

Appendix I

Greenhouse Gas Emissions Assumptions and Modeling



Diamond Bar - Crooked Creek
Greenhouse Gas Emissions Assumptions and Modeling

1. Assumptions
2. GHG Emissions Summary
3. CalEEMod Output
4. EMFAC2017 - See Appendix C5

1. Assumptions

Diamond Bar - Crooked Creek

Assumptions

CalEEMod Inputs (Non-Default information only)

Project Location					
County	Los Angeles				
Air District	SCAQMD				
Climate Zone	10				
Construction Year start	2021				
Operational Year Project	2023				
Utility Provider	Southern California Edison				
Source Receptor Area (SCAQMD)	10				
	2021	2022	2023	2030	2040
CO intensity	483.27	462.58	441.90	300.8662	100.29
% renewable	35.75%	38.50%	41.25%	60.00%	86.67%

1 Southern California Edison, 2018. ESG/Sustainability Template. Report date: September 27, 2018. Available: <https://www.edison.com/content/dam/eix/documents/sustainability/eix-esg-pilot-quantitative-section-sce.pdf>. Accessed April 5, 2019.

2 SCE 2017 Power Content Label https://www.sce.com/sites/default/files/inline-files/2017PCL_0.pdf

3 SB-100 California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases, https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201720180

Land Use	SQFT	Building KFS	Units/ Spaces	Acres	CalEEMod Category
Single Family Residential			7	1.90	light industrial
Parking/roadway				0.60	Other Asphalt
				2.50	
Population					
		Residents			
# Bedrooms	32				
# Homes	7	14.00			
# Non-Master Bedrooms	25	25.00			
Total		39.00			

Taken from the Project Description

Notes: Within the 7 residential units there are 5 accessory dwelling units (ADUs). These ADUs were added after the initial modeling. They do not increase the square footage of the homes, but will increase the number of trips.

Diamond Bar - Crooked Creek

Assumptions

Construction Schedule

Phase Name	CalEEMod Phase Name	Start Date	End Date	Days/week	Workdays
Site Preparation	Site Preparation	8/9/2021	8/13/2021	5.00	5
Grading/Retaining Wall Const	Grading	8/16/2021	10/5/2021	5.00	45
Underground Utilities Installation	Trenching	10/11/2021	12/3/2021	5.00	60
Street Improvements	Paving	12/6/2021	1/7/2022	5.00	30
Home Construction	Building Construction	1/10/2022	10/21/2022	5.00	180
Architectural Coating	Architectural Coating	9/10/2022	10/21/2022	5.00	30
					320

*Notes:

-For conservative emissions estimates all modeling was assumed to be conducted in 2021. Modeling phase dates that differ from the provided dates are as follows:

CalEEMod Phase Name	Start Date	End Date
Street Improvements	1/1/2021	2/11/2021
Building Construction	1/1/2021	9/9/2021
Architectural Coating	1/1/2021	2/11/2021

Materials Import/Export

	Cubic Yards
Grading:	5,760

Trips & VMT

Phase Name	Worker Trips	Worker Trips	Vendor Trucks	Haul Trucks
Site Preparation	8	16	0	50
Grading/Retaining Wall Const	10	20	0	570
Underground Utilities Installation	14	28	5	0
Street Improvements	15	30	0	0
Home Construction	14	28	5	0
Architectural Coating	(Part of Building Construction)			

Diamond Bar - Crooked Creek

Assumptions

Construction Equipmnet

<u>PhaseName</u>	<u>Type</u>	<u>#</u>	<u>Hrs</u>	<u>HP</u>
Site Preparation	Graders	1	8	187
Site Preparation	Scrapers	1	8	367
Site Preparation	Tractors/Loaders/Backhoes	1	7	97
Grading	Graders	3	8	187
Grading	Rubber Tired Dozers	1	8	247
Grading	Tractors/Loaders/Backhoes	2	7	97
Grading	Water Truck	1	8	402
Trenching	Excavator	1	7	158
Trenching	Tractor/Loader/Backhoe	2	8	97
Trenching	Water Truck	1	2	402
Paving	Cement and Mortar Mixers	1	8	9
Paving	Pavers	1	8	130
Paving	Paving Equipment	1	8	132
Paving	Rollers	2	8	80
Paving	Tractors/Loaders/Backhoes	1	8	97
Home Construction	Cranes	1	8	231
Home Construction	Forklifts	2	7	89
Home Construction	Generator Sets	1	8	84
Home Construction	Tractors/Loaders/Backhoes	1	6	97
Home Construction	Welders	3	8	46
Architectural Coating	Air Compressors	1	6	78

Diamond Bar - Crooked Creek

Operational Assumptions

Mobile source emissions

		Trip Gen	trips/day	Annual VMT
SFR	7	9.44	66	225,805
ADU	5	7.32	38	125,102
Revised SFR	7	14.67	104	350,907

Note: A revised SFR trip generation was generated based on the additional trips from the ADUs. This was done to allow for a revised operational analysis for the 7 SFRs.

Source: Urban Crossroads. *Trip Generation & VMT Screening Assessment* .

Area Sources

Default Modified to Fit SCAQMD's no wood fireplace/wood stove rule.

	Wood	Gas	None	Total
Default	0.35	5.95	0.70	7
% of Default		0.89	0.11	
Revised	0	6.26	0.74	7

Solid Waste

Defaults Used

Water and Wastewater

Defaults adjusted to account for sewer connection

	Default	Revised
Septic	10.30	0.00
Aerobic	87.46	97.51
Lagoon	2.21	2.46

Stationary Sources

Assumed none

Energy Use

Default Energy Usage used.

2. GHG Emissions Summary

Diamond Bar - Crooked Creek

Unmitigated GHG Summary

CalEEMod: Crooked Creek
EMFAC2017: Crooked Creek

11/6/2020
11/6/2020

Unmitigated Construction Emissions - Max Annual

	tons/year CO ₂ e						
	Days	Onsite	Hauling	Vendor	Worker	MT CO ₂ e	MT CO ₂ e
Site Preparation							
Site Preparation	5	5.43	1.95	0.00	0.37	8	
Grading/Retaining Wall Const	45	93.78	70.24	0.00	4.14	168	
Underground Utilities Installation	60	37.29	0.00	7.97	7.73	53	
Street Improvements	30	23.44	0.00	0.00	4.14	28	
Home Construction	180	187.80	0.00	23.90	23.18	235	
Architectural Coating	30	3.84	0.00	0.00	0.00	4	495
Max Project Total							495
Amortized							17

Unmitigated Operational Emissions - Max Annual

CalEEMod: Crooked Creek

Date: 9/24/2021

EMFAC2017: Crooked Creek

9/24/2021

	2023	2030	2040
Area	2	2	2
Energy	22	18	13
Mobile	120	100	90
Solid Waste	8	8	8
Water	2	2	0
Total Operational:	154	130	113
Amortized Construction:	17	17	17
Total Project:	170	146	129
Population:	39	39	39
Emissions per capita	4.4	3.8	3.31
Threshold Target 2030:	6.00	6.00	-
Significant:	No	No	-
Threshold Target 2040:	-	-	4.00
Significant:	-	-	No

3. CalEEMod Output

Crooked Creek - Los Angeles-South Coast County, Annual

Crooked Creek
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 Asphalt Surfaces	0.60	Acre	0.60	26,136.00	0
Single Family Housing	7.00	Dwelling Unit	1.90	12,600.00	20

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	462.58	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - See Assumptions

Off-road Equipment -

Off-road Equipment - See Assumptions

Off-road Equipment -

Trips and VMT - Modeled outside of CalEEMod

Grading - See Assumptions

[illegible]

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	30.00
tblConstructionPhase	NumDays	220.00	180.00
tblConstructionPhase	NumDays	6.00	45.00
tblConstructionPhase	NumDays	10.00	30.00
tblConstructionPhase	NumDays	3.00	5.00
tblEnergyUse	T24E	951.67	913.60
tblEnergyUse	T24NG	24,566.15	22,355.20
tblFireplaces	NumberGas	5.95	6.20
tblFireplaces	NumberNoFireplace	0.70	0.74
tblFireplaces	NumberWood	0.35	0.00
tblGrading	AcresOfGrading	67.50	3.00
tblGrading	AcresOfGrading	7.50	4.50
tblGrading	MaterialImported	0.00	5,760.00
tblLandUse	LotAcreage	2.27	1.90
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	462.58
tblTripsAndVMT	HaulingTripNumber	720.00	0.00
tblTripsAndVMT	VendorTripNumber	5.00	0.00
tblTripsAndVMT	WorkerTripNumber	14.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00

tblWater	AerobicPercent	87.46	97.54
tblWater	AerobicPercent	87.46	97.54
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	IndoorWaterUseRate	456,078.18	364,862.54
tblWater	OutdoorWaterUseRate	287,527.55	230,022.04
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	0.35	0.00
tblWoodstoves	NumberNoncatalytic	0.35	0.00
tblWoodstoves	WoodstoveDayYear	25.00	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					
2021	0.3479	2.7204	2.1702	4.1000e-003	0.1398	0.1298	0.2696	0.0750	0.1223	0.1973	0.0000	349.3673	349.3673	0.0882	0.0000	351.5721
Maximum	0.3479	2.7204	2.1702	4.1000e-003	0.1398	0.1298	0.2696	0.0750	0.1223	0.1973	0.0000	349.3673	349.3673	0.0882	0.0000	351.5721

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					
2021	0.1659	0.5821	2.4563	4.1000e-003	0.0518	0.0254	0.0772	0.0278	0.0254	0.0532	0.0000	349.3669	349.3669	0.0882	0.0000	351.5717
Maximum	0.1659	0.5821	2.4563	4.1000e-003	0.0518	0.0254	0.0772	0.0278	0.0254	0.0532	0.0000	349.3669	349.3669	0.0882	0.0000	351.5717

	ROG	NOx	CO	SO2	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	52.33	78.60	-13.18	0.00	62.95	80.44	71.37	62.95	79.25	73.05	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	8-9-2021	9-30-2021	0.9100	0.1275
		Highest	0.9100	0.1275

2.2 Overall Operational

Operation Modeled Separately

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2021	9/9/2021	5	180	
2	Street Improvements	Paving	1/1/2021	2/11/2021	5	30	
3	Architectural Coating	Architectural Coating	1/1/2021	2/11/2021	5	30	
4	Site Preparation	Site Preparation	8/9/2021	8/13/2021	5	5	
5	Grading	Grading	8/16/2021	10/15/2021	5	45	
6	Under Ground Utilities	Trenching	10/11/2021	12/31/2021	5	60	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.6

Residential Indoor: 25,515; Residential Outdoor: 8,505; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Street Improvements	Cement and Mortar Mixers	1	8.00	9	0.56
Street Improvements	Pavers	1	8.00	130	0.42
Street Improvements	Paving Equipment	1	8.00	132	0.36
Street Improvements	Rollers	2	8.00	80	0.38
Street Improvements	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	3	8.00	187	0.41
Grading	Off-Highway Trucks	1	8.00	402	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Under Ground Utilities	Excavators	1	7.00	158	0.38
Under Ground Utilities	Off-Highway Trucks	1	2.00	402	0.38
Under Ground Utilities	Tractors/Loaders/Backhoes	2	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
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Building Construction	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Improvements	6	0.00	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
Site Preparation	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Under Ground Utilities	4	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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	0.1841	1.4425	1.3107	2.2500e-003		0.0736	0.0736		0.0705	0.0705	0.0000	186.8839	186.8839	0.0368	0.0000	187.8030
Total	0.1841	1.4425	1.3107	2.2500e-003		0.0736	0.0736		0.0705	0.0705	0.0000	186.8839	186.8839	0.0368	0.0000	187.8030

Unmitigated Construction Off-Site

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.1600e-003	0.0137	0.1946	2.7000e-004		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	23.2572	23.2572	7.3700e-003	0.0000	23.4414
Paving	7.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.9500e-003	0.0137	0.1946	2.7000e-004		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	23.2572	23.2572	7.3700e-003	0.0000	23.4414

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

3.4 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
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Category	tons/yr										MT/yr					
Archit. Coating	0.0431					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2800e-003	0.0229	0.0273	4.0000e-005		1.4100e-003	1.4100e-003		1.4100e-003	1.4100e-003	0.0000	3.8299	3.8299	2.6000e-004	0.0000	3.8365
Total	0.0463	0.0229	0.0273	4.0000e-005		1.4100e-003	1.4100e-003		1.4100e-003	1.4100e-003	0.0000	3.8299	3.8299	2.6000e-004	0.0000	3.8365

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	0.0431					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-004	1.9300e-003	0.0275	4.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	3.8299	3.8299	2.6000e-004	0.0000	3.8365

Total	0.0435	1.9300e-003	0.0275	4.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	3.8299	3.8299	2.6000e-004	0.0000	3.8365
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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

3.5 Site Preparation - 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					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8700e-003	0.0457	0.0269	6.0000e-005		1.7500e-003	1.7500e-003		1.6100e-003	1.6100e-003	0.0000	5.3816	5.3816	1.7400e-003	0.0000	5.4251
Total	3.8700e-003	0.0457	0.0269	6.0000e-005	2.3900e-003	1.7500e-003	4.1400e-003	2.6000e-004	1.6100e-003	1.8700e-003	0.0000	5.3816	5.3816	1.7400e-003	0.0000	5.4251

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					
Fugitive Dust					8.8000e-004	0.0000	8.8000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5000e-004	3.2600e-003	0.0297	6.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	5.3816	5.3816	1.7400e-003	0.0000	5.4251
Total	7.5000e-004	3.2600e-003	0.0297	6.0000e-005	8.8000e-004	1.0000e-004	9.8000e-004	1.0000e-004	1.0000e-004	2.0000e-004	0.0000	5.3816	5.3816	1.7400e-003	0.0000	5.4251

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					

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					0.0509	0.0000	0.0509	0.0277	0.0000	0.0277	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0130	0.0562	0.5126	1.0600e-003		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	93.0261	93.0261	0.0301	0.0000	93.7782
Total	0.0130	0.0562	0.5126	1.0600e-003	0.0509	1.7300e-003	0.0526	0.0277	1.7300e-003	0.0294	0.0000	93.0261	93.0261	0.0301	0.0000	93.7782

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

3.7 Under Ground Utilities - 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	0.0218	0.2098	0.2485	4.2000e-004		0.0109	0.0109		0.0100	0.0100	0.0000	36.9886	36.9886	0.0120	0.0000	37.2877
Total	0.0218	0.2098	0.2485	4.2000e-004		0.0109	0.0109		0.0100	0.0100	0.0000	36.9886	36.9886	0.0120	0.0000	37.2877

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					
Off-Road	5.1600e-003	0.0224	0.2878	4.2000e-004		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	36.9886	36.9886	0.0120	0.0000	37.2876

Total	5.1600e-003	0.0224	0.2878	4.2000e-004		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	36.9886	36.9886	0.0120	0.0000	37.2876
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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

Operation Modeled Separately

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.60	Acre	0.60	26,136.00	0
Single Family Housing	7.00	Dwelling Unit	1.90	12,600.00	39

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	441.9	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction Modeled Separately

Off-road Equipment -

Trips and VMT - Construction Modeled Separately

Grading - Construction Modeled Separately

Vehicle Trips - See Assumptions

Woodstoves - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Construction Off-road Equipment Mitigation - See Assumptions

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Water Mitigation - Title 24 Compliance

Off-road Equipment - Construction Modeled Separately

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	3.00	1.00
tblFireplaces	NumberGas	5.95	6.26
tblFireplaces	NumberNoFireplace	0.70	0.74
tblFireplaces	NumberWood	0.35	0.00
tblLandUse	LotAcreage	2.27	1.90
tblLandUse	Population	20.00	39.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	441.9
tblVehicleTrips	ST_TR	9.54	14.67
tblVehicleTrips	SU_TR	8.55	14.67
tblVehicleTrips	WD_TR	9.44	14.67
tblWater	AerobicPercent	87.46	97.54
tblWater	AerobicPercent	87.46	97.54
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	0.35	0.00
tblWoodstoves	NumberNoncatalytic	0.35	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.1 Overall Construction

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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
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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	0.0539	2.1300e-003	0.0728	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6330
Energy	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	21.7417	21.7417	9.4000e-004	3.5000e-004	21.8680
Mobile	0.0561	0.0662	0.5932	1.2800e-003	0.1318	9.4000e-004	0.1328	0.0352	8.7000e-004	0.0360	0.0000	118.2058	118.2058	8.1100e-003	5.1700e-003	119.9496
Waste						0.0000	0.0000		0.0000	0.0000	3.2458	0.0000	3.2458	0.1918	0.0000	8.0414
Water						0.0000	0.0000		0.0000	0.0000	0.1614	1.8307	1.9920	4.7500e-003	3.8000e-004	2.2228
Total	0.1110	0.0775	0.6699	1.3500e-003	0.1318	2.1800e-003	0.1340	0.0352	2.1100e-003	0.0373	3.4072	143.3994	146.8065	0.2058	5.9300e-003	153.7148

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0539	2.1300e-003	0.0728	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6330
Energy	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	21.7417	21.7417	9.4000e-004	3.5000e-004	21.8680
Mobile	0.0561	0.0662	0.5932	1.2800e-003	0.1318	9.4000e-004	0.1328	0.0352	8.7000e-004	0.0360	0.0000	118.2058	118.2058	8.1100e-003	5.1700e-003	119.9496
Waste						0.0000	0.0000		0.0000	0.0000	3.2458	0.0000	3.2458	0.1918	0.0000	8.0414
Water						0.0000	0.0000		0.0000	0.0000	0.1614	1.8307	1.9920	4.7500e-003	3.8000e-004	2.2228
Total	0.1110	0.0775	0.6699	1.3500e-003	0.1318	2.1800e-003	0.1340	0.0352	2.1100e-003	0.0373	3.4072	143.3994	146.8065	0.2058	5.9300e-003	153.7148

	ROG	NOx	CO	SO2	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	8/9/2021	8/9/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Acres of Grading (Grading Phase): 0****Acres of Paving: 0.6****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Scrapers	0	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	0	7.00	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	0	0.00	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

Reduce Vehicle Speed on Unpaved Roads

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0561	0.0662	0.5932	1.2800e-003	0.1318	9.4000e-004	0.1328	0.0352	8.7000e-004	0.0360	0.0000	118.2058	118.2058	8.1100e-003	5.1700e-003	119.9496
Unmitigated	0.0561	0.0662	0.5932	1.2800e-003	0.1318	9.4000e-004	0.1328	0.0352	8.7000e-004	0.0360	0.0000	118.2058	118.2058	8.1100e-003	5.1700e-003	119.9496

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	102.69	102.69	102.69	350,907	350,907
Total	102.69	102.69	102.69	350,907	350,907

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374
Single Family Housing	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374

5.0 Energy Detail

Historical Energy Use: N

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	11.1752	11.1752	7.3000e-004	1.5000e-004	11.2387
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	11.1752	11.1752	7.3000e-004	1.5000e-004	11.2387
NaturalGas Mitigated	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293
NaturalGas Unmitigated	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
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	0.0000
Single Family Housing	198009	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293
Total		1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293

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	tons/yr										MT/yr					
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	0.0000
Single Family Housing	198009	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293
Total		1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	55752.6	11.1752	7.3000e-004	1.5000e-004	11.2387
Total		11.1752	7.3000e-004	1.5000e-004	11.2387

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	55752.6	11.1752	7.3000e-004	1.5000e-004	11.2387
Total		11.1752	7.3000e-004	1.5000e-004	11.2387

6.0 Area Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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	0.0539	2.1300e-003	0.0728	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6330
Unmitigated	0.0539	2.1300e-003	0.0728	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6330

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	4.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0472					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.5000e-004	1.3000e-003	5.5000e-004	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.5033	1.5033	3.0000e-005	3.0000e-005	1.5122
Landscaping	2.1800e-003	8.3000e-004	0.0722	0.0000		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	0.1179	0.1179	1.1000e-004	0.0000	0.1208
Total	0.0539	2.1300e-003	0.0728	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6330

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	4.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0472					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.5000e-004	1.3000e-003	5.5000e-004	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.5033	1.5033	3.0000e-005	3.0000e-005	1.5122
Landscaping	2.1800e-003	8.3000e-004	0.0722	0.0000		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	0.1179	0.1179	1.1000e-004	0.0000	0.1208
Total	0.0539	2.1300e-003	0.0728	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6330

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.9920	4.7500e-003	3.8000e-004	2.2228
Unmitigated	1.9920	4.7500e-003	3.8000e-004	2.2228

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.456078 / 0.287528	1.9920	4.7500e-003	3.8000e-004	2.2228
Total		1.9920	4.7500e-003	3.8000e-004	2.2228

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.456078 / 0.287528	1.9920	4.7500e-003	3.8000e-004	2.2228
Total		1.9920	4.7500e-003	3.8000e-004	2.2228

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.2458	0.1918	0.0000	8.0414
Unmitigated	3.2458	0.1918	0.0000	8.0414

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	15.99	3.2458	0.1918	0.0000	8.0414
Total		3.2458	0.1918	0.0000	8.0414

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	15.99	3.2458	0.1918	0.0000	8.0414
Total		3.2458	0.1918	0.0000	8.0414

9.0 Operational Offroad

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.60	Acre	0.60	26,136.00	0
Single Family Housing	7.00	Dwelling Unit	1.90	12,600.00	39

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	10			Operational Year	2030
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	300.87	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction Modeled Separately

Off-road Equipment -

Trips and VMT - Construction Modeled Separately

Grading - Construction Modeled Separately

Vehicle Trips - See Assumptions

Woodstoves - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Construction Off-road Equipment Mitigation - See Assumptions

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Water Mitigation - Title 24 Compliance

Off-road Equipment - Construction Modeled Separately

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	3.00	1.00
tblFireplaces	NumberGas	5.95	6.26
tblFireplaces	NumberNoFireplace	0.70	0.74
tblFireplaces	NumberWood	0.35	0.00
tblLandUse	LotAcreage	2.27	1.90
tblLandUse	Population	20.00	39.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	300.87
tblVehicleTrips	ST_TR	9.54	14.67
tblVehicleTrips	SU_TR	8.55	14.67
tblVehicleTrips	WD_TR	9.44	14.67
tblWater	AerobicPercent	87.46	97.54
tblWater	AerobicPercent	87.46	97.54
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	0.35	0.00
tblWoodstoves	NumberNoncatalytic	0.35	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.1 Overall Construction

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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
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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	0.0538	2.1300e-003	0.0726	1.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6329
Energy	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	18.1752	18.1752	9.4000e-004	3.5000e-004	18.3015
Mobile	0.0474	0.0492	0.4783	1.0700e-003	0.1319	6.9000e-004	0.1326	0.0352	6.4000e-004	0.0358	0.0000	98.7954	98.7954	6.9100e-003	4.2800e-003	100.2424
Waste						0.0000	0.0000		0.0000	0.0000	3.2458	0.0000	3.2458	0.1918	0.0000	8.0414
Water						0.0000	0.0000		0.0000	0.0000	0.1614	1.2464	1.4078	4.7500e-003	3.8000e-004	1.6386
Total	0.1023	0.0605	0.5547	1.1400e-003	0.1319	1.9400e-003	0.1338	0.0352	1.8900e-003	0.0371	3.4072	119.8382	123.2454	0.2046	5.0400e-003	129.8568

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0538	2.1300e-003	0.0726	1.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6329
Energy	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	18.1752	18.1752	9.4000e-004	3.5000e-004	18.3015
Mobile	0.0474	0.0492	0.4783	1.0700e-003	0.1319	6.9000e-004	0.1326	0.0352	6.4000e-004	0.0358	0.0000	98.7954	98.7954	6.9100e-003	4.2800e-003	100.2424
Waste						0.0000	0.0000		0.0000	0.0000	3.2458	0.0000	3.2458	0.1918	0.0000	8.0414
Water						0.0000	0.0000		0.0000	0.0000	0.1614	1.2464	1.4078	4.7500e-003	3.8000e-004	1.6386
Total	0.1023	0.0605	0.5547	1.1400e-003	0.1319	1.9400e-003	0.1338	0.0352	1.8900e-003	0.0371	3.4072	119.8382	123.2454	0.2046	5.0400e-003	129.8568

	ROG	NOx	CO	SO2	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	8/9/2021	8/9/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Acres of Grading (Grading Phase): 0****Acres of Paving: 0.6****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Scrapers	0	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	0	7.00	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	0	0.00	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

Reduce Vehicle Speed on Unpaved Roads

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

[illegible]

Mitigated Construction Off-Site

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0474	0.0492	0.4783	1.0700e-003	0.1319	6.9000e-004	0.1326	0.0352	6.4000e-004	0.0358	0.0000	98.7954	98.7954	6.9100e-003	4.2800e-003	100.2424
Unmitigated	0.0474	0.0492	0.4783	1.0700e-003	0.1319	6.9000e-004	0.1326	0.0352	6.4000e-004	0.0358	0.0000	98.7954	98.7954	6.9100e-003	4.2800e-003	100.2424

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	102.69	102.69	102.69	350,907	350,907
Total	102.69	102.69	102.69	350,907	350,907

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.529534	0.067658	0.193471	0.126518	0.024260	0.006985	0.011675	0.007885	0.000939	0.000569	0.026493	0.000724	0.003288
Single Family Housing	0.529534	0.067658	0.193471	0.126518	0.024260	0.006985	0.011675	0.007885	0.000939	0.000569	0.026493	0.000724	0.003288

5.0 Energy Detail

Historical Energy Use: N

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	7.6087	7.6087	7.3000e-004	1.5000e-004	7.6722
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.6087	7.6087	7.3000e-004	1.5000e-004	7.6722
NaturalGas Mitigated	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293
NaturalGas Unmitigated	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
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	0.0000
Single Family Housing	198009	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293
Total		1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293

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	tons/yr										MT/yr					
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	0.0000
Single Family Housing	198009	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293
Total		1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	55752.6	7.6087	7.3000e-004	1.5000e-004	7.6722
Total		7.6087	7.3000e-004	1.5000e-004	7.6722

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	55752.6	7.6087	7.3000e-004	1.5000e-004	7.6722
Total		7.6087	7.3000e-004	1.5000e-004	7.6722

6.0 Area Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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	0.0538	2.1300e-003	0.0726	1.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6329
Unmitigated	0.0538	2.1300e-003	0.0726	1.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6329

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	4.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0472					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.5000e-004	1.3000e-003	5.5000e-004	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.5033	1.5033	3.0000e-005	3.0000e-005	1.5122
Landscaping	2.1500e-003	8.3000e-004	0.0720	0.0000		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	0.1179	0.1179	1.1000e-004	0.0000	0.1207
Total	0.0538	2.1300e-003	0.0726	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6329

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	4.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0472					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.5000e-004	1.3000e-003	5.5000e-004	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.5033	1.5033	3.0000e-005	3.0000e-005	1.5122
Landscaping	2.1500e-003	8.3000e-004	0.0720	0.0000		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	0.1179	0.1179	1.1000e-004	0.0000	0.1207
Total	0.0538	2.1300e-003	0.0726	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6329

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.4078	4.7500e-003	3.8000e-004	1.6386
Unmitigated	1.4078	4.7500e-003	3.8000e-004	1.6386

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.456078 / 0.287528	1.4078	4.7500e-003	3.8000e-004	1.6386
Total		1.4078	4.7500e-003	3.8000e-004	1.6386

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.456078 / 0.287528	1.4078	4.7500e-003	3.8000e-004	1.6386
Total		1.4078	4.7500e-003	3.8000e-004	1.6386

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.2458	0.1918	0.0000	8.0414
Unmitigated	3.2458	0.1918	0.0000	8.0414

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	15.99	3.2458	0.1918	0.0000	8.0414
Total		3.2458	0.1918	0.0000	8.0414

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	15.99	3.2458	0.1918	0.0000	8.0414
Total		3.2458	0.1918	0.0000	8.0414

9.0 Operational Offroad

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.60	Acre	0.60	26,136.00	0
Single Family Housing	7.00	Dwelling Unit	1.90	12,600.00	39

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	10			Operational Year	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	100.29	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction Modeled Separately

Off-road Equipment -

Trips and VMT - Construction Modeled Separately

Grading - Construction Modeled Separately

Vehicle Trips - See Assumptions

Woodstoves - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Construction Off-road Equipment Mitigation - See Assumptions

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Water Mitigation - Title 24 Compliance

Off-road Equipment - Construction Modeled Separately

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	3.00	1.00
tblFireplaces	NumberGas	5.95	6.26
tblFireplaces	NumberNoFireplace	0.70	0.74
tblFireplaces	NumberWood	0.35	0.00
tblLandUse	LotAcreage	2.27	1.90
tblLandUse	Population	20.00	39.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	100.29
tblVehicleTrips	ST_TR	9.54	14.67
tblVehicleTrips	SU_TR	8.55	14.67
tblVehicleTrips	WD_TR	9.44	14.67
tblWater	AerobicPercent	87.46	97.54
tblWater	AerobicPercent	87.46	97.54
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	0.35	0.00
tblWoodstoves	NumberNoncatalytic	0.35	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.1 Overall Construction

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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
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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	0.0538	2.1300e-003	0.0724	1.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6329
Energy	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	13.1027	13.1027	9.4000e-004	3.5000e-004	13.2291
Mobile	0.0436	0.0422	0.4377	9.5000e-004	0.1319	4.8000e-004	0.1324	0.0352	4.5000e-004	0.0357	0.0000	88.3387	88.3387	6.4500e-003	3.9200e-003	89.6678
Waste						0.0000	0.0000		0.0000	0.0000	3.2458	0.0000	3.2458	0.1918	0.0000	8.0414
Water						0.0000	0.0000		0.0000	0.0000	0.1614	0.4155	0.5768	4.7500e-003	3.8000e-004	0.8076
Total	0.0985	0.0534	0.5140	1.0200e-003	0.1319	1.7300e-003	0.1337	0.0352	1.7000e-003	0.0369	3.4072	103.4780	106.8852	0.2041	4.6800e-003	113.3789

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0538	2.1300e-003	0.0724	1.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6329
Energy	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	13.1027	13.1027	9.4000e-004	3.5000e-004	13.2291
Mobile	0.0436	0.0422	0.4377	9.5000e-004	0.1319	4.8000e-004	0.1324	0.0352	4.5000e-004	0.0357	0.0000	88.3387	88.3387	6.4500e-003	3.9200e-003	89.6678
Waste						0.0000	0.0000		0.0000	0.0000	3.2458	0.0000	3.2458	0.1918	0.0000	8.0414
Water						0.0000	0.0000		0.0000	0.0000	0.1614	0.4155	0.5768	4.7500e-003	3.8000e-004	0.8076
Total	0.0985	0.0534	0.5140	1.0200e-003	0.1319	1.7300e-003	0.1337	0.0352	1.7000e-003	0.0369	3.4072	103.4780	106.8852	0.2041	4.6800e-003	113.3789

	ROG	NOx	CO	SO2	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	8/9/2021	8/9/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Acres of Grading (Grading Phase): 0****Acres of Paving: 0.6****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Scrapers	0	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	0	7.00	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	0	0.00	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

Reduce Vehicle Speed on Unpaved Roads

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0436	0.0422	0.4377	9.5000e-004	0.1319	4.8000e-004	0.1324	0.0352	4.5000e-004	0.0357	0.0000	88.3387	88.3387	6.4500e-003	3.9200e-003	89.6678
Unmitigated	0.0436	0.0422	0.4377	9.5000e-004	0.1319	4.8000e-004	0.1324	0.0352	4.5000e-004	0.0357	0.0000	88.3387	88.3387	6.4500e-003	3.9200e-003	89.6678

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	102.69	102.69	102.69	350,907	350,907
Total	102.69	102.69	102.69	350,907	350,907

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.516633	0.070991	0.195744	0.128836	0.026081	0.007842	0.011970	0.007437	0.000933	0.000540	0.028760	0.000776	0.003457
Single Family Housing	0.516633	0.070991	0.195744	0.128836	0.026081	0.007842	0.011970	0.007437	0.000933	0.000540	0.028760	0.000776	0.003457

5.0 Energy Detail

Historical Energy Use: N

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	2.5362	2.5362	7.3000e-004	1.5000e-004	2.5998
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.5362	2.5362	7.3000e-004	1.5000e-004	2.5998
NaturalGas Mitigated	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293
NaturalGas Unmitigated	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
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	0.0000
Single Family Housing	198009	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293
Total		1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293

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	tons/yr										MT/yr					
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	0.0000
Single Family Housing	198009	1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293
Total		1.0700e-003	9.1200e-003	3.8800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	10.5665	10.5665	2.0000e-004	1.9000e-004	10.6293

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	55752.6	2.5362	7.3000e-004	1.5000e-004	2.5998
Total		2.5362	7.3000e-004	1.5000e-004	2.5998

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	55752.6	2.5362	7.3000e-004	1.5000e-004	2.5998
Total		2.5362	7.3000e-004	1.5000e-004	2.5998

6.0 Area Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0538	2.1300e-003	0.0724	1.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6329
Unmitigated	0.0538	2.1300e-003	0.0724	1.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6329

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	4.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0472					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.5000e-004	1.3000e-003	5.5000e-004	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.5033	1.5033	3.0000e-005	3.0000e-005	1.5122
Landscaping	2.1500e-003	8.3000e-004	0.0719	0.0000		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	0.1179	0.1179	1.1000e-004	0.0000	0.1207
Total	0.0538	2.1300e-003	0.0724	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6329

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	4.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0472					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.5000e-004	1.3000e-003	5.5000e-004	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.5033	1.5033	3.0000e-005	3.0000e-005	1.5122
Landscaping	2.1500e-003	8.3000e-004	0.0719	0.0000		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	0.1179	0.1179	1.1000e-004	0.0000	0.1207
Total	0.0538	2.1300e-003	0.0724	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	1.6212	1.6212	1.4000e-004	3.0000e-005	1.6329

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.5768	4.7500e-003	3.8000e-004	0.8076
Unmitigated	0.5768	4.7500e-003	3.8000e-004	0.8076

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.456078 / 0.287528	0.5768	4.7500e-003	3.8000e-004	0.8076
Total		0.5768	4.7500e-003	3.8000e-004	0.8076

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.456078 / 0.287528	0.5768	4.7500e-003	3.8000e-004	0.8076
Total		0.5768	4.7500e-003	3.8000e-004	0.8076

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.2458	0.1918	0.0000	8.0414
Unmitigated	3.2458	0.1918	0.0000	8.0414

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	15.99	3.2458	0.1918	0.0000	8.0414
Total		3.2458	0.1918	0.0000	8.0414

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	15.99	3.2458	0.1918	0.0000	8.0414
Total		3.2458	0.1918	0.0000	8.0414

9.0 Operational Offroad

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

4. EMFAC2017 - See Appendix C5