



APPENDIX IV.G

GHG Calculation Worksheets

Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Long Beach Riverpark - Regulatory Compliance

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	9.07	Acre	9.07	395,089.20	0
Parking Lot	3.94	Acre	3.94	171,626.40	0
Apartments Low Rise	152.00	Dwelling Unit	3.79	152,000.00	435
Single Family Housing	74.00	Dwelling Unit	3.54	133,200.00	212

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2027
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project site is 20.34 acres in size.

Construction Phase - Estimated construction schedule.

Trips and VMT - Assumed haul trucks would travel to either Chiquita Canyon Landfill or Simi Valley Landfill (both approximately 60 miles from Project Site). Project would use 20 on haul trucks.
Grading - 90,000 cy soil export, 130,000 cy soil import.

Architectural Coating - Consistent with SCAQMD Rule 1113 assumed VOC content of 50 grams per liter for architectural coatings.

Vehicle Trips - Trip rates based on project traffic study.

Woodstoves - No woodstoves.

Area Coating - Consistent with SCAQMD Rule 1113 assumed VOC content of 50 grams per liter for architectural coatings.

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Construction Off-road Equipment Mitigation - Dust control measures per SCAQMD Rule 403.

Area Mitigation - Consistent with SCAQMD Rule 1113 assumed VOC content of 50 grams per liter for architectural coatings.

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	66.00
tblConstructionPhase	NumDays	370.00	740.00
tblConstructionPhase	NumDays	35.00	66.00
tblConstructionPhase	NumDays	20.00	152.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	10.00	169.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	7.60	0.00
tblFireplaces	NumberWood	3.70	0.00
tblGrading	AcresOfGrading	7.50	0.00
tblGrading	AcresOfGrading	253.50	0.00
tblGrading	MaterialExported	0.00	90,000.00
tblGrading	MaterialImported	0.00	130,000.00
tblLandUse	LotAcreage	9.50	3.79
tblLandUse	LotAcreage	24.03	3.54
tblTripsAndVMT	HaulingTripLength	20.00	60.00

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tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripNumber	8,899.00	9,000.00
tblTripsAndVMT	HaulingTripNumber	12,854.00	13,000.00
tblVehicleTrips	ST_TR	8.14	7.23
tblVehicleTrips	ST_TR	9.54	9.34
tblVehicleTrips	SU_TR	6.28	6.21
tblVehicleTrips	SU_TR	8.55	6.21
tblVehicleTrips	WD_TR	7.32	6.74
tblVehicleTrips	WD_TR	9.44	8.97
tblWoodstoves	NumberCatalytic	7.60	0.00
tblWoodstoves	NumberCatalytic	3.70	0.00
tblWoodstoves	NumberNoncatalytic	7.60	0.00
tblWoodstoves	NumberNoncatalytic	3.70	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1238	1.8627	0.8059	4.1900e-003	0.6760	0.0584	0.7344	0.3471	0.0539	0.4010	0.0000	401.4966	401.4966	0.0508	0.0458	416.4055

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2022	12-31-2022	1.9521	1.9521
2	1-1-2023	3-31-2023	1.6142	1.6142
3	4-1-2023	6-30-2023	2.2219	2.2219
4	7-1-2023	9-30-2023	2.9411	2.9411
5	10-1-2023	12-31-2023	0.8817	0.8817
6	1-1-2024	3-31-2024	1.0543	1.0543
7	4-1-2024	6-30-2024	1.0421	1.0421
8	7-1-2024	9-30-2024	0.7072	0.7072
9	10-1-2024	12-31-2024	0.7156	0.7156
10	1-1-2025	3-31-2025	0.6595	0.6595
11	4-1-2025	6-30-2025	0.6551	0.6551
12	7-1-2025	9-30-2025	0.6623	0.6623
13	10-1-2025	12-31-2025	0.6741	0.6741
14	1-1-2026	3-31-2026	0.9983	0.9983
15	4-1-2026	6-30-2026	1.1306	1.1306
		Highest	2.9411	2.9411

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	1.2389	0.0667	2.3456	3.8000e-004		0.0161	0.0161		0.0161	0.0161	0.0000	49.9378	49.9378	4.5300e-003	8.5000e-004	50.3031
Energy	0.0232	0.1981	0.0843	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	452.0331	452.0331	0.0232	6.4800e-003	454.5448

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Mobile	0.8137	0.8834	8.3298	0.0185	2.1344	0.0132	2.1475	0.5695	0.0122	0.5817	0.0000	1,775.0404	1,775.0404	0.1180	0.0738	1,799.9787
Waste						0.0000	0.0000		0.0000	0.0000	31.8371	0.0000	31.8371	1.8815	0.0000	78.8751
Water						0.0000	0.0000		0.0000	0.0000	4.6715	52.2932	56.9647	0.4842	0.0119	72.6058
Total	2.0758	1.1482	10.7596	0.0201	2.1344	0.0453	2.1797	0.5695	0.0444	0.6139	36.5086	2,329.3044	2,365.8130	2.5115	0.0930	2,456.3075

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	1.2389	0.0667	2.3456	3.8000e-004		0.0161	0.0161		0.0161	0.0161	0.0000	49.9378	49.9378	4.5300e-003	8.5000e-004	50.3031
Energy	0.0232	0.1981	0.0843	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	446.8848	446.8848	0.0228	6.4300e-003	449.3700
Mobile	0.8137	0.8834	8.3298	0.0185	2.1344	0.0132	2.1475	0.5695	0.0122	0.5817	0.0000	1,775.0404	1,775.0404	0.1180	0.0738	1,799.9787
Waste						0.0000	0.0000		0.0000	0.0000	31.8371	0.0000	31.8371	1.8815	0.0000	78.8751
Water						0.0000	0.0000		0.0000	0.0000	3.7372	44.3769	48.1141	0.3876	9.5200e-003	60.6402
Total	2.0758	1.1482	10.7596	0.0201	2.1344	0.0453	2.1797	0.5695	0.0444	0.6139	35.5743	2,316.2399	2,351.8142	2.4144	0.0906	2,439.1670

	ROG	NOx	CO	SO2	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	2.56	0.56	0.59	3.87	2.57	0.70

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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 Clearing	Site Preparation	10/1/2022	10/7/2022	5	5	1
2	Bioremediation	Site Preparation	10/10/2022	6/1/2023	5	169	2
3	Grading	Grading	6/2/2023	9/1/2023	5	66	3
4	Building Construction	Building Construction	8/1/2023	6/1/2026	5	740	5
5	Utility Installation/Streets	Paving	12/1/2023	7/1/2024	5	152	4
6	Architectural Coating	Architectural Coating	3/1/2026	6/1/2026	5	66	6

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 198

Acres of Paving: 13.01

Residential Indoor: 577,530; Residential Outdoor: 192,510; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 34,003

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Clearing	Rubber Tired Dozers	3	8.00	247	0.40
Site Clearing	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Bioremediation	Rubber Tired Dozers	3	8.00	247	0.40
Bioremediation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	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	2	8.00	97	0.37
Utility Installation/Streets	Pavers	2	8.00	130	0.42

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Utility Installation/Streets	Paving Equipment	2	8.00	132	0.36
Utility Installation/Streets	Rollers	2	8.00	80	0.38
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
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
Site Clearing	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Bioremediation	7	18.00	0.00	9,000.00	14.70	6.90	60.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	13,000.00	14.70	6.90	60.00	LD_Mix	HDT_Mix	HHDT
Utility Installation/Streets	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	374.00	117.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	75.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Soil Stabilizer
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads

3.2 Site Clearing - 2022

Unmitigated Construction On-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9300e-003	0.0827	0.0492	1.0000e-004		4.0300e-003	4.0300e-003		3.7100e-003	3.7100e-003	0.0000	8.3599	8.3599	2.7000e-003	0.0000	8.4274
Total	7.9300e-003	0.0827	0.0492	1.0000e-004	0.0452	4.0300e-003	0.0492	0.0248	3.7100e-003	0.0285	0.0000	8.3599	8.3599	2.7000e-003	0.0000	8.4274

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	1.5000e-004	1.3000e-004	1.6700e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4082	0.4082	1.0000e-005	1.0000e-005	0.4118
Total	1.5000e-004	1.3000e-004	1.6700e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4082	0.4082	1.0000e-005	1.0000e-005	0.4118

Mitigated Construction On-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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					0.0150	0.0000	0.0150	8.2300e-003	0.0000	8.2300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9300e-003	0.0827	0.0492	1.0000e-004		4.0300e-003	4.0300e-003		3.7100e-003	3.7100e-003	0.0000	8.3598	8.3598	2.7000e-003	0.0000	8.4274
Total	7.9300e-003	0.0827	0.0492	1.0000e-004	0.0150	4.0300e-003	0.0190	8.2300e-003	3.7100e-003	0.0119	0.0000	8.3598	8.3598	2.7000e-003	0.0000	8.4274

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	1.5000e-004	1.3000e-004	1.6700e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4082	0.4082	1.0000e-005	1.0000e-005	0.4118
Total	1.5000e-004	1.3000e-004	1.6700e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4082	0.4082	1.0000e-005	1.0000e-005	0.4118

3.3 Bioremediation - 2022

Unmitigated Construction On-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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					0.5420	0.0000	0.5420	0.2979	0.0000	0.2979	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0951	0.9925	0.5909	1.1400e-003		0.0484	0.0484		0.0445	0.0445	0.0000	100.3182	100.3182	0.0324	0.0000	101.1293
Total	0.0951	0.9925	0.5909	1.1400e-003	0.5420	0.0484	0.5904	0.2979	0.0445	0.3424	0.0000	100.3182	100.3182	0.0324	0.0000	101.1293

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	0.0188	0.7858	0.1440	2.8900e-003	0.0824	5.9400e-003	0.0883	0.0226	5.6800e-003	0.0283	0.0000	287.5122	287.5122	0.0155	0.0456	301.4957
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	1.8500e-003	1.5400e-003	0.0201	5.0000e-005	5.9200e-003	4.0000e-005	5.9600e-003	1.5700e-003	4.0000e-005	1.6100e-003	0.0000	4.8982	4.8982	1.4000e-004	1.3000e-004	4.9413
Total	0.0207	0.7873	0.1641	2.9400e-003	0.0883	5.9800e-003	0.0943	0.0242	5.7200e-003	0.0299	0.0000	292.4104	292.4104	0.0156	0.0458	306.4370

Mitigated Construction On-Site

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1797	0.0000	0.1797	0.0988	0.0000	0.0988	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0951	0.9925	0.5909	1.1400e-003		0.0484	0.0484		0.0445	0.0445	0.0000	100.3181	100.3181	0.0324	0.0000	101.1292
Total	0.0951	0.9925	0.5909	1.1400e-003	0.1797	0.0484	0.2281	0.0988	0.0445	0.1433	0.0000	100.3181	100.3181	0.0324	0.0000	101.1292

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	0.0188	0.7858	0.1440	2.8900e-003	0.0824	5.9400e-003	0.0883	0.0226	5.6800e-003	0.0283	0.0000	287.5122	287.5122	0.0155	0.0456	301.4957
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	1.8500e-003	1.5400e-003	0.0201	5.0000e-005	5.9200e-003	4.0000e-005	5.9600e-003	1.5700e-003	4.0000e-005	1.6100e-003	0.0000	4.8982	4.8982	1.4000e-004	1.3000e-004	4.9413
Total	0.0207	0.7873	0.1641	2.9400e-003	0.0883	5.9800e-003	0.0943	0.0242	5.7200e-003	0.0299	0.0000	292.4104	292.4104	0.0156	0.0458	306.4370

3.3 Bioremediation - 2023

Unmitigated Construction On-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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					0.9846	0.0000	0.9846	0.5412	0.0000	0.5412	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1449	1.5001	0.9943	2.0700e-003		0.0690	0.0690		0.0635	0.0635	0.0000	182.3063	182.3063	0.0590	0.0000	183.7803
Total	0.1449	1.5001	0.9943	2.0700e-003	0.9846	0.0690	1.0536	0.5412	0.0635	0.6047	0.0000	182.3063	182.3063	0.0590	0.0000	183.7803

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	0.0125	1.0894	0.2171	4.9400e-003	0.1497	7.1100e-003	0.1568	0.0411	6.8000e-003	0.0479	0.0000	493.0071	493.0071	0.0275	0.0783	517.0300
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	3.1100e-003	2.4700e-003	0.0335	9.0000e-005	0.0108	7.0000e-005	0.0108	2.8600e-003	6.0000e-005	2.9200e-003	0.0000	8.6640	8.6640	2.3000e-004	2.2000e-004	8.7360
Total	0.0156	1.0918	0.2507	5.0300e-003	0.1604	7.1800e-003	0.1676	0.0440	6.8600e-003	0.0508	0.0000	501.6710	501.6710	0.0278	0.0785	525.7661

Mitigated Construction On-Site

Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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					0.3264	0.0000	0.3264	0.1794	0.0000	0.1794	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1449	1.5001	0.9943	2.0700e-003		0.0690	0.0690		0.0635	0.0635	0.0000	182.3061	182.3061	0.0590	0.0000	183.7801
Total	0.1449	1.5001	0.9943	2.0700e-003	0.3264	0.0690	0.3954	0.1794	0.0635	0.2429	0.0000	182.3061	182.3061	0.0590	0.0000	183.7801

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	0.0125	1.0894	0.2171	4.9400e-003	0.1497	7.1100e-003	0.1568	0.0411	6.8000e-003	0.0479	0.0000	493.0071	493.0071	0.0275	0.0783	517.0300
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	3.1100e-003	2.4700e-003	0.0335	9.0000e-005	0.0108	7.0000e-005	0.0108	2.8600e-003	6.0000e-005	2.9200e-003	0.0000	8.6640	8.6640	2.3000e-004	2.2000e-004	8.7360
Total	0.0156	1.0918	0.2507	5.0300e-003	0.1604	7.1800e-003	0.1676	0.0440	6.8600e-003	0.0508	0.0000	501.6710	501.6710	0.0278	0.0785	525.7661

3.4 Grading - 2023

Unmitigated Construction On-Site

Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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					0.3037	0.0000	0.3037	0.1206	0.0000	0.1206	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1096	1.1390	0.9257	2.0500e-003		0.0470	0.0470		0.0433	0.0433	0.0000	179.9662	179.9662	0.0582	0.0000	181.4213
Total	0.1096	1.1390	0.9257	2.0500e-003	0.3037	0.0470	0.3507	0.1206	0.0433	0.1638	0.0000	179.9662	179.9662	0.0582	0.0000	181.4213

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	0.0279	2.4397	0.4863	0.0111	0.3352	0.0159	0.3512	0.0921	0.0152	0.1073	0.0000	1,104.1147	1,104.1147	0.0617	0.1754	1,157.9154
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-003	1.6600e-003	0.0226	6.0000e-005	7.2300e-003	4.0000e-005	7.2800e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.8290	5.8290	1.5000e-004	1.5000e-004	5.8775
Total	0.0300	2.4413	0.5089	0.0111	0.3425	0.0160	0.3584	0.0940	0.0153	0.1093	0.0000	1,109.9437	1,109.9437	0.0618	0.1755	1,163.7928

Mitigated Construction On-Site

Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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					0.1007	0.0000	0.1007	0.0400	0.0000	0.0400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1096	1.1390	0.9257	2.0500e-003		0.0470	0.0470		0.0433	0.0433	0.0000	179.9660	179.9660	0.0582	0.0000	181.4211
Total	0.1096	1.1390	0.9257	2.0500e-003	0.1007	0.0470	0.1477	0.0400	0.0433	0.0832	0.0000	179.9660	179.9660	0.0582	0.0000	181.4211

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	0.0279	2.4397	0.4863	0.0111	0.3352	0.0159	0.3512	0.0921	0.0152	0.1073	0.0000	1,104.1147	1,104.1147	0.0617	0.1754	1,157.9154
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-003	1.6600e-003	0.0226	6.0000e-005	7.2300e-003	4.0000e-005	7.2800e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.8290	5.8290	1.5000e-004	1.5000e-004	5.8775
Total	0.0300	2.4413	0.5089	0.0111	0.3425	0.0160	0.3584	0.0940	0.0153	0.1093	0.0000	1,109.9437	1,109.9437	0.0618	0.1755	1,163.7928

3.5 Building Construction - 2023

Unmitigated Construction On-Site

Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	0.0857	0.7840	0.8853	1.4700e-003		0.0381	0.0381		0.0359	0.0359	0.0000	126.3336	126.3336	0.0301	0.0000	127.0849
Total	0.0857	0.7840	0.8853	1.4700e-003		0.0381	0.0381		0.0359	0.0359	0.0000	126.3336	126.3336	0.0301	0.0000	127.0849

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	7.2000e-003	0.2570	0.0962	1.1900e-003	0.0402	1.2300e-003	0.0414	0.0116	1.1800e-003	0.0128	0.0000	115.9390	115.9390	3.8800e-003	0.0167	121.0080
Worker	0.0647	0.0514	0.6963	1.9400e-003	0.2234	1.3700e-003	0.2247	0.0593	1.2700e-003	0.0606	0.0000	180.0179	180.0179	4.7300e-003	4.6300e-003	181.5152
Total	0.0719	0.3084	0.7925	3.1300e-003	0.2636	2.6000e-003	0.2662	0.0709	2.4500e-003	0.0734	0.0000	295.9568	295.9568	8.6100e-003	0.0213	302.5232

Mitigated Construction On-Site

Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	0.0857	0.7840	0.8853	1.4700e-003		0.0381	0.0381		0.0359	0.0359	0.0000	126.3334	126.3334	0.0301	0.0000	127.0848
Total	0.0857	0.7840	0.8853	1.4700e-003		0.0381	0.0381		0.0359	0.0359	0.0000	126.3334	126.3334	0.0301	0.0000	127.0848

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	7.2000e-003	0.2570	0.0962	1.1900e-003	0.0402	1.2300e-003	0.0414	0.0116	1.1800e-003	0.0128	0.0000	115.9390	115.9390	3.8800e-003	0.0167	121.0080
Worker	0.0647	0.0514	0.6963	1.9400e-003	0.2234	1.3700e-003	0.2247	0.0593	1.2700e-003	0.0606	0.0000	180.0179	180.0179	4.7300e-003	4.6300e-003	181.5152
Total	0.0719	0.3084	0.7925	3.1300e-003	0.2636	2.6000e-003	0.2662	0.0709	2.4500e-003	0.0734	0.0000	295.9568	295.9568	8.6100e-003	0.0213	302.5232

3.5 Building Construction - 2024

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
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Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	tons/yr										MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179
Total	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179

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	0.0168	0.6189	0.2263	2.8100e-003	0.0966	2.9800e-003	0.0996	0.0279	2.8500e-003	0.0307	0.0000	274.4978	274.4978	9.3500e-003	0.0395	286.5152
Worker	0.1452	0.1102	1.5590	4.5300e-003	0.5369	3.1700e-003	0.5401	0.1426	2.9200e-003	0.1455	0.0000	423.8128	423.8128	0.0103	0.0103	427.1514
Total	0.1619	0.7292	1.7854	7.3400e-003	0.6335	6.1500e-003	0.6396	0.1705	5.7700e-003	0.1763	0.0000	698.3106	698.3106	0.0196	0.0499	713.6666

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					

Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175
Total	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175

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	0.0168	0.6189	0.2263	2.8100e-003	0.0966	2.9800e-003	0.0996	0.0279	2.8500e-003	0.0307	0.0000	274.4978	274.4978	9.3500e-003	0.0395	286.5152
Worker	0.1452	0.1102	1.5590	4.5300e-003	0.5369	3.1700e-003	0.5401	0.1426	2.9200e-003	0.1455	0.0000	423.8128	423.8128	0.0103	0.0103	427.1514
Total	0.1619	0.7292	1.7854	7.3400e-003	0.6335	6.1500e-003	0.6396	0.1705	5.7700e-003	0.1763	0.0000	698.3106	698.3106	0.0196	0.0499	713.6666

3.5 Building Construction - 2025

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	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
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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	0.0162	0.6136	0.2214	2.7500e-003	0.0962	2.9800e-003	0.0992	0.0278	2.8500e-003	0.0306	0.0000	268.5304	268.5304	9.3800e-003	0.0387	280.2998
Worker	0.1354	0.0986	1.4483	4.3600e-003	0.5348	3.0100e-003	0.5378	0.1421	2.7700e-003	0.1448	0.0000	411.9001	411.9001	9.2500e-003	9.6200e-003	414.9972
Total	0.1516	0.7122	1.6697	7.1100e-003	0.6311	5.9900e-003	0.6371	0.1698	5.6200e-003	0.1755	0.0000	680.4306	680.4306	0.0186	0.0483	695.2971

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	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0162	0.6136	0.2214	2.7500e-003	0.0962	2.9800e-003	0.0992	0.0278	2.8500e-003	0.0306	0.0000	268.5304	268.5304	9.3800e-003	0.0387	280.2998
Worker	0.1354	0.0986	1.4483	4.3600e-003	0.5348	3.0100e-003	0.5378	0.1421	2.7700e-003	0.1448	0.0000	411.9001	411.9001	9.2500e-003	9.6200e-003	414.9972
Total	0.1516	0.7122	1.6697	7.1100e-003	0.6311	5.9900e-003	0.6371	0.1698	5.6200e-003	0.1755	0.0000	680.4306	680.4306	0.0186	0.0483	695.2971

3.5 Building Construction - 2026

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	0.0738	0.6734	0.8686	1.4600e-003		0.0285	0.0285		0.0268	0.0268	0.0000	125.2365	125.2365	0.0294	0.0000	125.9725
Total	0.0738	0.6734	0.8686	1.4600e-003		0.0285	0.0285		0.0268	0.0268	0.0000	125.2365	125.2365	0.0294	0.0000	125.9725

Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	6.5400e-003	0.2520	0.0903	1.1100e-003	0.0398	1.2300e-003	0.0411	0.0115	1.1800e-003	0.0127	0.0000	109.0550	109.0550	3.9100e-003	0.0157	113.8396
Worker	0.0528	0.0370	0.5632	1.7500e-003	0.2213	1.1800e-003	0.2225	0.0588	1.0900e-003	0.0599	0.0000	166.6149	166.6149	3.4800e-003	3.7500e-003	167.8191
Total	0.0593	0.2891	0.6535	2.8600e-003	0.2611	2.4100e-003	0.2635	0.0703	2.2700e-003	0.0725	0.0000	275.6700	275.6700	7.3900e-003	0.0195	281.6587

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	0.0738	0.6734	0.8686	1.4600e-003		0.0285	0.0285		0.0268	0.0268	0.0000	125.2364	125.2364	0.0294	0.0000	125.9723
Total	0.0738	0.6734	0.8686	1.4600e-003		0.0285	0.0285		0.0268	0.0268	0.0000	125.2364	125.2364	0.0294	0.0000	125.9723

Mitigated Construction Off-Site

Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	6.5400e-003	0.2520	0.0903	1.1100e-003	0.0398	1.2300e-003	0.0411	0.0115	1.1800e-003	0.0127	0.0000	109.0550	109.0550	3.9100e-003	0.0157	113.8396
Worker	0.0528	0.0370	0.5632	1.7500e-003	0.2213	1.1800e-003	0.2225	0.0588	1.0900e-003	0.0599	0.0000	166.6149	166.6149	3.4800e-003	3.7500e-003	167.8191
Total	0.0593	0.2891	0.6535	2.8600e-003	0.2611	2.4100e-003	0.2635	0.0703	2.2700e-003	0.0725	0.0000	275.6700	275.6700	7.3900e-003	0.0195	281.6587

3.6 Utility Installation/Streets - 2023

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	0.0108	0.1070	0.1531	2.4000e-004		5.3600e-003	5.3600e-003		4.9300e-003	4.9300e-003	0.0000	21.0282	21.0282	6.8000e-003	0.0000	21.1982
Paving	7.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0116	0.1070	0.1531	2.4000e-004		5.3600e-003	5.3600e-003		4.9300e-003	4.9300e-003	0.0000	21.0282	21.0282	6.8000e-003	0.0000	21.1982

Unmitigated Construction Off-Site

Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	5.0000e-004	4.0000e-004	5.3800e-003	1.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.3910	1.3910	4.0000e-005	4.0000e-005	1.4026
Total	5.0000e-004	4.0000e-004	5.3800e-003	1.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.3910	1.3910	4.0000e-005	4.0000e-005	1.4026

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	0.0108	0.1070	0.1531	2.4000e-004		5.3600e-003	5.3600e-003		4.9300e-003	4.9300e-003	0.0000	21.0282	21.0282	6.8000e-003	0.0000	21.1982
Paving	7.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0116	0.1070	0.1531	2.4000e-004		5.3600e-003	5.3600e-003		4.9300e-003	4.9300e-003	0.0000	21.0282	21.0282	6.8000e-003	0.0000	21.1982

Mitigated Construction Off-Site

Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	5.0000e-004	4.0000e-004	5.3800e-003	1.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.3910	1.3910	4.0000e-005	4.0000e-005	1.4026
Total	5.0000e-004	4.0000e-004	5.3800e-003	1.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.3910	1.3910	4.0000e-005	4.0000e-005	1.4026

3.6 Utility Installation/Streets - 2024

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	0.0647	0.6239	0.9580	1.4900e-003		0.0307	0.0307		0.0282	0.0282	0.0000	131.1738	131.1738	0.0424	0.0000	132.2344
Paving	4.4500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0692	0.6239	0.9580	1.4900e-003		0.0307	0.0307		0.0282	0.0282	0.0000	131.1738	131.1738	0.0424	0.0000	132.2344

Unmitigated Construction Off-Site

Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9100e-003	2.2100e-003	0.0313	9.0000e-005	0.0108	6.0000e-005	0.0108	2.8600e-003	6.0000e-005	2.9200e-003	0.0000	8.4989	8.4989	2.1000e-004	2.1000e-004	8.5659
Total	2.9100e-003	2.2100e-003	0.0313	9.0000e-005	0.0108	6.0000e-005	0.0108	2.8600e-003	6.0000e-005	2.9200e-003	0.0000	8.4989	8.4989	2.1000e-004	2.1000e-004	8.5659

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	0.0647	0.6239	0.9580	1.4900e-003		0.0307	0.0307		0.0282	0.0282	0.0000	131.1736	131.1736	0.0424	0.0000	132.2342
Paving	4.4500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0692	0.6239	0.9580	1.4900e-003		0.0307	0.0307		0.0282	0.0282	0.0000	131.1736	131.1736	0.0424	0.0000	132.2342

Mitigated Construction Off-Site

Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9100e-003	2.2100e-003	0.0313	9.0000e-005	0.0108	6.0000e-005	0.0108	2.8600e-003	6.0000e-005	2.9200e-003	0.0000	8.4989	8.4989	2.1000e-004	2.1000e-004	8.5659
Total	2.9100e-003	2.2100e-003	0.0313	9.0000e-005	0.0108	6.0000e-005	0.0108	2.8600e-003	6.0000e-005	2.9200e-003	0.0000	8.4989	8.4989	2.1000e-004	2.1000e-004	8.5659

3.7 Architectural Coating - 2026

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	0.9711					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6400e-003	0.0378	0.0597	1.0000e-004		1.7000e-003	1.7000e-003		1.7000e-003	1.7000e-003	0.0000	8.4257	8.4257	4.6000e-004	0.0000	8.4372
Total	0.9767	0.0378	0.0597	1.0000e-004		1.7000e-003	1.7000e-003		1.7000e-003	1.7000e-003	0.0000	8.4257	8.4257	4.6000e-004	0.0000	8.4372

Unmitigated Construction Off-Site

Long Beach Riverpark - Regulatory Compliance - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	6.4700e-003	4.5400e-003	0.0690	2.1000e-004	0.0271	1.5000e-004	0.0273	7.2000e-003	1.3000e-004	7.3400e-003	0.0000	20.4185	20.4185	4.3000e-004	4.6000e-004	20.5661
Total	6.4700e-003	4.5400e-003	0.0690	2.1000e-004	0.0271	1.5000e-004	0.0273	7.2000e-003	1.3000e-004	7.3400e-003	0.0000	20.4185	20.4185	4.3000e-004	4.6000e-004	20.5661

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	0.9711					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6400e-003	0.0378	0.0597	1.0000e-004		1.7000e-003	1.7000e-003		1.7000e-003	1.7000e-003	0.0000	8.4257	8.4257	4.6000e-004	0.0000	8.4372
Total	0.9767	0.0378	0.0597	1.0000e-004		1.7000e-003	1.7000e-003		1.7000e-003	1.7000e-003	0.0000	8.4257	8.4257	4.6000e-004	0.0000	8.4372

Mitigated Construction Off-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	6.4700e-003	4.5400e-003	0.0690	2.1000e-004	0.0271	1.5000e-004	0.0273	7.2000e-003	1.3000e-004	7.3400e-003	0.0000	20.4185	20.4185	4.3000e-004	4.6000e-004	20.5661
Total	6.4700e-003	4.5400e-003	0.0690	2.1000e-004	0.0271	1.5000e-004	0.0273	7.2000e-003	1.3000e-004	7.3400e-003	0.0000	20.4185	20.4185	4.3000e-004	4.6000e-004	20.5661

4.0 Operational Detail - Mobile

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	tons/yr										MT/yr					
Mitigated	0.8137	0.8834	8.3298	0.0185	2.1344	0.0132	2.1475	0.5695	0.0122	0.5817	0.0000	1,775.0404	1,775.0404	0.1180	0.0738	1,799.9787
Unmitigated	0.8137	0.8834	8.3298	0.0185	2.1344	0.0132	2.1475	0.5695	0.0122	0.5817	0.0000	1,775.0404	1,775.0404	0.1180	0.0738	1,799.9787

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,024.48	1,098.96	943.92	3,497,836	3,497,836
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Single Family Housing	663.78	691.16	459.54	2,181,900	2,181,900
Total	1,688.26	1,790.12	1,403.46	5,679,736	5,679,736

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
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.535658	0.065965	0.190922	0.126434	0.023737	0.006642	0.011305	0.008056	0.000938	0.000585	0.025742	0.000711	0.003305
Other Non-Asphalt Surfaces	0.535658	0.065965	0.190922	0.126434	0.023737	0.006642	0.011305	0.008056	0.000938	0.000585	0.025742	0.000711	0.003305
Parking Lot	0.535658	0.065965	0.190922	0.126434	0.023737	0.006642	0.011305	0.008056	0.000938	0.000585	0.025742	0.000711	0.003305
Single Family Housing	0.535658	0.065965	0.190922	0.126434	0.023737	0.006642	0.011305	0.008056	0.000938	0.000585	0.025742	0.000711	0.003305

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	217.4773	217.4773	0.0184	2.2200e-003	218.5992
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	222.6255	222.6255	0.0188	2.2800e-003	223.7740
NaturalGas Mitigated	0.0232	0.1981	0.0843	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	229.4076	229.4076	4.4000e-003	4.2100e-003	230.7708
NaturalGas Unmitigated	0.0232	0.1981	0.0843	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	229.4076	229.4076	4.4000e-003	4.2100e-003	230.7708

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					
Apartments Low Rise	2.41252e+006	0.0130	0.1112	0.0473	7.1000e-004		8.9900e-003	8.9900e-003		8.9900e-003	8.9900e-003	0.0000	128.7413	128.7413	2.4700e-003	2.3600e-003	129.5064
Other Non-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	0.0000
Parking Lot	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	0.0000
Single Family Housing	1.88641e+006	0.0102	0.0869	0.0370	5.5000e-004		7.0300e-003	7.0300e-003		7.0300e-003	7.0300e-003	0.0000	100.6662	100.6662	1.9300e-003	1.8500e-003	101.2644
Total		0.0232	0.1981	0.0843	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	229.4076	229.4076	4.4000e-003	4.2100e-003	230.7708

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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					
Apartments Low Rise	2.41252e+006	0.0130	0.1112	0.0473	7.1000e-004		8.9900e-003	8.9900e-003		8.9900e-003	8.9900e-003	0.0000	128.7413	128.7413	2.4700e-003	2.3600e-003	129.5064
Other Non-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	0.0000
Parking Lot	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	0.0000
Single Family Housing	1.88641e+006	0.0102	0.0869	0.0370	5.5000e-004		7.0300e-003	7.0300e-003		7.0300e-003	7.0300e-003	0.0000	100.6662	100.6662	1.9300e-003	1.8500e-003	101.2644
Total		0.0232	0.1981	0.0843	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	229.4076	229.4076	4.4000e-003	4.2100e-003	230.7708

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	613764	108.8483	9.1900e-003	1.1100e-003	109.4098
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	60069.2	10.6530	9.0000e-004	1.1000e-004	10.7080
Single Family Housing	581488	103.1242	8.7000e-003	1.0600e-003	103.6562

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total		222.6255	0.0188	2.2800e-003	223.7740
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Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	597175	105.9063	8.9400e-003	1.0800e-003	106.4526
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	60069.2	10.6530	9.0000e-004	1.1000e-004	10.7080
Single Family Housing	569047	100.9180	8.5200e-003	1.0300e-003	101.4386
Total		217.4773	0.0184	2.2200e-003	218.5992

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2389	0.0667	2.3456	3.8000e-004		0.0161	0.0161		0.0161	0.0161	0.0000	49.9378	49.9378	4.5300e-003	8.5000e-004	50.3031
Unmitigated	1.2389	0.0667	2.3456	3.8000e-004		0.0161	0.0161		0.0161	0.0161	0.0000	49.9378	49.9378	4.5300e-003	8.5000e-004	50.3031

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	0.0971					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0672					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	4.6600e-003	0.0398	0.0170	2.5000e-004		3.2200e-003	3.2200e-003		3.2200e-003	3.2200e-003	0.0000	46.1303	46.1303	8.8000e-004	8.5000e-004	46.4045
Landscaping	0.0699	0.0268	2.3286	1.2000e-004		0.0129	0.0129		0.0129	0.0129	0.0000	3.8074	3.8074	3.6500e-003	0.0000	3.8986
Total	1.2389	0.0667	2.3456	3.7000e-004		0.0161	0.0161		0.0161	0.0161	0.0000	49.9378	49.9378	4.5300e-003	8.5000e-004	50.3031

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0971					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0672					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	4.6600e-003	0.0398	0.0170	2.5000e-004		3.2200e-003	3.2200e-003		3.2200e-003	3.2200e-003	0.0000	46.1303	46.1303	8.8000e-004	8.5000e-004	46.4045
Landscaping	0.0699	0.0268	2.3286	1.2000e-004		0.0129	0.0129		0.0129	0.0129	0.0000	3.8074	3.8074	3.6500e-003	0.0000	3.8986
Total	1.2389	0.0667	2.3456	3.7000e-004		0.0161	0.0161		0.0161	0.0161	0.0000	49.9378	49.9378	4.5300e-003	8.5000e-004	50.3031

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	MT/yr			
Mitigated	48.1141	0.3876	9.5200e-003	60.6402
Unmitigated	56.9647	0.4842	0.0119	72.6058

7.2 Water by Land Use

Unmitigated

Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e	
Land Use	Mgal	MT/yr			
Apartments Low Rise	9.90341 / 6.24346	38.3126	0.3257	7.9800e-003	48.8322
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	4.8214 / 3.03958	18.6522	0.1586	3.8800e-003	23.7736
Total		56.9647	0.4842	0.0119	72.6058

Mitigated

Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	Mgal	MT/yr			
Apartments Low Rise	7.92273 / 5.8626	32.3600	0.2607	6.4000e-003	40.7845
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3.85712 / 2.85416	15.7542	0.1269	3.1200e-003	19.8556
Total		48.1142	0.3876	9.5200e-003	60.6401

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	31.8371	1.8815	0.0000	78.8751
Unmitigated	31.8371	1.8815	0.0000	78.8751

8.2 Waste by Land Use

Unmitigated

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	69.92	14.1931	0.8388	0.0000	35.1629
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	86.92	17.6440	1.0427	0.0000	43.7122
Total		31.8371	1.8815	0.0000	78.8751

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	69.92	14.1931	0.8388	0.0000	35.1629
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	86.92	17.6440	1.0427	0.0000	43.7122
Total		31.8371	1.8815	0.0000	78.8751

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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
