

CalEEMod Input Template

Project Name: Ramon Substation Expansion County: Riverside
 Project Location: Riverside-Salton Sea County Zip code: 92276 (Thousand Palms)
 CEC Climate Zone: 15 Jurisdiction: Salton Sea Air Basin, South Coast AQMD
 Land Use Setting: Rural
 Utility: Imperial Irrigation District
 Operational Year: 2025



Land Use

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	SF
Parking	Other Asphalt Surfaces	4	Acre	4	174,240.00

Construction Schedule

Construction Phase Name	Phase Type	Start Date	End Date	# Days/Week	Total Days	# one-way worker trips/day	# one-way vendor trips/day	# Total haul trips	Worker Trip Length	Vendor Trip Length	Haul Trip Length
Site Preparation	Site Preparation	1/2/2024	1/15/2024	5	10	10	2	0	14.6	6.2	20
Grading	Grading	1/16/2024	1/25/2024	5	8	13	2	0	14.6	6.2	20
Structural Facilities	Building Construction	1/26/2024	8/14/2024	5	144	40	29	0	14.6	6.2	20
Paving	Paving	8/15/2024	9/9/2024	5	18	18	2	0	14.6	6.2	20

Total duration: 180 days

default

Notes:

Worker, vendor, and haul trip numbers and lengths are default.
 Assume work would occur 7am-7pm (8 hours/day) Monday through Friday (5 days/week)
 Assume cut/fill is balanced on site so no import or export of soil needed
 No landscaping

Assume operations and maintenance would not require any additional employees so CalEEMod is a construction only run.

List of Construction Equipment

Equipment Name	CalEEMod Equipment Name	Count	Hours/Day	HP	Load Factor
Site Preparation					
Dozer	Rubber Tired Dozers	1	8	247	0.4
Backhoe	Tractors/Loaders/Backhoes	2	8	97	0.37
Concrete Saw	Concrete/Industrial Saws	1	6	81	0.73
Grading					
Excavator	Excavators	1	8	158	0.38
Grader	Graders	2	8	187	0.41
Dozer	Rubber Tired Dozers	1	8	247	0.4
Backhoe	Tractors/Loaders/Backhoes	1	8	97	0.37
Structural Facilities					
Crane	Cranes	1	7	231	0.29
Forklift	Forklifts	2	8	89	0.2
Generator	Generator Sets	1	8	84	0.74
Backhoe	Tractors/Loaders/Backhoes	1	7	97	0.37
Welder	Welders	1	8	46	0.45
Paving					
Cement and Mortar Mixers	Cement and Mortar Mixers	2	6	9	0.56
Paver	Pavers	1	8	130	0.42
Paving Equipment	Paving Equipment	2	6	132	0.36
Roller	Rollers	2	6	80	0.38

Localized Emissions

SRA 30 Coachella Valley, 4 acre site, 300m receptor distance (used 200m distance to be conservative)

Localized Emissions Summary

	lbs/day			
	NOx	CO	PM10	PM2.5
Maximum on-site emissions	18.3	11.9	4.2	2.2
SCAQMD Localized Threshold	506	9,177	104	34
Exceedance?	No	No	No	No

Threshold scaled to 4 acre

	NOx	CO	PM10	PM2.5
2 acre threshold	425	7174	89	28
5 acre threshold	547	10178	112	37
Calculated 4 acre threshold	506	9177	104	34

GHG Emissions Summary

	MTCO ₂ e/ year
Construction Phase	
Site Preparation	9
Grading	11
Structural Facilities	180
Paving	14
Total	214

Ramon Substation Expansion - Riverside-Salton Sea County, Annual

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

**Ramon Substation Expansion
Riverside-Salton Sea County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	4.00	Acre	4.00	174,240.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	15			Operational Year	2025
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MWhr)	189.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - total duration - 180 working days

Off-road Equipment - estimated from similar projects

Grading - assume cut/fill is balanced on site

Off-road Equipment - estimated from similar projects

Off-road Equipment - estimated from similar projects

Off-road Equipment - estimated from similar projects

Demolition - no demolition

Trips and VMT - assume no more than 20 workers on site at a time; added 2 vendor trips in site preparation, grading, and paving for misc. deliveries; others are default

Construction Off-road Equipment Mitigation - assume water 2x/day per SCAQMD Rule 403

Ramon Substation Expansion - Riverside-Salton Sea County, Annual

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

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	144.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	9/2/2024	8/14/2024
tblConstructionPhase	PhaseEndDate	10/16/2023	1/25/2024
tblConstructionPhase	PhaseEndDate	9/26/2024	9/9/2024
tblConstructionPhase	PhaseEndDate	10/4/2023	1/15/2024
tblConstructionPhase	PhaseStartDate	10/17/2023	1/26/2024
tblConstructionPhase	PhaseStartDate	10/5/2023	1/16/2024
tblConstructionPhase	PhaseStartDate	9/3/2024	8/15/2024
tblConstructionPhase	PhaseStartDate	9/28/2023	1/2/2024
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	73.00	40.00

2.0 Emissions Summary

Ramon Substation Expansion - Riverside-Salton Sea County, Annual

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
2	12-28-2023	3-27-2024	0.4109	0.4109
3	3-28-2024	6-27-2024	0.4037	0.4037
4	6-28-2024	9-27-2024	0.2877	0.2877
		Highest	0.4109	0.4109

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	0.0173	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0173	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005

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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	0.0173	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0173	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005

	ROG	NOx	CO	SO2	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	1/2/2024	1/15/2024	5	10	
2	Grading	Grading	1/16/2024	1/25/2024	5	8	
3	Structural Facilities	Building Construction	1/26/2024	8/14/2024	5	144	

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4	Paving	Paving	8/15/2024	9/9/2024	5	18
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Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 12

Acres of Paving: 4

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	Concrete/Industrial Saws	1	6.00	81	0.73
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Structural Facilities	Cranes	1	7.00	231	0.29
Grading	Excavators	1	8.00	158	0.38
Structural Facilities	Forklifts	2	8.00	89	0.20
Structural Facilities	Generator Sets	1	8.00	84	0.74
Grading	Graders	2	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Structural Facilities	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Structural Facilities	Welders	1	8.00	46	0.45

Trips and VMT

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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	4	10.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Structural Facilities	6	40.00	29.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 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					
Fugitive Dust					0.0328	0.0000	0.0328	0.0168	0.0000	0.0168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0900e-003	0.0592	0.0517	1.0000e-004		2.6900e-003	2.6900e-003		2.5000e-003	2.5000e-003	0.0000	8.5049	8.5049	2.1900e-003	0.0000	8.5598
Total	6.0900e-003	0.0592	0.0517	1.0000e-004	0.0328	2.6900e-003	0.0355	0.0168	2.5000e-003	0.0193	0.0000	8.5049	8.5049	2.1900e-003	0.0000	8.5598

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

3.2 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	3.2000e-004	1.3000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1505	0.1505	0.0000	2.0000e-005	0.1572
Worker	1.5000e-004	1.1000e-004	1.4600e-003	0.0000	5.5000e-004	0.0000	5.5000e-004	1.4000e-004	0.0000	1.5000e-004	0.0000	0.4020	0.4020	1.0000e-005	1.0000e-005	0.4053
Total	1.6000e-004	4.3000e-004	1.5900e-003	0.0000	6.1000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.5525	0.5525	1.0000e-005	3.0000e-005	0.5625

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					0.0147	0.0000	0.0147	7.5800e-003	0.0000	7.5800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0900e-003	0.0592	0.0517	1.0000e-004		2.6900e-003	2.6900e-003		2.5000e-003	2.5000e-003	0.0000	8.5049	8.5049	2.1900e-003	0.0000	8.5598
Total	6.0900e-003	0.0592	0.0517	1.0000e-004	0.0147	2.6900e-003	0.0174	7.5800e-003	2.5000e-003	0.0101	0.0000	8.5049	8.5049	2.1900e-003	0.0000	8.5598

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3.2 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	3.2000e-004	1.3000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1505	0.1505	0.0000	2.0000e-005	0.1572
Worker	1.5000e-004	1.1000e-004	1.4600e-003	0.0000	5.5000e-004	0.0000	5.5000e-004	1.4000e-004	0.0000	1.5000e-004	0.0000	0.4020	0.4020	1.0000e-005	1.0000e-005	0.4053
Total	1.6000e-004	4.3000e-004	1.5900e-003	0.0000	6.1000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.5525	0.5525	1.0000e-005	3.0000e-005	0.5625

3.3 Grading - 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					
Fugitive Dust					0.0305	0.0000	0.0305	0.0139	0.0000	0.0139	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9100e-003	0.0732	0.0478	1.2000e-004		2.9100e-003	2.9100e-003		2.6700e-003	2.6700e-003	0.0000	10.5597	10.5597	3.4200e-003	0.0000	10.6451
Total	6.9100e-003	0.0732	0.0478	1.2000e-004	0.0305	2.9100e-003	0.0334	0.0139	2.6700e-003	0.0166	0.0000	10.5597	10.5597	3.4200e-003	0.0000	10.6451

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

3.3 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	2.6000e-004	1.1000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.1204	0.1204	0.0000	2.0000e-005	0.1258
Worker	1.6000e-004	1.1000e-004	1.5100e-003	0.0000	5.7000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4181	0.4181	1.0000e-005	1.0000e-005	0.4215
Total	1.7000e-004	3.7000e-004	1.6200e-003	0.0000	6.2000e-004	0.0000	6.2000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.5385	0.5385	1.0000e-005	3.0000e-005	0.5473

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					0.0137	0.0000	0.0137	6.2700e-003	0.0000	6.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9100e-003	0.0732	0.0478	1.2000e-004		2.9100e-003	2.9100e-003		2.6700e-003	2.6700e-003	0.0000	10.5597	10.5597	3.4200e-003	0.0000	10.6451
Total	6.9100e-003	0.0732	0.0478	1.2000e-004	0.0137	2.9100e-003	0.0166	6.2700e-003	2.6700e-003	8.9400e-003	0.0000	10.5597	10.5597	3.4200e-003	0.0000	10.6451

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3.3 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	2.6000e-004	1.1000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.1204	0.1204	0.0000	2.0000e-005	0.1258
Worker	1.6000e-004	1.1000e-004	1.5100e-003	0.0000	5.7000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4181	0.4181	1.0000e-005	1.0000e-005	0.4215
Total	1.7000e-004	3.7000e-004	1.6200e-003	0.0000	6.2000e-004	0.0000	6.2000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.5385	0.5385	1.0000e-005	3.0000e-005	0.5473

3.4 Structural Facilities - 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	0.0810	0.7219	0.8003	1.4400e-003		0.0321	0.0321		0.0305	0.0305	0.0000	122.7689	122.7689	0.0252	0.0000	123.3986
Total	0.0810	0.7219	0.8003	1.4400e-003		0.0321	0.0321		0.0305	0.0305	0.0000	122.7689	122.7689	0.0252	0.0000	123.3986

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

3.4 Structural Facilities - 2024

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	2.1500e-003	0.0670	0.0276	3.3000e-004	0.0119	5.3000e-004	0.0124	3.4200e-003	5.1000e-004	3.9300e-003	0.0000	31.4290	31.4290	3.4000e-004	4.6400e-003	32.8214
Worker	8.6800e-003	6.1300e-003	0.0839	2.5000e-004	0.0314	1.4000e-004	0.0316	8.3500e-003	1.3000e-004	8.4800e-003	0.0000	23.1550	23.1550	5.4000e-004	5.9000e-004	23.3446
Total	0.0108	0.0732	0.1115	5.8000e-004	0.0433	6.7000e-004	0.0440	0.0118	6.4000e-004	0.0124	0.0000	54.5841	54.5841	8.8000e-004	5.2300e-003	56.1660

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	0.0810	0.7219	0.8003	1.4400e-003		0.0321	0.0321		0.0305	0.0305	0.0000	122.7687	122.7687	0.0252	0.0000	123.3985
Total	0.0810	0.7219	0.8003	1.4400e-003		0.0321	0.0321		0.0305	0.0305	0.0000	122.7687	122.7687	0.0252	0.0000	123.3985

Ramon Substation Expansion - Riverside-Salton Sea County, Annual

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

3.4 Structural Facilities - 2024

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	2.1500e-003	0.0670	0.0276	3.3000e-004	0.0119	5.3000e-004	0.0124	3.4200e-003	5.1000e-004	3.9300e-003	0.0000	31.4290	31.4290	3.4000e-004	4.6400e-003	32.8214
Worker	8.6800e-003	6.1300e-003	0.0839	2.5000e-004	0.0314	1.4000e-004	0.0316	8.3500e-003	1.3000e-004	8.4800e-003	0.0000	23.1550	23.1550	5.4000e-004	5.9000e-004	23.3446
Total	0.0108	0.0732	0.1115	5.8000e-004	0.0433	6.7000e-004	0.0440	0.0118	6.4000e-004	0.0124	0.0000	54.5841	54.5841	8.8000e-004	5.2300e-003	56.1660

3.5 Paving - 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	6.6400e-003	0.0614	0.0899	1.4000e-004		2.9900e-003	2.9900e-003		2.7700e-003	2.7700e-003	0.0000	12.2785	12.2785	3.8400e-003	0.0000	12.3743
Paving	5.2400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0119	0.0614	0.0899	1.4000e-004		2.9900e-003	2.9900e-003		2.7700e-003	2.7700e-003	0.0000	12.2785	12.2785	3.8400e-003	0.0000	12.3743

Ramon Substation Expansion - Riverside-Salton Sea County, Annual

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

3.5 Paving - 2024

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	2.0000e-005	5.8000e-004	2.4000e-004	0.0000	1.0000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.2709	0.2709	0.0000	4.0000e-005	0.2829
Worker	4.9000e-004	3.4000e-004	4.7200e-003	1.0000e-005	1.7700e-003	1.0000e-005	1.7800e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.3025	1.3025	3.0000e-005	3.0000e-005	1.3131
Total	5.1000e-004	9.2000e-004	4.9600e-003	1.0000e-005	1.8700e-003	1.0000e-005	1.8900e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.5734	1.5734	3.0000e-005	7.0000e-005	1.5961

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.6400e-003	0.0614	0.0899	1.4000e-004		2.9900e-003	2.9900e-003		2.7700e-003	2.7700e-003	0.0000	12.2784	12.2784	3.8400e-003	0.0000	12.3743
Paving	5.2400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0119	0.0614	0.0899	1.4000e-004		2.9900e-003	2.9900e-003		2.7700e-003	2.7700e-003	0.0000	12.2784	12.2784	3.8400e-003	0.0000	12.3743

Ramon Substation Expansion - Riverside-Salton Sea County, Annual

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

3.5 Paving - 2024

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	2.0000e-005	5.8000e-004	2.4000e-004	0.0000	1.0000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.2709	0.2709	0.0000	4.0000e-005	0.2829
Worker	4.9000e-004	3.4000e-004	4.7200e-003	1.0000e-005	1.7700e-003	1.0000e-005	1.7800e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.3025	1.3025	3.0000e-005	3.0000e-005	1.3131
Total	5.1000e-004	9.2000e-004	4.9600e-003	1.0000e-005	1.8700e-003	1.0000e-005	1.8900e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.5734	1.5734	3.0000e-005	7.0000e-005	1.5961

Ramon Substation Expansion - Riverside-Salton Sea County, Annual

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	13.80	6.20	6.20	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.540541	0.056458	0.173793	0.136090	0.025268	0.007074	0.011525	0.018705	0.000610	0.000304	0.023606	0.001094	0.004932

Ramon Substation Expansion - Riverside-Salton Sea County, Annual

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

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Ramon Substation Expansion - Riverside-Salton Sea County, Annual

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
Total		0.0000	0.0000	0.0000	0.0000

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
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Ramon Substation Expansion - Riverside-Salton Sea County, Annual

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
Category	tons/yr										MT/yr					
Mitigated	0.0173	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Unmitigated	0.0173	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005

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	6.0600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0113					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Total	0.0173	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005

Ramon Substation Expansion - Riverside-Salton Sea County, Annual

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	6.0600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0113					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Total	0.0173	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

Ramon Substation Expansion - Riverside-Salton Sea County, Annual

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	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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
Total		0.0000	0.0000	0.0000	0.0000

Ramon Substation Expansion - Riverside-Salton Sea County, Annual

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
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Ramon Substation Expansion - Riverside-Salton Sea County, Annual

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
Total		0.0000	0.0000	0.0000	0.0000

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
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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

Ramon Substation Expansion - Riverside-Salton Sea County, Annual

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

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
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

**Ramon Substation Expansion
Riverside-Salton Sea County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	4.00	Acre	4.00	174,240.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	15			Operational Year	2025
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MWhr)	189.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - total duration - 180 working days

Off-road Equipment - estimated from similar projects

Grading - assume cut/fill is balanced on site

Off-road Equipment - estimated from similar projects

Off-road Equipment - estimated from similar projects

Off-road Equipment - estimated from similar projects

Demolition - no demolition

Trips and VMT - assume no more than 20 workers on site at a time; added 2 vendor trips in site preparation, grading, and paving for misc. deliveries; others are default

Construction Off-road Equipment Mitigation - assume water 2x/day per SCAQMD Rule 403

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	144.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	9/2/2024	8/14/2024
tblConstructionPhase	PhaseEndDate	10/16/2023	1/25/2024
tblConstructionPhase	PhaseEndDate	9/26/2024	9/9/2024
tblConstructionPhase	PhaseEndDate	10/4/2023	1/15/2024
tblConstructionPhase	PhaseStartDate	10/17/2023	1/26/2024
tblConstructionPhase	PhaseStartDate	10/5/2023	1/16/2024
tblConstructionPhase	PhaseStartDate	9/3/2024	8/15/2024
tblConstructionPhase	PhaseStartDate	9/28/2023	1/2/2024
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	73.00	40.00

2.0 Emissions Summary

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0949	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	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	0.0949	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000	0.0000	9.3000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0949	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	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	0.0949	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000	0.0000	9.3000e-004

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

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	1/2/2024	1/15/2024	5	10	
2	Grading	Grading	1/16/2024	1/25/2024	5	8	
3	Structural Facilities	Building Construction	1/26/2024	8/14/2024	5	144	
4	Paving	Paving	8/15/2024	9/9/2024	5	18	

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 12

Acres of Paving: 4

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	Concrete/Industrial Saws	1	6.00	81	0.73
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Structural Facilities	Cranes	1	7.00	231	0.29
Grading	Excavators	1	8.00	158	0.38
Structural Facilities	Forklifts	2	8.00	89	0.20
Structural Facilities	Generator Sets	1	8.00	84	0.74
Grading	Graders	2	8.00	187	0.41

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Structural Facilities	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Structural Facilities	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Structural Facilities	6	40.00	29.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

3.2 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.2176	11.8349	10.3398	0.0195		0.5370	0.5370		0.5007	0.5007		1,875.0130	1,875.0130	0.4838		1,887.1074
Total	1.2176	11.8349	10.3398	0.0195	6.5523	0.5370	7.0893	3.3675	0.5007	3.8682		1,875.0130	1,875.0130	0.4838		1,887.1074

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1500e-003	0.0612	0.0260	3.1000e-004	0.0115	5.1000e-004	0.0120	3.3200e-003	4.9000e-004	3.8000e-003		33.1461	33.1461	3.6000e-004	4.8900e-003	34.6137
Worker	0.0339	0.0200	0.3400	9.5000e-004	0.1110	5.0000e-004	0.1115	0.0294	4.6000e-004	0.0299		95.5689	95.5689	2.0700e-003	2.1700e-003	96.2670
Total	0.0361	0.0812	0.3660	1.2600e-003	0.1225	1.0100e-003	0.1235	0.0328	9.5000e-004	0.0337		128.7150	128.7150	2.4300e-003	7.0600e-003	130.8807

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

3.2 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.2176	11.8349	10.3398	0.0195		0.5370	0.5370		0.5007	0.5007	0.0000	1,875.013 0	1,875.013 0	0.4838		1,887.107 3
Total	1.2176	11.8349	10.3398	0.0195	2.9486	0.5370	3.4856	1.5154	0.5007	2.0160	0.0000	1,875.013 0	1,875.013 0	0.4838		1,887.107 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1500e-003	0.0612	0.0260	3.1000e-004	0.0115	5.1000e-004	0.0120	3.3200e-003	4.9000e-004	3.8000e-003		33.1461	33.1461	3.6000e-004	4.8900e-003	34.6137
Worker	0.0339	0.0200	0.3400	9.5000e-004	0.1110	5.0000e-004	0.1115	0.0294	4.6000e-004	0.0299		95.5689	95.5689	2.0700e-003	2.1700e-003	96.2670
Total	0.0361	0.0812	0.3660	1.2600e-003	0.1225	1.0100e-003	0.1235	0.0328	9.5000e-004	0.0337		128.7150	128.7150	2.4300e-003	7.0600e-003	130.8807

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

3.3 Grading - 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	lb/day										lb/day					
Fugitive Dust					7.6128	0.0000	7.6128	3.4820	0.0000	3.4820			0.0000			0.0000
Off-Road	1.7284	18.2902	11.9446	0.0301		0.7263	0.7263		0.6682	0.6682		2,910.028 1	2,910.028 1	0.9412		2,933.557 1
Total	1.7284	18.2902	11.9446	0.0301	7.6128	0.7263	8.3391	3.4820	0.6682	4.1502		2,910.028 1	2,910.028 1	0.9412		2,933.557 1

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1500e-003	0.0612	0.0260	3.1000e-004	0.0115	5.1000e-004	0.0120	3.3200e-003	4.9000e-004	3.8000e-003		33.1461	33.1461	3.6000e-004	4.8900e-003	34.6137
Worker	0.0441	0.0260	0.4420	1.2300e-003	0.1443	6.4000e-004	0.1450	0.0383	5.9000e-004	0.0389		124.2396	124.2396	2.7000e-003	2.8200e-003	125.1471
Total	0.0462	0.0872	0.4680	1.5400e-003	0.1558	1.1500e-003	0.1570	0.0416	1.0800e-003	0.0427		157.3857	157.3857	3.0600e-003	7.7100e-003	159.7608

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

3.3 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.4258	0.0000	3.4258	1.5669	0.0000	1.5669			0.0000			0.0000
Off-Road	1.7284	18.2902	11.9446	0.0301		0.7263	0.7263		0.6682	0.6682	0.0000	2,910.028 1	2,910.028 1	0.9412		2,933.557 1
Total	1.7284	18.2902	11.9446	0.0301	3.4258	0.7263	4.1520	1.5669	0.6682	2.2351	0.0000	2,910.028 1	2,910.028 1	0.9412		2,933.557 1

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1500e-003	0.0612	0.0260	3.1000e-004	0.0115	5.1000e-004	0.0120	3.3200e-003	4.9000e-004	3.8000e-003		33.1461	33.1461	3.6000e-004	4.8900e-003	34.6137
Worker	0.0441	0.0260	0.4420	1.2300e-003	0.1443	6.4000e-004	0.1450	0.0383	5.9000e-004	0.0389		124.2396	124.2396	2.7000e-003	2.8200e-003	125.1471
Total	0.0462	0.0872	0.4680	1.5400e-003	0.1558	1.1500e-003	0.1570	0.0416	1.0800e-003	0.0427		157.3857	157.3857	3.0600e-003	7.7100e-003	159.7608

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

3.4 Structural Facilities - 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	lb/day										lb/day					
Off-Road	1.1255	10.0258	11.1152	0.0200		0.4460	0.4460		0.4230	0.4230		1,879.5763	1,879.5763	0.3857		1,889.2183
Total	1.1255	10.0258	11.1152	0.0200		0.4460	0.4460		0.4230	0.4230		1,879.5763	1,879.5763	0.3857		1,889.2183

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0311	0.8879	0.3773	4.5300e-003	0.1670	7.3900e-003	0.1744	0.0481	7.0700e-003	0.0552		480.6183	480.6183	5.2300e-003	0.0710	501.8987
Worker	0.1356	0.0800	1.3599	3.7800e-003	0.4441	1.9800e-003	0.4461	0.1178	1.8200e-003	0.1196		382.2756	382.2756	8.2900e-003	8.6700e-003	385.0678
Total	0.1667	0.9678	1.7372	8.3100e-003	0.6111	9.3700e-003	0.6204	0.1659	8.8900e-003	0.1747		862.8939	862.8939	0.0135	0.0796	886.9666

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

3.4 Structural Facilities - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1255	10.0258	11.1152	0.0200		0.4460	0.4460		0.4230	0.4230	0.0000	1,879.5763	1,879.5763	0.3857		1,889.2182
Total	1.1255	10.0258	11.1152	0.0200		0.4460	0.4460		0.4230	0.4230	0.0000	1,879.5763	1,879.5763	0.3857		1,889.2182

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0311	0.8879	0.3773	4.5300e-003	0.1670	7.3900e-003	0.1744	0.0481	7.0700e-003	0.0552		480.6183	480.6183	5.2300e-003	0.0710	501.8987
Worker	0.1356	0.0800	1.3599	3.7800e-003	0.4441	1.9800e-003	0.4461	0.1178	1.8200e-003	0.1196		382.2756	382.2756	8.2900e-003	8.6700e-003	385.0678
Total	0.1667	0.9678	1.7372	8.3100e-003	0.6111	9.3700e-003	0.6204	0.1659	8.8900e-003	0.1747		862.8939	862.8939	0.0135	0.0796	886.9666

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

3.5 Paving - 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	lb/day										lb/day					
Off-Road	0.7375	6.8248	9.9854	0.0158		0.3322	0.3322		0.3073	0.3073		1,503.8538	1,503.8538	0.4697		1,515.5972
Paving	0.5822					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3197	6.8248	9.9854	0.0158		0.3322	0.3322		0.3073	0.3073		1,503.8538	1,503.8538	0.4697		1,515.5972

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1500e-003	0.0612	0.0260	3.1000e-004	0.0115	5.1000e-004	0.0120	3.3200e-003	4.9000e-004	3.8000e-003		33.1461	33.1461	3.6000e-004	4.8900e-003	34.6137
Worker	0.0610	0.0360	0.6120	1.7000e-003	0.1998	8.9000e-004	0.2007	0.0530	8.2000e-004	0.0538		172.0240	172.0240	3.7300e-003	3.9000e-003	173.2805
Total	0.0632	0.0972	0.6380	2.0100e-003	0.2114	1.4000e-003	0.2127	0.0563	1.3100e-003	0.0576		205.1701	205.1701	4.0900e-003	8.7900e-003	207.8942

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7375	6.8248	9.9854	0.0158		0.3322	0.3322		0.3073	0.3073	0.0000	1,503.8538	1,503.8538	0.4697		1,515.5972
Paving	0.5822					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3197	6.8248	9.9854	0.0158		0.3322	0.3322		0.3073	0.3073	0.0000	1,503.8538	1,503.8538	0.4697		1,515.5972

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1500e-003	0.0612	0.0260	3.1000e-004	0.0115	5.1000e-004	0.0120	3.3200e-003	4.9000e-004	3.8000e-003		33.1461	33.1461	3.6000e-004	4.8900e-003	34.6137
Worker	0.0610	0.0360	0.6120	1.7000e-003	0.1998	8.9000e-004	0.2007	0.0530	8.2000e-004	0.0538		172.0240	172.0240	3.7300e-003	3.9000e-003	173.2805
Total	0.0632	0.0972	0.6380	2.0100e-003	0.2114	1.4000e-003	0.2127	0.0563	1.3100e-003	0.0576		205.1701	205.1701	4.0900e-003	8.7900e-003	207.8942

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	13.80	6.20	6.20	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.540541	0.056458	0.173793	0.136090	0.025268	0.007074	0.011525	0.018705	0.000610	0.000304	0.023606	0.001094	0.004932

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

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	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0949	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004
Unmitigated	0.0949	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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	lb/day										lb/day					
Architectural Coating	0.0332					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0617					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004
Total	0.0950	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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	lb/day										lb/day					
Architectural Coating	0.0332					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0617					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004
Total	0.0950	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

Ramon Substation Expansion - Riverside-Salton Sea County, Summer

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

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
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

**Ramon Substation Expansion
Riverside-Salton Sea County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	4.00	Acre	4.00	174,240.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	15			Operational Year	2025
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MWhr)	189.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - total duration - 180 working days

Off-road Equipment - estimated from similar projects

Grading - assume cut/fill is balanced on site

Off-road Equipment - estimated from similar projects

Off-road Equipment - estimated from similar projects

Off-road Equipment - estimated from similar projects

Demolition - no demolition

Trips and VMT - assume no more than 20 workers on site at a time; added 2 vendor trips in site preparation, grading, and paving for misc. deliveries; others are default

Construction Off-road Equipment Mitigation - assume water 2x/day per SCAQMD Rule 403

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	144.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	9/2/2024	8/14/2024
tblConstructionPhase	PhaseEndDate	10/16/2023	1/25/2024
tblConstructionPhase	PhaseEndDate	9/26/2024	9/9/2024
tblConstructionPhase	PhaseEndDate	10/4/2023	1/15/2024
tblConstructionPhase	PhaseStartDate	10/17/2023	1/26/2024
tblConstructionPhase	PhaseStartDate	10/5/2023	1/16/2024
tblConstructionPhase	PhaseStartDate	9/3/2024	8/15/2024
tblConstructionPhase	PhaseStartDate	9/28/2023	1/2/2024
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	73.00	40.00

2.0 Emissions Summary

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0949	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	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	0.0949	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000	0.0000	9.3000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0949	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	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	0.0949	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000	0.0000	9.3000e-004

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

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	1/2/2024	1/15/2024	5	10	
2	Grading	Grading	1/16/2024	1/25/2024	5	8	
3	Structural Facilities	Building Construction	1/26/2024	8/14/2024	5	144	
4	Paving	Paving	8/15/2024	9/9/2024	5	18	

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 12

Acres of Paving: 4

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	Concrete/Industrial Saws	1	6.00	81	0.73
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Structural Facilities	Cranes	1	7.00	231	0.29
Grading	Excavators	1	8.00	158	0.38
Structural Facilities	Forklifts	2	8.00	89	0.20
Structural Facilities	Generator Sets	1	8.00	84	0.74
Grading	Graders	2	8.00	187	0.41

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Structural Facilities	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Structural Facilities	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Structural Facilities	6	40.00	29.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	2.00	0.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

3.2 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.2176	11.8349	10.3398	0.0195		0.5370	0.5370		0.5007	0.5007		1,875.0130	1,875.0130	0.4838		1,887.1074
Total	1.2176	11.8349	10.3398	0.0195	6.5523	0.5370	7.0893	3.3675	0.5007	3.8682		1,875.0130	1,875.0130	0.4838		1,887.1074

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9800e-003	0.0650	0.0269	3.1000e-004	0.0115	5.1000e-004	0.0120	3.3200e-003	4.9000e-004	3.8100e-003		33.2373	33.2373	3.5000e-004	4.9100e-003	34.7099
Worker	0.0319	0.0207	0.2763	8.6000e-004	0.1110	5.0000e-004	0.1115	0.0294	4.6000e-004	0.0299		86.6119	86.6119	2.0700e-003	2.2200e-003	87.3249
Total	0.0338	0.0857	0.3032	1.1700e-003	0.1225	1.0100e-003	0.1235	0.0328	9.5000e-004	0.0337		119.8492	119.8492	2.4200e-003	7.1300e-003	122.0348

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

3.2 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.2176	11.8349	10.3398	0.0195		0.5370	0.5370		0.5007	0.5007	0.0000	1,875.0130	1,875.0130	0.4838		1,887.1073
Total	1.2176	11.8349	10.3398	0.0195	2.9486	0.5370	3.4856	1.5154	0.5007	2.0160	0.0000	1,875.0130	1,875.0130	0.4838		1,887.1073

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9800e-003	0.0650	0.0269	3.1000e-004	0.0115	5.1000e-004	0.0120	3.3200e-003	4.9000e-004	3.8100e-003		33.2373	33.2373	3.5000e-004	4.9100e-003	34.7099
Worker	0.0319	0.0207	0.2763	8.6000e-004	0.1110	5.0000e-004	0.1115	0.0294	4.6000e-004	0.0299		86.6119	86.6119	2.0700e-003	2.2200e-003	87.3249
Total	0.0338	0.0857	0.3032	1.1700e-003	0.1225	1.0100e-003	0.1235	0.0328	9.5000e-004	0.0337		119.8492	119.8492	2.4200e-003	7.1300e-003	122.0348

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

3.3 Grading - 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	lb/day										lb/day					
Fugitive Dust					7.6128	0.0000	7.6128	3.4820	0.0000	3.4820			0.0000			0.0000
Off-Road	1.7284	18.2902	11.9446	0.0301		0.7263	0.7263		0.6682	0.6682		2,910.028 1	2,910.028 1	0.9412		2,933.557 1
Total	1.7284	18.2902	11.9446	0.0301	7.6128	0.7263	8.3391	3.4820	0.6682	4.1502		2,910.028 1	2,910.028 1	0.9412		2,933.557 1

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9800e-003	0.0650	0.0269	3.1000e-004	0.0115	5.1000e-004	0.0120	3.3200e-003	4.9000e-004	3.8100e-003		33.2373	33.2373	3.5000e-004	4.9100e-003	34.7099
Worker	0.0414	0.0270	0.3592	1.1100e-003	0.1443	6.4000e-004	0.1450	0.0383	5.9000e-004	0.0389		112.5955	112.5955	2.6900e-003	2.8800e-003	113.5224
Total	0.0434	0.0919	0.3861	1.4200e-003	0.1558	1.1500e-003	0.1570	0.0416	1.0800e-003	0.0427		145.8328	145.8328	3.0400e-003	7.7900e-003	148.2323

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

3.3 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.4258	0.0000	3.4258	1.5669	0.0000	1.5669			0.0000			0.0000
Off-Road	1.7284	18.2902	11.9446	0.0301		0.7263	0.7263		0.6682	0.6682	0.0000	2,910.028 1	2,910.028 1	0.9412		2,933.557 1
Total	1.7284	18.2902	11.9446	0.0301	3.4258	0.7263	4.1520	1.5669	0.6682	2.2351	0.0000	2,910.028 1	2,910.028 1	0.9412		2,933.557 1

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9800e-003	0.0650	0.0269	3.1000e-004	0.0115	5.1000e-004	0.0120	3.3200e-003	4.9000e-004	3.8100e-003		33.2373	33.2373	3.5000e-004	4.9100e-003	34.7099
Worker	0.0414	0.0270	0.3592	1.1100e-003	0.1443	6.4000e-004	0.1450	0.0383	5.9000e-004	0.0389		112.5955	112.5955	2.6900e-003	2.8800e-003	113.5224
Total	0.0434	0.0919	0.3861	1.4200e-003	0.1558	1.1500e-003	0.1570	0.0416	1.0800e-003	0.0427		145.8328	145.8328	3.0400e-003	7.7900e-003	148.2323

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

3.4 Structural Facilities - 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	lb/day										lb/day					
Off-Road	1.1255	10.0258	11.1152	0.0200		0.4460	0.4460		0.4230	0.4230		1,879.5763	1,879.5763	0.3857		1,889.2183
Total	1.1255	10.0258	11.1152	0.0200		0.4460	0.4460		0.4230	0.4230		1,879.5763	1,879.5763	0.3857		1,889.2183

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0287	0.9421	0.3905	4.5400e-003	0.1670	7.4100e-003	0.1744	0.0481	7.0900e-003	0.0552		481.9405	481.9405	5.1300e-003	0.0712	503.2939
Worker	0.1274	0.0829	1.1052	3.4300e-003	0.4441	1.9800e-003	0.4461	0.1178	1.8200e-003	0.1196		346.4476	346.4476	8.2900e-003	8.8800e-003	349.2996
Total	0.1561	1.0250	1.4956	7.9700e-003	0.6111	9.3900e-003	0.6204	0.1659	8.9100e-003	0.1748		828.3881	828.3881	0.0134	0.0801	852.5934

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

3.4 Structural Facilities - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1255	10.0258	11.1152	0.0200		0.4460	0.4460		0.4230	0.4230	0.0000	1,879.5763	1,879.5763	0.3857		1,889.2182
Total	1.1255	10.0258	11.1152	0.0200		0.4460	0.4460		0.4230	0.4230	0.0000	1,879.5763	1,879.5763	0.3857		1,889.2182

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0287	0.9421	0.3905	4.5400e-003	0.1670	7.4100e-003	0.1744	0.0481	7.0900e-003	0.0552		481.9405	481.9405	5.1300e-003	0.0712	503.2939
Worker	0.1274	0.0829	1.1052	3.4300e-003	0.4441	1.9800e-003	0.4461	0.1178	1.8200e-003	0.1196		346.4476	346.4476	8.2900e-003	8.8800e-003	349.2996
Total	0.1561	1.0250	1.4956	7.9700e-003	0.6111	9.3900e-003	0.6204	0.1659	8.9100e-003	0.1748		828.3881	828.3881	0.0134	0.0801	852.5934

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

3.5 Paving - 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	lb/day										lb/day					
Off-Road	0.7375	6.8248	9.9854	0.0158		0.3322	0.3322		0.3073	0.3073		1,503.8538	1,503.8538	0.4697		1,515.5972
Paving	0.5822					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3197	6.8248	9.9854	0.0158		0.3322	0.3322		0.3073	0.3073		1,503.8538	1,503.8538	0.4697		1,515.5972

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9800e-003	0.0650	0.0269	3.1000e-004	0.0115	5.1000e-004	0.0120	3.3200e-003	4.9000e-004	3.8100e-003		33.2373	33.2373	3.5000e-004	4.9100e-003	34.7099
Worker	0.0573	0.0373	0.4973	1.5400e-003	0.1998	8.9000e-004	0.2007	0.0530	8.2000e-004	0.0538		155.9014	155.9014	3.7300e-003	3.9900e-003	157.1848
Total	0.0593	0.1023	0.5243	1.8500e-003	0.2114	1.4000e-003	0.2128	0.0563	1.3100e-003	0.0576		189.1387	189.1387	4.0800e-003	8.9000e-003	191.8947

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7375	6.8248	9.9854	0.0158		0.3322	0.3322		0.3073	0.3073	0.0000	1,503.8538	1,503.8538	0.4697		1,515.5972
Paving	0.5822					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3197	6.8248	9.9854	0.0158		0.3322	0.3322		0.3073	0.3073	0.0000	1,503.8538	1,503.8538	0.4697		1,515.5972

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9800e-003	0.0650	0.0269	3.1000e-004	0.0115	5.1000e-004	0.0120	3.3200e-003	4.9000e-004	3.8100e-003		33.2373	33.2373	3.5000e-004	4.9100e-003	34.7099
Worker	0.0573	0.0373	0.4973	1.5400e-003	0.1998	8.9000e-004	0.2007	0.0530	8.2000e-004	0.0538		155.9014	155.9014	3.7300e-003	3.9900e-003	157.1848
Total	0.0593	0.1023	0.5243	1.8500e-003	0.2114	1.4000e-003	0.2128	0.0563	1.3100e-003	0.0576		189.1387	189.1387	4.0800e-003	8.9000e-003	191.8947

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	13.80	6.20	6.20	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.540541	0.056458	0.173793	0.136090	0.025268	0.007074	0.011525	0.018705	0.000610	0.000304	0.023606	0.001094	0.004932

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

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	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0949	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004
Unmitigated	0.0949	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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	lb/day										lb/day					
Architectural Coating	0.0332					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0617					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004
Total	0.0950	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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	lb/day										lb/day					
Architectural Coating	0.0332					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0617					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004
Total	0.0950	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.3000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

Ramon Substation Expansion - Riverside-Salton Sea County, Winter

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

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
