

Perris Residential - South Coast AQMD Air District, Summer

Perris Residential
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	11.90	Acre	11.90	518,364.00	0
Single Family Housing	145.00	Dwelling Unit	28.30	300,000.00	654

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2022
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

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Project Characteristics -

Land Use - used data on site plan

Construction Phase - Grading: 90 days, Construction: 500 days, Paving 35 days adjusted to allow for 3 year build out

Off-road Equipment -

Off-road Equipment - Construction: 1 crane, 3 forklifts, 1 gen set, 3 loader/backhoes, 1 welder

Off-road Equipment - Grading: 2 excavators, 2 graders, 1 dozer, 2 scrapers, 2 tractors added equipment based on type and quantity of grading

Off-road Equipment - Paving: 2 pavers, 2 paving equipment, 2 rollers

On-road Fugitive Dust - limit speed during grading

Vehicle Trips - trip rates per TIA

Construction Off-road Equipment Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Fleet Mix -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Architectural Coating -

Grading - grading balanced on site

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Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	195750	176175
tblAreaCoating	Area_Residential_Interior	587250	528525
tblConstructionPhase	NumDays	55.00	35.00
tblConstructionPhase	NumDays	740.00	500.00
tblConstructionPhase	NumDays	75.00	90.00
tblConstructionPhase	NumDays	55.00	35.00
tblGrading	AcresOfGrading	360.00	112.50
tblLandUse	LandUseSquareFeet	261,000.00	300,000.00
tblLandUse	LotAcreage	47.08	28.30
tblLandUse	Population	415.00	654.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Grading
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblVehicleTrips	ST_TR	9.91	9.44
tblVehicleTrips	SU_TR	8.62	9.44
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

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2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	5.7687	67.2781	35.1536	0.0808	7.6048	2.6731	10.2779	3.5215	2.4593	5.9808	0.0000	7,831.0398	7,831.0398	2.4552	0.0000	7,892.4186
2021	2.6731	22.8922	23.3503	0.0569	1.9935	0.9810	2.9745	0.5364	0.9222	1.4586	0.0000	5,636.2447	5,636.2447	0.7474	0.0000	5,654.9305
2022	53.9827	20.7799	22.6527	0.0562	1.9935	0.8297	2.8232	0.5364	0.7805	1.3169	0.0000	5,565.8784	5,565.8784	0.7359	0.0000	5,584.2750
Maximum	53.9827	67.2781	35.1536	0.0808	7.6048	2.6731	10.2779	3.5215	2.4593	5.9808	0.0000	7,831.0398	7,831.0398	2.4552	0.0000	7,892.4186

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	5.7687	67.2781	35.1536	0.0808	3.1227	2.6731	5.7958	1.4150	2.4593	3.8743	0.0000	7,831.0398	7,831.0398	2.4552	0.0000	7,892.4186
2021	2.6731	22.8922	23.3503	0.0569	1.9935	0.9810	2.9745	0.5364	0.9222	1.4586	0.0000	5,636.2447	5,636.2447	0.7474	0.0000	5,654.9305
2022	53.9827	20.7799	22.6527	0.0562	1.9935	0.8297	2.8232	0.5364	0.7805	1.3169	0.0000	5,565.8784	5,565.8784	0.7359	0.0000	5,584.2750
Maximum	53.9827	67.2781	35.1536	0.0808	3.1227	2.6731	5.7958	1.4150	2.4593	3.8743	0.0000	7,831.0398	7,831.0398	2.4552	0.0000	7,892.4186

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	38.67	0.00	27.88	45.85	0.00	24.06	0.00	0.00	0.00	0.00	0.00	0.00

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	44.9455	3.1466	85.7168	0.1888		11.1425	11.1425		11.1425	11.1425	1,358.2032	2,631.5427	3,989.7459	4.0712	0.0922	4,118.9974
Energy	0.1311	1.1201	0.4767	7.1500e-003		0.0906	0.0906		0.0906	0.0906		1,429.9571	1,429.9571	0.0274	0.0262	1,438.4546
Mobile	2.3827	12.1954	31.8563	0.1211	9.9458	0.0920	10.0378	2.6611	0.0858	2.7469		12,331.1186	12,331.1186	0.5672		12,345.2979
Total	47.4593	16.4622	118.0498	0.3170	9.9458	11.3250	21.2708	2.6611	11.3189	13.9800	1,358.2032	16,392.6184	17,750.8216	4.6658	0.1184	17,902.7498

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	7.2036	2.3029	12.8980	0.0145		0.2412	0.2412		0.2412	0.2412	0.0000	2,785.0721	2,785.0721	0.0738	0.0507	2,802.0141
Energy	0.1311	1.1201	0.4767	7.1500e-003		0.0906	0.0906		0.0906	0.0906		1,429.9571	1,429.9571	0.0274	0.0262	1,438.4546
Mobile	2.3827	12.1954	31.8563	0.1211	9.9458	0.0920	10.0378	2.6611	0.0858	2.7469		12,331.1186	12,331.1186	0.5672		12,345.2979
Total	9.7174	15.6185	45.2310	0.1427	9.9458	0.4237	10.3695	2.6611	0.4176	3.0787	0.0000	16,546.1478	16,546.1478	0.6683	0.0769	16,585.7666

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	79.52	5.13	61.68	54.98	0.00	96.26	51.25	0.00	96.31	77.98	100.00	-0.94	6.79	85.68	35.07	7.36

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2020	5/5/2020	5	90	
2	Building Construction	Building Construction	5/13/2020	4/12/2022	5	500	
3	Paving	Paving	4/13/2022	5/31/2022	5	35	
4	Architectural Coating	Architectural Coating	6/1/2022	7/19/2022	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 11.9

Residential Indoor: 587,250; Residential Outdoor: 195,750; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 13,695 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	9	23.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	148.00	53.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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3.2 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.3477	0.0000	7.3477	3.4534	0.0000	3.4534			0.0000			0.0000
Off-Road	5.6647	67.2081	34.2133	0.0781		2.6712	2.6712		2.4575	2.4575		7,567.8238	7,567.8238	2.4476		7,629.0134
Total	5.6647	67.2081	34.2133	0.0781	7.3477	2.6712	10.0189	3.4534	2.4575	5.9109		7,567.8238	7,567.8238	2.4476		7,629.0134

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	0.1041	0.0700	0.9403	2.6400e-003	0.2571	1.9500e-003	0.2590	0.0682	1.8000e-003	0.0700		263.2160	263.2160	7.5700e-003		263.4052
Total	0.1041	0.0700	0.9403	2.6400e-003	0.2571	1.9500e-003	0.2590	0.0682	1.8000e-003	0.0700		263.2160	263.2160	7.5700e-003		263.4052

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3.2 Grading - 2020

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					2.8656	0.0000	2.8656	1.3468	0.0000	1.3468			0.0000			0.0000
Off-Road	5.6647	67.2081	34.2133	0.0781		2.6712	2.6712		2.4575	2.4575	0.0000	7,567.823 7	7,567.823 7	2.4476		7,629.013 4
Total	5.6647	67.2081	34.2133	0.0781	2.8656	2.6712	5.5368	1.3468	2.4575	3.8043	0.0000	7,567.823 7	7,567.823 7	2.4476		7,629.013 4

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	0.1041	0.0700	0.9403	2.6400e-003	0.2571	1.9500e-003	0.2590	0.0682	1.8000e-003	0.0700		263.2160	263.2160	7.5700e-003		263.4052
Total	0.1041	0.0700	0.9403	2.6400e-003	0.2571	1.9500e-003	0.2590	0.0682	1.8000e-003	0.0700		263.2160	263.2160	7.5700e-003		263.4052

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3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5

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	0.1741	5.5616	1.3243	0.0136	0.3392	0.0276	0.3668	0.0977	0.0264	0.1240		1,454.576 8	1,454.576 8	0.0913		1,456.859 9
Worker	0.6696	0.4501	6.0505	0.0170	1.6543	0.0126	1.6668	0.4387	0.0116	0.4503		1,693.737 8	1,693.737 8	0.0487		1,694.955 2
Total	0.8437	6.0117	7.3748	0.0306	1.9935	0.0401	2.0336	0.5364	0.0379	0.5743		3,148.314 6	3,148.314 6	0.1400		3,151.815 2

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3.3 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5

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	0.1741	5.5616	1.3243	0.0136	0.3392	0.0276	0.3668	0.0977	0.0264	0.1240		1,454.576 8	1,454.576 8	0.0913		1,456.859 9
Worker	0.6696	0.4501	6.0505	0.0170	1.6543	0.0126	1.6668	0.4387	0.0116	0.4503		1,693.737 8	1,693.737 8	0.0487		1,694.955 2
Total	0.8437	6.0117	7.3748	0.0306	1.9935	0.0401	2.0336	0.5364	0.0379	0.5743		3,148.314 6	3,148.314 6	0.1400		3,151.815 2

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3.3 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

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	0.1475	5.0549	1.1995	0.0135	0.3392	0.0102	0.3494	0.0977	9.7400e-003	0.1074		1,443.9239	1,443.9239	0.0873		1,446.1075
Worker	0.6247	0.4052	5.5755	0.0165	1.6543	0.0122	1.6665	0.4387	0.0112	0.4499		1,638.9569	1,638.9569	0.0441		1,640.0588
Total	0.7722	5.4601	6.7751	0.0300	1.9935	0.0224	2.0159	0.5364	0.0210	0.5573		3,082.8808	3,082.8808	0.1314		3,086.1662

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3.3 Building Construction - 2021

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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

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	0.1475	5.0549	1.1995	0.0135	0.3392	0.0102	0.3494	0.0977	9.7400e-003	0.1074		1,443.9239	1,443.9239	0.0873		1,446.1075
Worker	0.6247	0.4052	5.5755	0.0165	1.6543	0.0122	1.6665	0.4387	0.0112	0.4499		1,638.9569	1,638.9569	0.0441		1,640.0588
Total	0.7722	5.4601	6.7751	0.0300	1.9935	0.0224	2.0159	0.5364	0.0210	0.5573		3,082.8808	3,082.8808	0.1314		3,086.1662

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3.3 Building Construction - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

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	0.1383	4.7983	1.1337	0.0134	0.3392	8.8200e-003	0.3480	0.0977	8.4300e-003	0.1061		1,431.3134	1,431.3134	0.0841		1,433.4155
Worker	0.5860	0.3660	5.1556	0.0159	1.6543	0.0118	1.6661	0.4387	0.0109	0.4496		1,580.2314	1,580.2314	0.0398		1,581.2272
Total	0.7243	5.1643	6.2893	0.0293	1.9935	0.0207	2.0142	0.5364	0.0193	0.5557		3,011.5448	3,011.5448	0.1239		3,014.6427

Perris Residential - South Coast AQMD Air District, Summer

3.3 Building Construction - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

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	0.1383	4.7983	1.1337	0.0134	0.3392	8.8200e-003	0.3480	0.0977	8.4300e-003	0.1061		1,431.3134	1,431.3134	0.0841		1,433.4155
Worker	0.5860	0.3660	5.1556	0.0159	1.6543	0.0118	1.6661	0.4387	0.0109	0.4496		1,580.2314	1,580.2314	0.0398		1,581.2272
Total	0.7243	5.1643	6.2893	0.0293	1.9935	0.0207	2.0142	0.5364	0.0193	0.5557		3,011.5448	3,011.5448	0.1239		3,014.6427

Perris Residential - South Coast AQMD Air District, Summer

3.4 Paving - 2022

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.8908					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.9936	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104

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	0.0594	0.0371	0.5225	1.6100e-003	0.1677	1.2000e-003	0.1689	0.0445	1.1000e-003	0.0456		160.1586	160.1586	4.0400e-003		160.2595
Total	0.0594	0.0371	0.5225	1.6100e-003	0.1677	1.2000e-003	0.1689	0.0445	1.1000e-003	0.0456		160.1586	160.1586	4.0400e-003		160.2595

Perris Residential - South Coast AQMD Air District, Summer

3.4 Paving - 2022

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.8908					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.9936	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4

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	0.0594	0.0371	0.5225	1.6100e-003	0.1677	1.2000e-003	0.1689	0.0445	1.1000e-003	0.0456		160.1586	160.1586	4.0400e-003		160.2595
Total	0.0594	0.0371	0.5225	1.6100e-003	0.1677	1.2000e-003	0.1689	0.0445	1.1000e-003	0.0456		160.1586	160.1586	4.0400e-003		160.2595

Perris Residential - South Coast AQMD Air District, Summer

3.5 Architectural Coating - 2022

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	53.6594					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	53.8639	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

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	0.1188	0.0742	1.0451	3.2100e-003	0.3353	2.4000e-003	0.3377	0.0889	2.2100e-003	0.0911		320.3172	320.3172	8.0700e-003		320.5190
Total	0.1188	0.0742	1.0451	3.2100e-003	0.3353	2.4000e-003	0.3377	0.0889	2.2100e-003	0.0911		320.3172	320.3172	8.0700e-003		320.5190

Perris Residential - South Coast AQMD Air District, Summer

3.5 Architectural Coating - 2022

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	53.6594					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	53.8639	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

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	0.1188	0.0742	1.0451	3.2100e-003	0.3353	2.4000e-003	0.3377	0.0889	2.2100e-003	0.0911		320.3172	320.3172	8.0700e-003		320.5190
Total	0.1188	0.0742	1.0451	3.2100e-003	0.3353	2.4000e-003	0.3377	0.0889	2.2100e-003	0.0911		320.3172	320.3172	8.0700e-003		320.5190

4.0 Operational Detail - Mobile

Perris Residential - South Coast AQMD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3827	12.1954	31.8563	0.1211	9.9458	0.0920	10.0378	2.6611	0.0858	2.7469		12,331.1186	12,331.1186	0.5672		12,345.2979
Unmitigated	2.3827	12.1954	31.8563	0.1211	9.9458	0.0920	10.0378	2.6611	0.0858	2.7469		12,331.1186	12,331.1186	0.5672		12,345.2979

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,368.80	1,368.80	1,368.80	4,677,398	4,677,398
Total	1,368.80	1,368.80	1,368.80	4,677,398	4,677,398

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
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Perris Residential - South Coast AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Single Family Housing	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	0.1311	1.1201	0.4767	7.1500e-003		0.0906	0.0906		0.0906	0.0906		1,429.9571	1,429.9571	0.0274	0.0262	1,438.4546
NaturalGas Unmitigated	0.1311	1.1201	0.4767	7.1500e-003		0.0906	0.0906		0.0906	0.0906		1,429.9571	1,429.9571	0.0274	0.0262	1,438.4546

Perris Residential - South Coast AQMD Air District, Summer

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	12154.6	0.1311	1.1201	0.4767	7.1500e-003		0.0906	0.0906		0.0906	0.0906		1,429.9571	1,429.9571	0.0274	0.0262	1,438.4546
Total		0.1311	1.1201	0.4767	7.1500e-003		0.0906	0.0906		0.0906	0.0906		1,429.9571	1,429.9571	0.0274	0.0262	1,438.4546

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	12.1546	0.1311	1.1201	0.4767	7.1500e-003		0.0906	0.0906		0.0906	0.0906		1,429.9571	1,429.9571	0.0274	0.0262	1,438.4546
Total		0.1311	1.1201	0.4767	7.1500e-003		0.0906	0.0906		0.0906	0.0906		1,429.9571	1,429.9571	0.0274	0.0262	1,438.4546

6.0 Area Detail

6.1 Mitigation Measures Area

Perris Residential - South Coast AQMD Air District, Summer

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	7.2036	2.3029	12.8980	0.0145		0.2412	0.2412		0.2412	0.2412	0.0000	2,785.072 1	2,785.072 1	0.0738	0.0507	2,802.014 1
Unmitigated	44.9455	3.1466	85.7168	0.1888		11.1425	11.1425		11.1425	11.1425	1,358.203 2	2,631.542 7	3,989.745 9	4.0712	0.0922	4,118.9974

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	0.4648					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	37.9952	3.0085	73.7400	0.1881		11.0763	11.0763		11.0763	11.0763	1,358.203 2	2,610.000 0	3,968.203 2	4.0504	0.0922	4,096.935 0
Landscaping	0.3618	0.1381	11.9768	6.3000e-004		0.0662	0.0662		0.0662	0.0662		21.5427	21.5427	0.0208		22.0624
Total	44.9455	3.1466	85.7168	0.1888		11.1425	11.1425		11.1425	11.1425	1,358.203 2	2,631.542 7	3,989.745 9	4.0712	0.0922	4,118.997 4

Perris Residential - South Coast AQMD Air District, 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	0.4648					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2533	2.1648	0.9212	0.0138		0.1750	0.1750		0.1750	0.1750	0.0000	2,763.5294	2,763.5294	0.0530	0.0507	2,779.9517
Landscaping	0.3618	0.1381	11.9768	6.3000e-004		0.0662	0.0662		0.0662	0.0662		21.5427	21.5427	0.0208		22.0624
Total	7.2036	2.3029	12.8980	0.0145		0.2412	0.2412		0.2412	0.2412	0.0000	2,785.0721	2,785.0721	0.0738	0.0507	2,802.0141

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

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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Perris Residential - South Coast AQMD Air District, Summer

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
