	1.31400E-002	0.00000E+000	2.82331E+001	2.82331E+001	4.20000E-003	0.00000E+000	2.83382E+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
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17951E-006	1.17951E-006	0.00000E+000	0.00000E+000	1.17784E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.48995E-006	1.48995E-006	0.00000E+000	0.00000E+000	1.47826E-006
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	3.20388E-006
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	2.77209E-006
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	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.66893E-006	1.66893E-006	0.00000E+000	0.00000E+000	1.65583E-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	1.29718E-006	1.29718E-006	0.00000E+000	0.00000E+000	1.02946E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.06258E-006	1.06258E-006	0.00000E+000	0.00000E+000	1.41152E-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		
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	10.00	PM2.5 Reduction	10.00		
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	25.00				

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	0.21	0.18
Grading	Fugitive Dust	0.07	0.04	0.03	0.01	0.65	0.65
Grading	Roads	0.00	0.00	0.00	0.00	0.22	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	0.22	0.21
Site Preparation	Fugitive Dust	0.03	0.01	0.01	0.01	0.65	0.65
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.22	0.14

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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