

Appendix F

Air Quality Information

Appendix F-1
Air Quality Modeling Tables

Alternative A - Inputs

Input	Type of Input	Proposed Project	Source/Notes
Project Name	Project Name	Koi Nation Shiloh Resort and Casino Project	Project Description
Project Location	County	Sonoma (San Francisco)	Project Description
Climate zone	Climate Zone Number	4	Appendix F of CalEEMod User Guide
Land Use Setting	Urban or Rural	Rural	Site and Vicinity Figure
Start of Construction	Date	July 2026	Section 2 of the EA/TEIR
Operational Year	1st year of operation after full buildout.	2028	Section 2 of the EA/TEIR
Utility Company	Utility Company Name	PG&E	Section 2 of the EA/TEIR
Land Use Type and Subtype	Residential, Commercial, Recreation, etc.	See Table 1	See Table 1
Unit Amount	Size of Buildings or Number of units for each Land Use Type.	See Table 1	See Table 1
Lot Acreage	Acreage of each Land Use Type	See Table 1	See Table 1
Population	Population based on persons/household	Default	Default
Construction Phases	Type of construction phase (Demo, Site Prep, etc.) and beginning and ending dates	See Table 2	See Table 2
Off-Road Equipment	Type of equipment (Excavator, Dozer, etc.) and number of units per construction phase	See Table 2	See Table 2
Dust From Material Haul	Import/Export Material (Cu Yd or Tons)	10,000 CY import	Grading and Hydrology Report (Section 3.4)
	Total Acres Graded	51.5	Site plan
Demolition	Sq ft or tons of Demo (Tons or Sqft)	6,400 sq ft	Google Earth, 2022
Construction Trip Gen Rate	Average number of one-way trips per day	Default	Defaults
Operational Trip Reductions	% reduction in trips.	See Table 3	See Table 3
Operational Trip Gen Rate and trip length	Trips and trip lengths	See Table 3	See Table 3
Area Sources	Hearths – # of wood-burning fireplaces, # of gas fireplaces, and # of units with no fireplace.	NA	No hearths are included in project design.

Alternative A - Inputs (cont.)

Input	Type of Input	Proposed Project	Source/Notes
Energy Use	Project Specific Emission Factors.	See Table 4	See Table 4
Water and Wastewater	Indoor and outdoor water use for each Land Use Subtype in gallons per year.	See Table 1	See Table 1
Solid waste	Tons of solid waste generated per year	1,919 ton/year	EA/TEIR Section 3.10 Table 3.10-2
	Land Fill No Gas Capture, Landfill Capture Gas Flare Rate	Default	CalEEMod 2020.4.0 Default
Operational off-road equipment	Excavator, Dozer, etc.	--	--
Stationary Sources	Emergency Generators	Four Tier 4 1,650-KW (2,447 HP) emergency gen/sets operating 60 hours per year. One Tier 4 1,650-KW (2,447 HP) emergency gen/set operating 12 hours per year. One Tier 4 900-KW (1,367 HP) emergency gen/set operating 60 hours per year.	Section 2 of the EA/TEIR
Land Use Change	Vegetation land use type (cropland, etc.) and initial and final acreage	Initial Cropland: 61.7 acres Final Cropland: 14.1 acres	GIS analysis
Sequestration	Type and net number of new trees added	Not Applicable	Insignificant increase in the number of trees on project site for modeling purposes

Alternative A – Mitigation Inputs

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Off-Road Equipment	C-1	Yes	Engine Type, DPF Level, and Oxidation Catalyst	See Off-Road Equipment Mitigation Inputs	See Off-Road Equipment Mitigation Inputs
Soil Stabilizer for Unpaved Roads	N/A	Yes	PM ₁₀ (% Reduction)	10%	Default % Reduction.
	N/A		PM _{2.5} (% Reduction)	10%	Default % Reduction.
Water Exposed Area	N/A	Yes	Frequency (per day)	2 times per day	Section 2 of the EA/TEIR
	N/A		PM ₁₀ (% Reduction)	55%	Default % Reduction.
	N/A		PM _{2.5} (% Reduction)	55%	Default % Reduction.
Replace Ground Cover of Area Disturbed	N/A	No	PM ₁₀ (% Reduction)	--	--
	N/A		PM _{2.5} (% Reduction)	--	--
Unpaved Road Mitigation	N/A	No	Moisture Content (%)	--	--
	N/A	Yes	Vehicle Speed (mph)	15 mph	Section 2 of the EA/TEIR
Type of Residential	N/A	No	Type of Residential	--	--
Increased Density	LUT-1	No	Dwelling Units/Acre	--	--
			Job/Job Acre	--	--
Increased Diversity	LUT-3	No	Yes or No	--	--
Improved Walkability Design	LUT-9	No	Intersections/Square Miles	--	--
Improve Destination Accessibility	LUT-4	No	Distance to Downtown/Job Ctr	--	--
Increased Transit Accessibility	LUT-5	No	Average Distance to Transit Station (miles)	--	--
Integrated Below Market Rate Housing	LUT-6	No	# Dwelling Units Below Market Rate	--	--
Improve Pedestrian Network	SDT-1	No	Yes or No; Project Site, Project Site and Connecting off-site, and Rural	--	--

Alternative A – Mitigation Inputs (cont.)

Mitigation Input	CAPCOA Mitigation	Include in Model?		Project Specific Inputs	
				Inputs	Source/Notes
Provide Traffic Calming Measures	SDT-2	No	% Streets with Improvement	--	--
		No	% Intersections with Improvement	--	--
Implement Neighborhood Electric Vehicle (NEV) Network	SDT-3	No	% of streets equipped with NEV network.	--	--
Limit Parking Supply	PDT-1	No	% Reduction in Spaces	--	--
Unbundled Parking Costs	PDT-2	No	Monthly Parking Costs (\$)	--	--
On-Street Market Pricing	PDT-3	No	% Increase in Price	--	--
Provide a Bus Rapid Transit System	TST-1	No	% Lines BRT	--	--
Expand Transit Network	TST-3	No	% Increase Transit Coverage	--	--
Increase Transit Frequency	TST-4	No	Level of Implementation	--	--
		No	% Reduction in Headways	--	--
Implement Trip Reduction Program	TRT-1, TRT-2	No	% employee eligible	--	--
		No	Program Type	--	--
Transit Subsidy	TRT-4	No	% employee eligible	--	--
		No	Daily Transit Subsidy Amount (\$)	--	--
Implement Employee Parking "Cash-Out"	TRT-15	No	% employee eligible	--	--
Workplace Parking Charge	TRT-14	No	% employee eligible	--	--
		No	Daily Parking Charge (\$)	--	--
Encourage Telecommuting and Alternative Work Schedules	TRT-6	No	% employee work 9/80	--	--
		No	% employee work 4/40	--	--
		No	% employee telecommute 1.5 days	--	--

Alternative A – Mitigation Inputs (cont.)

Mitigation Input	CAPCOA Mitigation	Include in Model?		Project Specific Inputs	
				Inputs	Source/Notes
Market Commute Trip Reduction Option	TRT-7	No	% employee eligible	--	--
Employee Vanpool/Shuttle	TRT-11	No	% employee eligible	--	--
		No	% vanpool mode share	--	--
Provide Ride Sharing Program	TRT-3	No	% employee eligible	--	--
Implement School Bus Program	TRT-13	No	% family using	--	--
Only Natural Gas Hearth	N/A	No	Yes or No	--	--
No hearth	N/A	No	Yes or No	--	--
Use of Low VOC Cleaning Supplies	N/A	No	Yes or No	--	--
Use low VOC Paint (Residential Interior)	N/A	Yes	Emission Factor (EF) (g/l)	100	BAAQMD Rule 3 Architectural Coatings (Nonflat Coating)
Use low VOC Paint (Residential Exterior)	N/A	Yes	EF (g/l)	100	BAAQMD Rule 3 Architectural Coatings (Nonflat Coating)
Use low VOC Paint (Non-residential Interior)	N/A	Yes	EF (g/l)	100	BAAQMD Rule 3 Architectural Coatings (Nonflat Coating)
Use low VOC Paint (Non-residential Exterior)	N/A	Yes	EF (g/l)	100	BAAQMD Rule 3 Architectural Coatings (Nonflat Coating)
Electric Lawnmower	A-1	No	Percent of equipment type that will be electric.	--	--
Electric Leafblower	A-1	No	Percent of equipment type that will be electric.	--	--
Electric Chainsaw	A-1	No	Percent of equipment type that will be electric.	--	--
Exceed Title 24	BE-1	No	Percentage improvement selected for the Project.	--	--

Alternative A – Mitigation Inputs (cont.)

Mitigation Input	CAPCOA Mitigation	Include in Model?	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Install High Efficiently Lighting	LE-1	Yes	% Lighting Energy Reduction	16	CAPCOA, 2010.
On-site Renewable Energy	E-1, AE-2, AE-3	No	kWh Generated	--	--
		No	% of Electricity Use Generated	--	--
Energy Efficient Appliances	BE-4	Yes	Appliance Type, Land Use Subtype, % Improvement	Use Default Values	Defaults
Apply Water Conservation Strategy	WUW-2	No	% Reduction Indoor	--	--
		No	% Reduction Outdoor	--	--
Use Reclaimed Water	WSW-1	No	% Indoor Water Use	--	--
		No	% Outdoor Water Use	--	--
Use Grey Water	WSW-2	No	% Indoor Water Use	--	--
		No	% Outdoor Water Use	--	--
Install Low-Flow Bathroom Faucet	WUW-1	No	% Reduction in flow	--	Included in Project
Install Low-flow Kitchen Faucet	WUW-1	No	% Reduction in flow	--	Included in Project
Install Low-flow Toilet	WUW-1	No	% Reduction in flow	--	Included in Project
Install Low-flow Shower	WUW-1	No	% Reduction in flow	--	Included in Project
Turf Reduction	WUW-5	No	Turf Reduction Area (sqft)	--	--
		No	% Reduction turf	--	--
Use Water-Efficient Irrigation Systems	WUW-4	No	% Reduction	--	--
Water Efficient Landscape	WUW-3	No	Maximum Applied Water Allowance (MAWA) (gal/yr)	--	--
		No	Estimated Total Water Use (ETWU) (gal/yr)	--	--
Institute Recycling and Composting Service	SW-1	Yes	% Reduction in Waste Disposal	50%	Tribe will use County facilities which are required to divert 50 percent of waste from landfills

Table 1: Alternative A – Land Use Inputs

Land Use Inputs						
Land Use Type	Land Use Subtype ¹	Unit Amount	Size Metric	Lot Acreage	Square Feet	Water Demand (gal/yr) ²
Commercial	User Defined (Casino) ³	122.6	ksf	51.5	410,572	62,050,000
Recreation	Hotel	400	rooms	0	268,930	
Commercial	User Defined (Event Center)	53.4	ksf	0	53,380	
Commercial	User Defined (Convention) ⁴	74.2	ksf	0	74,185	
Parking	Unenclosed Parking Structure with Elevator	3,692	spaces	0	1,214,080	
Parking	Parking Lot	1,427	spaces	0	475,300	
Industrial	User Defined (WWTP)	18.9	Ksf	0	18,900	

Notes:

ksf = 1,000 square feet

1 - Source: Section 2, Project Description.

2 - Source: Water and Wastewater Feasibility Report, Appendix A.

3 – Unit amount includes gaming floor and high limits gaming, square feet is total casino.

4 – Includes ballrooms and meeting rooms.

Table 2: Alternative A – Construction Equipment

Equipment	Construction Phase Activities					
	Demolition (7/1/26 – 7/14/26)	Site Preparation (7/1/26 – 7/21/26)	Grading (7/22/26 – 9/15/26)	Construction (9/16/26 – 12/28/27)	Paving (6/15/27 – 10/18/27)	Architectural Coating (3/23/27 – 12/27/27)
All Heavy Equipment	Default	Default	Default	Default	Default	Default
Worker Trips	Default	Default	Default	Default	Default	Default
Soil Haul Trips	Default	Default	Default	Default	Default	Default
Soil Haul	Default	Default	Default	Default	Default	Default
Total Days	10	15	40	335	90	200

Table 3: Alternative A – Trip Generation

Land Use Subtype	Daily Trip Generation Rate ¹		Average Trip Length (miles) ²			Trip Type (%) ³			Trip Purpose (%) ⁴		
	Weekday	Saturday/Sunday	Commercial-Customer Trips (C-C)	Commercial - Work Trips (C-W)	Commercial-Nonwork Trips (C-NW)	Primary	Diverted	Pass-By	Commercial-Customer Trips(C-C)	Commercial-Work Trips (C-W)	Commercial-Nonwork Trips (C-NW)
Commercial User Defined (Casino/Event Center/Convention)	41.62	59.79	55	Default	10	100	0	0	77	5	18
Recreation Hotel	2.0	2.05	55	Default	10	Default	Default	Default	Default	Default	Default

Notes:

- 1 Trip Generation Rates for Casino, Event Center and Convention Center adjusted for consistency with Traffic Impact Analysis Report (TJKM, 2022).
- 2 Average trip length for non-work trips based on distance from Santa Rosa area to project site. Average trip length for customer trips based on the market analysis (Meister, 2021).
- 3 All Trip Type percentages, with exception of the Casino/Event Center/Convention, are CalEEMod default values. The Casino/Event Center/Convention Trip Type percentage conservatively assumes that all trips are primary.
- 4 All Trip Purpose percentages, with exception of the Casino/Event Center/Convention, are CalEEMod default values. The Casino/Event Center/Convention Trip Purpose is based on estimated employee and service trips.

Table 4: Alternative A – Energy Use

Land Use Subtype	Title-24 Electricity Energy Intensity (KWhr/size/yr)	Nontitle-24 Electricity Energy Intensity (KWhr/size/yr)	Lighting Energy Intensity (KWhr/size/yr)	Title-24 Natural Gas Intensity (KBtu/size/yr)	Non-title-24 Natural Gas Intensity (KBtu/size/yr)
User Defined (Casino, Event Center, Convention)	7.35	23.69	6.78	0	0
Hotel	Default	Default	Default	Default	Default
Unenclosed Parking Structure with Elevator	Default	Default	Default	Default	Default
Parking Lot	Default	Default	Default	Default	Default
User Defined (WWTP)	1.32	3.7	3.08	0	0

Notes: Casino, Event Center, Convention energy use based on CalEEMod default values for quality restaurant energy use. WWTP energy use based on CalEEMod default values for general light industrial. No natural gas use expected.

Alternative A – Off-Road Equipment Mitigation Inputs

Equipment Type	Engine Tier	Number of Equipment Mitigated	Diesel Particulate Filter (DPF) Level 2014
Welders, Air Compressors, Concrete/Industrial Saws	No Change	0	No Change
All Other Equipment	Tier 4	All	3

Mitigation Measures incorporated into EIS

- The Tribe shall use Tier 4 construction equipment for diesel equipment with a horsepower rating of greater than 50.
- The Tribe shall use soil stabilizer on unpaved roads.
- The Tribe shall apply water to exposed construction areas twice a day.
- The Tribe shall restrict vehicle speeds on the construction site to 15 miles per hour.
- The Tribe shall restrict construction vehicle idling to five minutes.
- The Tribe shall use energy efficient lighting
- The Tribe shall use reclaimed water for outdoor landscape irrigation (included as part of the Project Description; however, input as a mitigation measure for the purposes of CalEEMod).

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	122.60	User Defined Unit	51.50	410,572.00	0
User Defined Commercial	74.20	User Defined Unit	0.00	74,185.00	0
User Defined Commercial	53.40	User Defined Unit	0.00	0.00	0
User Defined Industrial	18.90	User Defined Unit	0.00	18,900.00	0
Parking Lot	475.30	1000sqft	0.00	475,300.00	0
Unenclosed Parking with Elevator	1,214.10	1000sqft	0.00	1,214,100.00	0
Hotel	400.00	Room	0.00	268,930.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	75
Climate Zone	4			Operational Year	2028
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - See input tables for assumptions.
- Construction Phase - See input tables for assumptions.
- Trips and VMT -
- Demolition -
- Grading - See input tables for assumptions.

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Vehicle Trips - See input tables for assumptions.

Area Coating -

Energy Use - See input tables for assumptions.

Water And Wastewater - See input tables for assumptions.

Solid Waste - See input tables for assumptions.

Land Use Change - See input tables for assumptions.

Construction Off-road Equipment Mitigation - See input tables for assumptions.

Area Mitigation - Compliance with BAAQMD Rule 3

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - See detailed assumptions.

Stationary Sources - Process Boilers -

Stationary Sources - Emergency Generators and Fire Pumps EF - Based on generator specifications.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
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
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	70.00	10.00
tblConstructionPhase	NumDays	40.00	15.00
tblConstructionPhase	NumDays	110.00	40.00
tblConstructionPhase	NumDays	1,110.00	335.00
tblConstructionPhase	NumDays	75.00	200.00
tblConstructionPhase	NumDays	75.00	90.00
tblEnergyUse	LightingElect	0.00	6.78
tblEnergyUse	LightingElect	0.00	3.08
tblEnergyUse	NT24E	0.00	23.69
tblEnergyUse	NT24E	0.00	3.70

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tblEnergyUse	NT24NG	4.75	0.00
tblEnergyUse	T24E	0.00	7.35
tblEnergyUse	T24E	0.00	1.32
tblEnergyUse	T24NG	39.16	0.00
tblGrading	MaterialImported	0.00	10,000.00
tblLandUse	LandUseSquareFeet	0.00	410,572.00
tblLandUse	LandUseSquareFeet	0.00	74,185.00
tblLandUse	LandUseSquareFeet	0.00	18,900.00
tblLandUse	LandUseSquareFeet	580,800.00	268,930.00
tblLandUse	LotAcreage	0.00	51.50
tblLandUse	LotAcreage	10.91	0.00
tblLandUse	LotAcreage	27.87	0.00
tblLandUse	LotAcreage	13.33	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	219.00	1,919.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	14,600.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	40.00
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,367.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00

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tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	48.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	Load_Factor	0.73	0.50
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	4.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	5.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TTP	0.00	77.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TTP	0.00	18.00
tblVehicleTrips	CW_TTP	0.00	5.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	8.19	2.05
tblVehicleTrips	ST_TR	0.00	59.79
tblVehicleTrips	SU_TR	5.95	2.05
tblVehicleTrips	SU_TR	0.00	59.79
tblVehicleTrips	WD_TR	8.36	2.00
tblVehicleTrips	WD_TR	0.00	41.62
tblWater	IndoorWaterUseRate	10,146,708.00	0.00
tblWater	IndoorWaterUseRate	0.00	62,050,000.00
tblWater	OutdoorWaterUseRate	1,127,412.00	0.00

2.0 Emissions Summary

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
2026	0.2661	2.1424	2.4225	8.2700e-003	0.7399	0.0610	0.8008	0.2593	0.0567	0.3160	0.0000	764.1026	764.1026	0.0822	0.0523	781.7329
2027	5.2040	5.4238	8.3959	0.0262	1.8855	0.1516	2.0371	0.5034	0.1417	0.6450	0.0000	2,418.9528	2,418.9528	0.2098	0.1576	2,471.1492
Maximum	5.2040	5.4238	8.3959	0.0262	1.8855	0.1516	2.0371	0.5034	0.1417	0.6450	0.0000	2,418.9528	2,418.9528	0.2098	0.1576	2,471.1492

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					
2026	0.1757	1.0996	2.6400	8.2700e-003	0.5555	0.0119	0.5674	0.1771	0.0116	0.1887	0.0000	764.1023	764.1023	0.0822	0.0523	781.7326
2027	5.0724	3.8853	8.7391	0.0262	1.8855	0.0717	1.9572	0.5034	0.0683	0.5717	0.0000	2,418.9520	2,418.9520	0.2098	0.1576	2,471.1485
Maximum	5.0724	3.8853	8.7391	0.0262	1.8855	0.0717	1.9572	0.5034	0.0683	0.5717	0.0000	2,418.9520	2,418.9520	0.2098	0.1576	2,471.1485

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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	4.06	34.12	-5.18	0.00	7.02	60.65	11.04	10.78	59.72	20.88	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	7-1-2026	9-30-2026	1.2103	0.3572
2	10-1-2026	12-31-2026	1.2073	0.9297
3	1-1-2027	3-31-2027	1.3435	1.0590
4	4-1-2027	6-30-2027	3.0149	2.5874
5	7-1-2027	9-30-2027	3.3069	2.7663
		Highest	3.3069	2.7663

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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****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	3.5666	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2,127.8979	2,127.8979	0.3443	0.0417	2,148.9390
Mobile	20.1613	37.4602	255.1561	0.6258	73.1508	0.5081	73.6589	19.6012	0.4763	20.0775	0.0000	57,816.5241	57,816.5241	2.7485	2.5496	58,645.0302
Stationary	0.5353	0.2625	1.3650	2.5700e-003		0.0263	0.0263		0.0263	0.0263	0.0000	248.4342	248.4342	0.0348	0.0000	249.3050
Waste						0.0000	0.0000		0.0000	0.0000	389.5397	0.0000	389.5397	23.0211	0.0000	965.0680
Water						0.0000	0.0000		0.0000	0.0000	19.6856	31.0651	50.7507	2.0269	0.0484	115.8323
Total	24.2633	37.7229	256.5427	0.6283	73.1508	0.5345	73.6853	19.6012	0.5026	20.1038	409.2253	60,223.9634	60,633.1887	28.1758	2.6397	62,124.2194

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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	3.5219	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2,035.1094	2,035.1094	0.3292	0.0399	2,055.2330
Mobile	20.1613	37.4602	255.1561	0.6258	73.1508	0.5081	73.6589	19.6012	0.4763	20.0775	0.0000	57,816.5241	57,816.5241	2.7485	2.5496	58,645.0302
Stationary	0.5353	0.2625	1.3650	2.5700e-003		0.0263	0.0263		0.0263	0.0263	0.0000	248.4342	248.4342	0.0348	0.0000	249.3050
Waste						0.0000	0.0000		0.0000	0.0000	194.7698	0.0000	194.7698	11.5106	0.0000	482.5340
Water						0.0000	0.0000		0.0000	0.0000	19.6856	31.0651	50.7507	2.0269	0.0484	115.8323
Total	24.2185	37.7229	256.5427	0.6283	73.1508	0.5345	73.6853	19.6012	0.5026	20.1038	214.4554	60,131.1750	60,345.6304	16.6502	2.6379	61,547.9795

	ROG	NOx	CO	SO2	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	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.59	0.15	0.47	40.91	0.07	0.93

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-295.1200
Total	-295.1200

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2026	7/14/2026	5	10	
2	Site Preparation	Site Preparation	7/1/2026	7/21/2026	5	15	
3	Grading	Grading	7/22/2026	9/15/2026	5	40	
4	Building Construction	Building Construction	9/16/2026	12/28/2027	5	335	
5	Architectural Coating	Architectural Coating	3/23/2027	12/27/2027	5	200	
6	Paving	Paving	6/15/2027	10/18/2027	5	90	

Acres of Grading (Site Preparation Phase): 22.5**Acres of Grading (Grading Phase): 120****Acres of Paving: 0**

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,158,881; Non-Residential Outdoor: 386,294; Striped Parking Area: 101,364 (Architectural Coating – sqft)

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

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Architectural Coating	Pavers	2	8.00	130	0.42
Architectural Coating	Paving Equipment	2	8.00	132	0.36
Architectural Coating	Rollers	2	8.00	80	0.38

Trips and VMT

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

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
Demolition	6	15.00	0.00	29.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,250.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	986.00	404.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	7	197.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	7	197.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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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 Demolition - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.1500e-003	0.0000	3.1500e-003	4.8000e-004	0.0000	4.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0105	0.0960	0.0971	1.9000e-004		4.2600e-003	4.2600e-003		3.9600e-003	3.9600e-003	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175
Total	0.0105	0.0960	0.0971	1.9000e-004	3.1500e-003	4.2600e-003	7.4100e-003	4.8000e-004	3.9600e-003	4.4400e-003	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175

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	3.0000e-005	2.0100e-003	4.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.8358	0.8358	3.0000e-005	1.3000e-004	0.8759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.3000e-004	1.6400e-003	0.0000	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4316	0.4316	1.0000e-005	1.0000e-005	0.4356
Total	2.5000e-004	2.1400e-003	2.0900e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.5000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	1.2674	1.2674	4.0000e-005	1.4000e-004	1.3115

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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 Demolition - 2026****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					1.4200e-003	0.0000	1.4200e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4700e-003	0.0200	0.1153	1.9000e-004		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175
Total	3.4700e-003	0.0200	0.1153	1.9000e-004	1.4200e-003	5.0000e-004	1.9200e-003	2.1000e-004	5.0000e-004	7.1000e-004	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175

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	3.0000e-005	2.0100e-003	4.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.8358	0.8358	3.0000e-005	1.3000e-004	0.8759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.3000e-004	1.6400e-003	0.0000	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4316	0.4316	1.0000e-005	1.0000e-005	0.4356
Total	2.5000e-004	2.1400e-003	2.0900e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.5000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	1.2674	1.2674	4.0000e-005	1.4000e-004	1.3115

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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 Site Preparation - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1474	0.0000	0.1474	0.0758	0.0000	0.0758	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0186	0.1893	0.1343	2.9000e-004		8.1500e-003	8.1500e-003		7.5000e-003	7.5000e-003	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032
Total	0.0186	0.1893	0.1343	2.9000e-004	0.1474	8.1500e-003	0.1556	0.0758	7.5000e-003	0.0833	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032

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	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841
Total	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841

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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 Site Preparation - 2026****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					0.0663	0.0000	0.0663	0.0341	0.0000	0.0341	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4900e-003	0.0151	0.1565	2.9000e-004		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032
Total	3.4900e-003	0.0151	0.1565	2.9000e-004	0.0663	7.0000e-005	0.0664	0.0341	7.0000e-005	0.0342	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032

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	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841
Total	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841

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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 Grading - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1846	0.0000	0.1846	0.0732	0.0000	0.0732	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0580	0.5589	0.5266	1.2400e-003		0.0226	0.0226		0.0208	0.0208	0.0000	109.0124	109.0124	0.0353	0.0000	109.8939
Total	0.0580	0.5589	0.5266	1.2400e-003	0.1846	0.0226	0.2073	0.0732	0.0208	0.0940	0.0000	109.0124	109.0124	0.0353	0.0000	109.8939

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	1.2400e-003	0.0865	0.0196	3.6000e-004	0.0104	6.1000e-004	0.0110	2.8500e-003	5.8000e-004	3.4300e-003	0.0000	36.0257	36.0257	1.1900e-003	5.7000e-003	37.7547
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	6.9000e-004	8.7200e-003	3.0000e-005	3.1400e-003	2.0000e-005	3.1600e-003	8.4000e-004	1.0000e-005	8.5000e-004	0.0000	2.3018	2.3018	7.0000e-005	7.0000e-005	2.3231
Total	2.3900e-003	0.0872	0.0283	3.9000e-004	0.0135	6.3000e-004	0.0142	3.6900e-003	5.9000e-004	4.2800e-003	0.0000	38.3274	38.3274	1.2600e-003	5.7700e-003	40.0778

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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 Grading - 2026****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					0.0831	0.0000	0.0831	0.0329	0.0000	0.0329	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.0660	0.6600	1.2400e-003		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	109.0123	109.0123	0.0353	0.0000	109.8937
Total	0.0152	0.0660	0.6600	1.2400e-003	0.0831	3.0000e-004	0.0834	0.0329	3.0000e-004	0.0332	0.0000	109.0123	109.0123	0.0353	0.0000	109.8937

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	1.2400e-003	0.0865	0.0196	3.6000e-004	0.0104	6.1000e-004	0.0110	2.8500e-003	5.8000e-004	3.4300e-003	0.0000	36.0257	36.0257	1.1900e-003	5.7000e-003	37.7547
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	6.9000e-004	8.7200e-003	3.0000e-005	3.1400e-003	2.0000e-005	3.1600e-003	8.4000e-004	1.0000e-005	8.5000e-004	0.0000	2.3018	2.3018	7.0000e-005	7.0000e-005	2.3231
Total	2.3900e-003	0.0872	0.0283	3.9000e-004	0.0135	6.3000e-004	0.0142	3.6900e-003	5.9000e-004	4.2800e-003	0.0000	38.3274	38.3274	1.2600e-003	5.7700e-003	40.0778

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0526	0.4801	0.6193	1.0400e-003		0.0203	0.0203		0.0191	0.0191	0.0000	89.2890	89.2890	0.0210	0.0000	89.8137
Total	0.0526	0.4801	0.6193	1.0400e-003		0.0203	0.0203		0.0191	0.0191	0.0000	89.2890	89.2890	0.0210	0.0000	89.8137

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	0.0143	0.6630	0.1841	2.7200e-003	0.0913	3.4500e-003	0.0948	0.0264	3.3000e-003	0.0297	0.0000	264.8888	264.8888	5.4200e-003	0.0401	276.9632
Worker	0.1091	0.0656	0.8278	2.3800e-003	0.2979	1.5300e-003	0.2995	0.0793	1.4100e-003	0.0807	0.0000	218.4417	218.4417	6.3900e-003	6.2600e-003	220.4681
Total	0.1234	0.7286	1.0119	5.1000e-003	0.3892	4.9800e-003	0.3942	0.1057	4.7100e-003	0.1104	0.0000	483.3305	483.3305	0.0118	0.0463	497.4313

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0271	0.1803	0.6629	1.0400e-003		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	89.2889	89.2889	0.0210	0.0000	89.8136
Total	0.0271	0.1803	0.6629	1.0400e-003		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	89.2889	89.2889	0.0210	0.0000	89.8136

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	0.0143	0.6630	0.1841	2.7200e-003	0.0913	3.4500e-003	0.0948	0.0264	3.3000e-003	0.0297	0.0000	264.8888	264.8888	5.4200e-003	0.0401	276.9632
Worker	0.1091	0.0656	0.8278	2.3800e-003	0.2979	1.5300e-003	0.2995	0.0793	1.4100e-003	0.0807	0.0000	218.4417	218.4417	6.3900e-003	6.2600e-003	220.4681
Total	0.1234	0.7286	1.0119	5.1000e-003	0.3892	4.9800e-003	0.3942	0.1057	4.7100e-003	0.1104	0.0000	483.3305	483.3305	0.0118	0.0463	497.4313

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1764	1.6086	2.0749	3.4800e-003		0.0681	0.0681		0.0640	0.0640	0.0000	299.1761	299.1761	0.0703	0.0000	300.9343
Total	0.1764	1.6086	2.0749	3.4800e-003		0.0681	0.0681		0.0640	0.0640	0.0000	299.1761	299.1761	0.0703	0.0000	300.9343

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	0.0464	2.1946	0.6063	8.9300e-003	0.3059	0.0114	0.3173	0.0885	0.0109	0.0993	0.0000	869.9786	869.9786	0.0185	0.1316	909.6435
Worker	0.3425	0.1990	2.6006	7.7400e-003	0.9982	4.7900e-003	1.0030	0.2657	4.4100e-003	0.2701	0.0000	710.2180	710.2180	0.0195	0.0198	716.5990
Total	0.3889	2.3936	3.2069	0.0167	1.3042	0.0162	1.3203	0.3542	0.0153	0.3694	0.0000	1,580.1966	1,580.1966	0.0380	0.1513	1,626.2425

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****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	0.0909	0.6041	2.2211	3.4800e-003		0.0181	0.0181		0.0181	0.0181	0.0000	299.1757	299.1757	0.0703	0.0000	300.9339
Total	0.0909	0.6041	2.2211	3.4800e-003		0.0181	0.0181		0.0181	0.0181	0.0000	299.1757	299.1757	0.0703	0.0000	300.9339

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	0.0464	2.1946	0.6063	8.9300e-003	0.3059	0.0114	0.3173	0.0885	0.0109	0.0993	0.0000	869.9786	869.9786	0.0185	0.1316	909.6435
Worker	0.3425	0.1990	2.6006	7.7400e-003	0.9982	4.7900e-003	1.0030	0.2657	4.4100e-003	0.2701	0.0000	710.2180	710.2180	0.0195	0.0198	716.5990
Total	0.3889	2.3936	3.2069	0.0167	1.3042	0.0162	1.3203	0.3542	0.0153	0.3694	0.0000	1,580.1966	1,580.1966	0.0380	0.1513	1,626.2425

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.3809					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1086	0.9727	1.6387	2.5800e-003		0.0470	0.0470		0.0437	0.0437	0.0000	225.7251	225.7251	0.0661	0.0000	227.3786
Total	4.4895	0.9727	1.6387	2.5800e-003		0.0470	0.0470		0.0437	0.0437	0.0000	225.7251	225.7251	0.0661	0.0000	227.3786

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	0.1061	0.0617	0.8056	2.4000e-003	0.5761	1.4800e-003	0.5775	0.1478	1.3700e-003	0.1492	0.0000	219.9993	219.9993	6.0500e-003	6.1300e-003	221.9759
Total	0.1061	0.0617	0.8056	2.4000e-003	0.5761	1.4800e-003	0.5775	0.1478	1.3700e-003	0.1492	0.0000	219.9993	219.9993	6.0500e-003	6.1300e-003	221.9759

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.3809					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0769	0.6044	1.7746	2.5800e-003		0.0264	0.0264		0.0247	0.0247	0.0000	225.7248	225.7248	0.0661	0.0000	227.3783
Total	4.4578	0.6044	1.7746	2.5800e-003		0.0264	0.0264		0.0247	0.0247	0.0000	225.7248	225.7248	0.0661	0.0000	227.3783

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	0.1061	0.0617	0.8056	2.4000e-003	0.5761	1.4800e-003	0.5775	0.1478	1.3700e-003	0.1492	0.0000	219.9993	219.9993	6.0500e-003	6.1300e-003	221.9759
Total	0.1061	0.0617	0.8056	2.4000e-003	0.5761	1.4800e-003	0.5775	0.1478	1.3700e-003	0.1492	0.0000	219.9993	219.9993	6.0500e-003	6.1300e-003	221.9759

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Paving - 2027****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	0.0412	0.3862	0.6560	1.0300e-003		0.0188	0.0188		0.0173	0.0173	0.0000	90.0867	90.0867	0.0291	0.0000	90.8150
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0412	0.3862	0.6560	1.0300e-003		0.0188	0.0188		0.0173	0.0173	0.0000	90.0867	90.0867	0.0291	0.0000	90.8150

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029
Total	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0269	0.2204	0.7172	1.0300e-003		9.5400e-003	9.5400e-003		8.7900e-003	8.7900e-003	0.0000	90.0865	90.0865	0.0291	0.0000	90.8149
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0269	0.2204	0.7172	1.0300e-003		9.5400e-003	9.5400e-003		8.7900e-003	8.7900e-003	0.0000	90.0865	90.0865	0.0291	0.0000	90.8149

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029
Total	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029

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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	20.1613	37.4602	255.1561	0.6258	73.1508	0.5081	73.6589	19.6012	0.4763	20.0775	0.0000	57,816.52 41	57,816.52 41	2.7485	2.5496	58,645.03 02
Unmitigated	20.1613	37.4602	255.1561	0.6258	73.1508	0.5081	73.6589	19.6012	0.4763	20.0775	0.0000	57,816.52 41	57,816.52 41	2.7485	2.5496	58,645.03 02

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	800.00	820.00	820.00	7,648,879	7,648,879
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
User Defined Commercial	5,102.61	7,330.25	7330.25	93,765,911	93,765,911
User Defined Commercial	3,088.20	4,436.42	4436.42	56,749,026	56,749,026
User Defined Commercial	2,222.51	3,192.79	3192.79	40,840,943	40,840,943
User Defined Industrial	0.00	0.00	0.00		
Total	11,213.32	15,779.46	15,779.46	199,004,760	199,004,760

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
Hotel	14.70	55.00	10.00	19.40	61.60	19.00	58	38	4

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	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
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Industrial	14.70	6.60	6.60	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
Hotel	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
Parking Lot	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
Unenclosed Parking with Elevator	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
User Defined Commercial	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
User Defined Industrial	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

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

[illegible]

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

Unmitigated

[illegible]

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

Mitigated

[illegible]

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco 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			
Hotel	1.99008e+006	184.1299	0.0298	3.6100e-003	185.9506
Parking Lot	166355	15.3918	2.4900e-003	3.0000e-004	15.5440
Unenclosed Parking with Elevator	2.35535e+006	217.9262	0.0353	4.2700e-003	220.0811
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	1.55278e+007	1,436.6937	0.2324	0.0282	1,450.9000
User Defined Commercial	2.80568e+006	259.5918	0.0420	5.0900e-003	262.1587
User Defined Industrial	153090	14.1645	2.2900e-003	2.8000e-004	14.3045
Total		2,127.8979	0.3443	0.0417	2,148.9390

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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****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.88896e+006	174.7741	0.0283	3.4300e-003	176.5023
Parking Lot	139738	12.9291	2.0900e-003	2.5000e-004	13.0570
Unenclosed Parking with Elevator	2.01541e+006	186.4730	0.0302	3.6600e-003	188.3169
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	1.50824e+007	1,395.4847	0.2258	0.0274	1,409.2835
User Defined Commercial	2.7252e+006	252.1459	0.0408	4.9400e-003	254.6391
User Defined Industrial	143776	13.3027	2.1500e-003	2.6000e-004	13.4343
Total		2,035.1094	0.3292	0.0399	2,055.2330

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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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
Category	tons/yr										MT/yr					
Mitigated	3.5219	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449
Unmitigated	3.5666	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4381					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.1265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9900e-003	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449
Total	3.5666	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449

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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	0.3933					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.1265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9900e-003	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449
Total	3.5219	2.0000e-004	0.0216	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449

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	50.7507	2.0269	0.0484	115.8323
Unmitigated	50.7507	2.0269	0.0484	115.8323

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	62.05 / 0	50.7507	2.0269	0.0484	115.8323
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		50.7507	2.0269	0.0484	115.8323

7.2 Water by Land Use

8.1 Mitigation Measures Waste

8.0 Waste Detail

Indoor/Outdoor Use	Mgal	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use		MT/yr			
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	62.05 / 0	50.7507	2.0269	0.0484	115.8323
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		50.7507	2.0269	0.0484	115.8323

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

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	194.7698	11.5106	0.0000	482.5340
Unmitigated	389.5397	23.0211	0.0000	965.0680

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	1919	389.5397	23.0211	0.0000	965.0680
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		389.5397	23.0211	0.0000	965.0680

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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****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	959.5	194.7698	11.5106	0.0000	482.5340
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		194.7698	11.5106	0.0000	482.5340

9.0 Operational Offroad

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
Emergency Generator	4	0	48	2447	0.73	Diesel
Emergency Generator	5	0	12	2447	0.5	Diesel
Emergency Generator	1	0	60	1367	0.73	Diesel

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	0	40	14600	0.5	CNG

User Defined Equipment

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

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Boiler - CNG (0 - 2 MMBTU)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Emergency Generator - Diesel (750 - 9999 HP)	0.5353	0.2625	1.3650	2.5700e-003		0.0263	0.0263		0.0263	0.0263	0.0000	248.4342	248.4342	0.0348	0.0000	249.3050
Total	0.5353	0.2625	1.3650	2.5700e-003		0.0263	0.0263		0.0263	0.0263	0.0000	248.4342	248.4342	0.0348	0.0000	249.3050

11.0 Vegetation

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			
Unmitigated	-295.1200	0.0000	0.0000	-295.1200

11.1 Vegetation Land Change
Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres				
Cropland	61.7 / 14.1	-295.1200	0.0000	0.0000	-295.1200
Total		-295.1200	0.0000	0.0000	-295.1200

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

Koi Nation Shiloh Resort and Casino - Alt A
Sonoma-San Francisco County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	122.60	User Defined Unit	51.50	410,572.00	0
User Defined Commercial	74.20	User Defined Unit	0.00	74,185.00	0
User Defined Commercial	53.40	User Defined Unit	0.00	0.00	0
User Defined Industrial	18.90	User Defined Unit	0.00	18,900.00	0
Parking Lot	475.30	1000sqft	0.00	475,300.00	0
Unenclosed Parking with Elevator	1,214.10	1000sqft	0.00	1,214,100.00	0
Hotel	400.00	Room	0.00	268,930.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	75
Climate Zone	4			Operational Year	2028
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MW hr)	203.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - See input tables for assumptions.
- Construction Phase - See input tables for assumptions.
- Trips and VMT -
- Demolition -
- Grading - See input tables for assumptions.

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

Vehicle Trips - See input tables for assumptions.

Area Coating -

Energy Use - See input tables for assumptions.

Water And Wastewater - See input tables for assumptions.

Solid Waste - See input tables for assumptions.

Land Use Change - See input tables for assumptions.

Construction Off-road Equipment Mitigation - See input tables for assumptions.

Area Mitigation - Compliance with BAAQMD Rule 3

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - See detailed assumptions.

Stationary Sources - Process Boilers -

Stationary Sources - Emergency Generators and Fire Pumps EF - Based on generator specifications.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
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
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	70.00	10.00
tblConstructionPhase	NumDays	40.00	15.00
tblConstructionPhase	NumDays	110.00	40.00
tblConstructionPhase	NumDays	1,110.00	335.00
tblConstructionPhase	NumDays	75.00	200.00
tblConstructionPhase	NumDays	75.00	90.00
tblEnergyUse	LightingElect	0.00	6.78
tblEnergyUse	LightingElect	0.00	3.08
tblEnergyUse	NT24E	0.00	23.69
tblEnergyUse	NT24E	0.00	3.70

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

tblEnergyUse	NT24NG	4.75	0.00
tblEnergyUse	T24E	0.00	7.35
tblEnergyUse	T24E	0.00	1.32
tblEnergyUse	T24NG	39.16	0.00
tblGrading	MaterialImported	0.00	10,000.00
tblLandUse	LandUseSquareFeet	0.00	410,572.00
tblLandUse	LandUseSquareFeet	0.00	74,185.00
tblLandUse	LandUseSquareFeet	0.00	18,900.00
tblLandUse	LandUseSquareFeet	580,800.00	268,930.00
tblLandUse	LotAcreage	0.00	51.50
tblLandUse	LotAcreage	10.91	0.00
tblLandUse	LotAcreage	27.87	0.00
tblLandUse	LotAcreage	13.33	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	219.00	1,919.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	14,600.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	40.00
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,367.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00

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

tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	48.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	Load_Factor	0.73	0.50
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	4.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	5.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TTP	0.00	77.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TTP	0.00	18.00
tblVehicleTrips	CW_TTP	0.00	5.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	8.19	2.05
tblVehicleTrips	ST_TR	0.00	59.79
tblVehicleTrips	SU_TR	5.95	2.05
tblVehicleTrips	SU_TR	0.00	59.79
tblVehicleTrips	WD_TR	8.36	2.00
tblVehicleTrips	WD_TR	0.00	41.62
tblWater	IndoorWaterUseRate	10,146,708.00	0.00
tblWater	IndoorWaterUseRate	0.00	62,050,000.00
tblWater	OutdoorWaterUseRate	1,127,412.00	0.00

2.0 Emissions Summary

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	4.6876	44.8698	43.5812	0.1630	20.6083	1.9437	22.5520	10.2835	1.7957	12.0792	0.0000	16,747.55 89	16,747.55 89	2.2514	1.3118	17,161.68 57
2027	51.4446	49.1989	81.8663	0.2345	16.7346	1.5566	18.2912	4.4380	1.4503	5.8883	0.0000	23,756.83 02	23,756.83 02	2.4227	1.3442	24,217.96 96
Maximum	51.4446	49.1989	81.8663	0.2345	20.6083	1.9437	22.5520	10.2835	1.7957	12.0792	0.0000	23,756.83 02	23,756.83 02	2.4227	1.3442	24,217.96 96

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	4.0247	22.8817	44.7881	0.1630	10.5621	0.2698	10.8318	4.6746	0.2628	4.7887	0.0000	16,747.55 89	16,747.55 89	2.2514	1.3118	17,161.68 57
2027	50.1469	34.0461	85.7175	0.2345	16.7346	0.7567	17.4914	4.4380	0.7153	5.1533	0.0000	23,756.83 02	23,756.83 02	2.4227	1.3442	24,217.96 96
Maximum	50.1469	34.0461	85.7175	0.2345	16.7346	0.7567	17.4914	4.6746	0.7153	5.1533	0.0000	23,756.83 02	23,756.83 02	2.4227	1.3442	24,217.96 96

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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	3.49	39.48	-4.03	0.00	26.90	70.67	30.65	38.10	69.87	44.67	0.00	0.00	0.00	0.00	0.00	0.00

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	19.5544	2.1800e-003	0.2402	2.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		0.5162	0.5162	1.3400e-003		0.5497
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	141.7263	243.6999	1,833.9384	4.5549	532.8814	3.5420	536.4234	142.2596	3.3198	145.5794		463,723.0465	463,723.0465	20.7303	18.8473	469,857.7830
Stationary	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	161.2807	243.7021	1,834.1785	4.5549	532.8814	3.5428	536.4242	142.2596	3.3206	145.5803		463,723.5627	463,723.5627	20.7316	18.8473	469,858.3327

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco 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
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	19.3091	2.1800e-003	0.2402	2.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		0.5162	0.5162	1.3400e-003		0.5497
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	141.7263	243.6999	1,833.9384	4.5549	532.8814	3.5420	536.4234	142.2596	3.3198	145.5794		463,723.0465	463,723.0465	20.7303	18.8473	469,857.7830
Stationary	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	161.0354	243.7021	1,834.1785	4.5549	532.8814	3.5428	536.4242	142.2596	3.3206	145.5803		463,723.5627	463,723.5627	20.7316	18.8473	469,858.3327

	ROG	NOx	CO	SO2	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	0.15	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	Demolition	Demolition	7/1/2026	7/14/2026	5	10	
2	Site Preparation	Site Preparation	7/1/2026	7/21/2026	5	15	
3	Grading	Grading	7/22/2026	9/15/2026	5	40	
4	Building Construction	Building Construction	9/16/2026	12/28/2027	5	335	

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

5	Architectural Coating	Architectural Coating	3/23/2027	12/27/2027	5	200
6	Paving	Paving	6/15/2027	10/18/2027	5	90

Acres of Grading (Site Preparation Phase): 22.5**Acres of Grading (Grading Phase): 120****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,158,881; Non-Residential Outdoor: 386,294; Striped Parking Area: 101,364 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Architectural Coating	Pavers	2	8.00	130	0.42
Architectural Coating	Paving Equipment	2	8.00	132	0.36

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

Architectural Coating	Rollers	2	8.00	80	0.38
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

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
Demolition	6	15.00	0.00	29.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,250.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	986.00	404.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	7	197.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	7	197.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Demolition - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6300	0.0000	0.6300	0.0954	0.0000	0.0954			0.0000			0.0000
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920		3,747.5996	3,747.5996	1.0464		3,773.7606
Total	2.0926	19.1966	19.4184	0.0388	0.6300	0.8528	1.4828	0.0954	0.7920	0.8874		3,747.5996	3,747.5996	1.0464		3,773.7606

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	5.9000e-003	0.3886	0.0906	1.6900e-003	0.0502	2.8100e-003	0.0530	0.0137	2.6900e-003	0.0164		184.2031	184.2031	6.0900e-003	0.0292	193.0432
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
Worker	0.0448	0.0231	0.3466	9.9000e-004	0.1232	6.0000e-004	0.1238	0.0327	5.6000e-004	0.0332		100.5754	100.5754	2.6100e-003	2.5200e-003	101.3927
Total	0.0507	0.4117	0.4372	2.6800e-003	0.1734	3.4100e-003	0.1768	0.0464	3.2500e-003	0.0496		284.7785	284.7785	8.7000e-003	0.0317	294.4359

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Demolition - 2026****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					0.2835	0.0000	0.2835	0.0429	0.0000	0.0429			0.0000			0.0000
Off-Road	0.6948	4.0014	23.0661	0.0388		0.1008	0.1008		0.1008	0.1008	0.0000	3,747.599 6	3,747.599 6	1.0464		3,773.760 6
Total	0.6948	4.0014	23.0661	0.0388	0.2835	0.1008	0.3843	0.0429	0.1008	0.1437	0.0000	3,747.599 6	3,747.599 6	1.0464		3,773.760 6

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	5.9000e-003	0.3886	0.0906	1.6900e-003	0.0502	2.8100e-003	0.0530	0.0137	2.6900e-003	0.0164		184.2031	184.2031	6.0900e-003	0.0292	193.0432
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
Worker	0.0448	0.0231	0.3466	9.9000e-004	0.1232	6.0000e-004	0.1238	0.0327	5.6000e-004	0.0332		100.5754	100.5754	2.6100e-003	2.5200e-003	101.3927
Total	0.0507	0.4117	0.4372	2.6800e-003	0.1734	3.4100e-003	0.1768	0.0464	3.2500e-003	0.0496		284.7785	284.7785	8.7000e-003	0.0317	294.4359

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Site Preparation - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931		3,718.9320
Total	2.4727	25.2339	17.9118	0.0381	19.6570	1.0868	20.7438	10.1025	0.9999	11.1023		3,689.1037	3,689.1037	1.1931		3,718.9320

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	0.0000	0.0000	0.0000	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	0.0537	0.0277	0.4159	1.1900e-003	0.1479	7.3000e-004	0.1486	0.0392	6.7000e-004	0.0399		120.6904	120.6904	3.1300e-003	3.0300e-003	121.6713
Total	0.0537	0.0277	0.4159	1.1900e-003	0.1479	7.3000e-004	0.1486	0.0392	6.7000e-004	0.0399		120.6904	120.6904	3.1300e-003	3.0300e-003	121.6713

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Site Preparation - 2026****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					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0381		9.3100e-003	9.3100e-003		9.3100e-003	9.3100e-003	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
Total	0.4656	2.0175	20.8690	0.0381	8.8457	9.3100e-003	8.8550	4.5461	9.3100e-003	4.5554	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320

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	0.0000	0.0000	0.0000	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	0.0537	0.0277	0.4159	1.1900e-003	0.1479	7.3000e-004	0.1486	0.0392	6.7000e-004	0.0399		120.6904	120.6904	3.1300e-003	3.0300e-003	121.6713
Total	0.0537	0.0277	0.4159	1.1900e-003	0.1479	7.3000e-004	0.1486	0.0392	6.7000e-004	0.0399		120.6904	120.6904	3.1300e-003	3.0300e-003	121.6713

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Grading - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2319	0.0000	9.2319	3.6580	0.0000	3.6580			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.281 4	6,008.281 4	1.9432		6,056.861 4
Total	2.9012	27.9429	26.3311	0.0621	9.2319	1.1309	10.3628	3.6580	1.0404	4.6985		6,008.281 4	6,008.281 4	1.9432		6,056.861 4

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	0.0635	4.1872	0.9763	0.0182	0.5408	0.0303	0.5710	0.1477	0.0290	0.1767		1,984.947 2	1,984.947 2	0.0656	0.3142	2,080.207 1
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
Worker	0.0597	0.0308	0.4621	1.3300e-003	0.1643	8.1000e-004	0.1651	0.0436	7.4000e-004	0.0443		134.1005	134.1005	3.4800e-003	3.3700e-003	135.1903
Total	0.1232	4.2180	1.4384	0.0196	0.7051	0.0311	0.7361	0.1913	0.0297	0.2210		2,119.047 7	2,119.047 7	0.0691	0.3175	2,215.397 4

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Grading - 2026****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					4.1543	0.0000	4.1543	1.6461	0.0000	1.6461			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621		0.0152	0.0152		0.0152	0.0152	0.0000	6,008.281 4	6,008.281 4	1.9432		6,056.861 4
Total	0.7616	3.3000	32.9991	0.0621	4.1543	0.0152	4.1696	1.6461	0.0152	1.6614	0.0000	6,008.281 4	6,008.281 4	1.9432		6,056.861 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0635	4.1872	0.9763	0.0182	0.5408	0.0303	0.5710	0.1477	0.0290	0.1767		1,984.947 2	1,984.947 2	0.0656	0.3142	2,080.207 1
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
Worker	0.0597	0.0308	0.4621	1.3300e-003	0.1643	8.1000e-004	0.1651	0.0436	7.4000e-004	0.0443		134.1005	134.1005	3.4800e-003	3.3700e-003	135.1903
Total	0.1232	4.2180	1.4384	0.0196	0.7051	0.0311	0.7361	0.1913	0.0297	0.2210		2,119.047 7	2,119.047 7	0.0691	0.3175	2,215.397 4

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 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	0.3776	16.6812	4.7151	0.0706	2.4623	0.0894	2.5517	0.7080	0.0855	0.7936		7,579.931 5	7,579.931 5	0.1557	1.1459	7,925.305 9
Worker	2.9426	1.5173	22.7815	0.0654	8.0998	0.0397	8.1395	2.1484	0.0366	2.1850		6,611.153 0	6,611.153 0	0.1714	0.1659	6,664.881 7
Total	3.3202	18.1985	27.4966	0.1360	10.5621	0.1291	10.6912	2.8565	0.1221	2.9786		14,191.08 45	14,191.08 45	0.3271	1.3118	14,590.18 76

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****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	0.7044	4.6832	17.2182	0.0270		0.1406	0.1406		0.1406	0.1406	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	0.7044	4.6832	17.2182	0.0270		0.1406	0.1406		0.1406	0.1406	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 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	0.3776	16.6812	4.7151	0.0706	2.4623	0.0894	2.5517	0.7080	0.0855	0.7936		7,579.931 5	7,579.931 5	0.1557	1.1459	7,925.305 9
Worker	2.9426	1.5173	22.7815	0.0654	8.0998	0.0397	8.1395	2.1484	0.0366	2.1850		6,611.153 0	6,611.153 0	0.1714	0.1659	6,664.881 7
Total	3.3202	18.1985	27.4966	0.1360	10.5621	0.1291	10.6912	2.8565	0.1221	2.9786		14,191.08 45	14,191.08 45	0.3271	1.3118	14,590.18 76

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 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	0.3663	16.4768	4.6337	0.0692	2.4621	0.0879	2.5500	0.7080	0.0841	0.7921		7,429.763 2	7,429.763 2	0.1583	1.1230	7,768.378 5
Worker	2.7568	1.3738	21.3336	0.0635	8.0998	0.0371	8.1369	2.1484	0.0342	2.1826		6,414.763 5	6,414.763 5	0.1560	0.1563	6,465.251 9
Total	3.1232	17.8506	25.9673	0.1327	10.5619	0.1250	10.6869	2.8564	0.1183	2.9747		13,844.52 68	13,844.52 68	0.3143	1.2794	14,233.63 04

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****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	0.7044	4.6832	17.2182	0.0270		0.1406	0.1406		0.1406	0.1406	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	0.7044	4.6832	17.2182	0.0270		0.1406	0.1406		0.1406	0.1406	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 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	0.3663	16.4768	4.6337	0.0692	2.4621	0.0879	2.5500	0.7080	0.0841	0.7921		7,429.763 2	7,429.763 2	0.1583	1.1230	7,768.378 5
Worker	2.7568	1.3738	21.3336	0.0635	8.0998	0.0371	8.1369	2.1484	0.0342	2.1826		6,414.763 5	6,414.763 5	0.1560	0.1563	6,465.251 9
Total	3.1232	17.8506	25.9673	0.1327	10.5619	0.1250	10.6869	2.8564	0.1183	2.9747		13,844.52 68	13,844.52 68	0.3143	1.2794	14,233.63 04

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	43.8093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.0860	9.7271	16.3871	0.0258		0.4700	0.4700		0.4366	0.4366		2,488.193 2	2,488.193 2	0.7291		2,506.419 7
Total	44.8953	9.7271	16.3871	0.0258		0.4700	0.4700		0.4366	0.4366		2,488.193 2	2,488.193 2	0.7291		2,506.419 7

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1016	0.5490	8.5248	0.0254	6.0495	0.0148	6.0644	1.5490	0.0137	1.5626		2,563.303 1	2,563.303 1	0.0623	0.0625	2,583.477 9
Total	1.1016	0.5490	8.5248	0.0254	6.0495	0.0148	6.0644	1.5490	0.0137	1.5626		2,563.303 1	2,563.303 1	0.0623	0.0625	2,583.477 9

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	43.8093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7687	6.0440	17.7460	0.0258		0.2636	0.2636		0.2468	0.2468	0.0000	2,488.193 2	2,488.193 2	0.7291		2,506.419 7
Total	44.5780	6.0440	17.7460	0.0258		0.2636	0.2636		0.2468	0.2468	0.0000	2,488.193 2	2,488.193 2	0.7291		2,506.419 7

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1016	0.5490	8.5248	0.0254	6.0495	0.0148	6.0644	1.5490	0.0137	1.5626		2,563.303 1	2,563.303 1	0.0623	0.0625	2,583.477 9
Total	1.1016	0.5490	8.5248	0.0254	6.0495	0.0148	6.0644	1.5490	0.0137	1.5626		2,563.303 1	2,563.303 1	0.0623	0.0625	2,583.477 9

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Paving - 2027****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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8

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	0.0000	0.0000	0.0000	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	0.0419	0.0209	0.3246	9.7000e-004	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		97.5877	97.5877	2.3700e-003	2.3800e-003	98.3558
Total	0.0419	0.0209	0.3246	9.7000e-004	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		97.5877	97.5877	2.3700e-003	2.3800e-003	98.3558

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Paving - 2027****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	0.5978	4.8985	15.9368	0.0228		0.2121	0.2121		0.1953	0.1953	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5978	4.8985	15.9368	0.0228		0.2121	0.2121		0.1953	0.1953	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8

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	0.0000	0.0000	0.0000	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	0.0419	0.0209	0.3246	9.7000e-004	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		97.5877	97.5877	2.3700e-003	2.3800e-003	98.3558
Total	0.0419	0.0209	0.3246	9.7000e-004	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		97.5877	97.5877	2.3700e-003	2.3800e-003	98.3558

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco 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	141.7263	243.6999	1,833.9384	4.5549	532.8814	3.5420	536.4234	142.2596	3.3198	145.5794		463,723.0465	463,723.0465	20.7303	18.8473	469,857.7830
Unmitigated	141.7263	243.6999	1,833.9384	4.5549	532.8814	3.5420	536.4234	142.2596	3.3198	145.5794		463,723.0465	463,723.0465	20.7303	18.8473	469,857.7830

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	800.00	820.00	820.00	7,648,879	7,648,879
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
User Defined Commercial	5,102.61	7,330.25	7330.25	93,765,911	93,765,911
User Defined Commercial	3,088.20	4,436.42	4436.42	56,749,026	56,749,026
User Defined Commercial	2,222.51	3,192.79	3192.79	40,840,943	40,840,943
User Defined Industrial	0.00	0.00	0.00		
Total	11,213.32	15,779.46	15,779.46	199,004,760	199,004,760

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
Hotel	14.70	55.00	10.00	19.40	61.60	19.00	58	38	4

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

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

	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
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Industrial	14.70	6.60	6.60	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
Hotel	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
Parking Lot	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
Unenclosed Parking with Elevator	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
User Defined Commercial	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
User Defined Industrial	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco 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
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					
Hotel	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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	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
User Defined Commercial	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
User Defined Industrial	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

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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

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					
Hotel	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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	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
User Defined Commercial	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
User Defined Industrial	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

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

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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
Category	lb/day										lb/day					
Mitigated	19.3091	2.1800e-003	0.2402	2.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		0.5162	0.5162	1.3400e-003		0.5497
Unmitigated	19.5544	2.1800e-003	0.2402	2.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		0.5162	0.5162	1.3400e-003		0.5497

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	2.4005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	17.1318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0221	2.1800e-003	0.2402	2.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		0.5162	0.5162	1.3400e-003		0.5497
Total	19.5544	2.1800e-003	0.2402	2.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		0.5162	0.5162	1.3400e-003		0.5497

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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	lb/day										lb/day					
Architectural Coating	2.1552					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	17.1318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0221	2.1800e-003	0.2402	2.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		0.5162	0.5162	1.3400e-003		0.5497
Total	19.3091	2.1800e-003	0.2402	2.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		0.5162	0.5162	1.3400e-003		0.5497

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

Koi Nation Shiloh Resort and Casino - Alt A - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	4	0	48	2447	0.73	Diesel
Emergency Generator	5	0	12	2447	0.5	Diesel
Emergency Generator	1	0	60	1367	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	0	40	14600	0.5	CNG

User Defined Equipment

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

10.1 Stationary Sources**Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Emergency Generator - Diesel (750 - 9999 HP)	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

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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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
User Defined Commercial	122.60	User Defined Unit	51.50	410,572.00	0
User Defined Commercial	74.20	User Defined Unit	0.00	74,185.00	0
User Defined Commercial	53.40	User Defined Unit	0.00	0.00	0
User Defined Industrial	18.90	User Defined Unit	0.00	18,900.00	0
Parking Lot	475.30	1000sqft	0.00	475,300.00	0
Unenclosed Parking with Elevator	1,214.10	1000sqft	0.00	1,214,100.00	0
Hotel	400.00	Room	0.00	268,930.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	75
Climate Zone	4			Operational Year	2040
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - See input tables for assumptions.
- Construction Phase - See input tables for assumptions.
- Trips and VMT -
- Demolition -
- Grading - See input tables for assumptions.

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

Vehicle Trips - See input tables for assumptions.

Area Coating -

Energy Use - See input tables for assumptions.

Water And Wastewater - See input tables for assumptions.

Solid Waste - See input tables for assumptions.

Land Use Change - See input tables for assumptions.

Construction Off-road Equipment Mitigation - See input tables for assumptions.

Area Mitigation - Compliance with BAAQMD Rule 3

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - See detailed assumptions.

Stationary Sources - Process Boilers -

Stationary Sources - Emergency Generators and Fire Pumps EF - Based on generator specifications.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
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
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	70.00	10.00
tblConstructionPhase	NumDays	40.00	15.00
tblConstructionPhase	NumDays	110.00	40.00
tblConstructionPhase	NumDays	1,110.00	335.00
tblConstructionPhase	NumDays	75.00	200.00
tblConstructionPhase	NumDays	75.00	90.00
tblEnergyUse	LightingElect	0.00	6.78
tblEnergyUse	LightingElect	0.00	3.08
tblEnergyUse	NT24E	0.00	23.69
tblEnergyUse	NT24E	0.00	3.70
tblEnergyUse	NT24NG	4.75	0.00

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

tblEnergyUse	T24E	0.00	7.35
tblEnergyUse	T24E	0.00	1.32
tblEnergyUse	T24NG	39.16	0.00
tblGrading	MaterialImported	0.00	10,000.00
tblLandUse	LandUseSquareFeet	0.00	410,572.00
tblLandUse	LandUseSquareFeet	0.00	74,185.00
tblLandUse	LandUseSquareFeet	0.00	18,900.00
tblLandUse	LandUseSquareFeet	580,800.00	268,930.00
tblLandUse	LotAcreage	0.00	51.50
tblLandUse	LotAcreage	10.91	0.00
tblLandUse	LotAcreage	27.87	0.00
tblLandUse	LotAcreage	13.33	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	219.00	1,919.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	14,600.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	40.00
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,367.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00

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

tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	48.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	Load_Factor	0.73	0.50
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	4.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	5.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TTP	0.00	77.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TTP	0.00	18.00
tblVehicleTrips	CW_TTP	0.00	5.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	8.19	2.05
tblVehicleTrips	ST_TR	0.00	59.79
tblVehicleTrips	SU_TR	5.95	2.05
tblVehicleTrips	SU_TR	0.00	59.79
tblVehicleTrips	WD_TR	8.36	2.00
tblVehicleTrips	WD_TR	0.00	41.62
tblWater	IndoorWaterUseRate	10,146,708.00	0.00
tblWater	IndoorWaterUseRate	0.00	62,050,000.00
tblWater	OutdoorWaterUseRate	1,127,412.00	0.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
2026	0.2661	2.1424	2.4225	8.2700e-003	0.7399	0.0610	0.8008	0.2593	0.0567	0.3160	0.0000	764.1026	764.1026	0.0822	0.0523	781.7329
2027	5.2040	5.4238	8.3959	0.0262	1.8855	0.1516	2.0371	0.5034	0.1417	0.6450	0.0000	2,418.9528	2,418.9528	0.2098	0.1576	2,471.1492
Maximum	5.2040	5.4238	8.3959	0.0262	1.8855	0.1516	2.0371	0.5034	0.1417	0.6450	0.0000	2,418.9528	2,418.9528	0.2098	0.1576	2,471.1492

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					
2026	0.1757	1.0996	2.6400	8.2700e-003	0.5555	0.0119	0.5674	0.1771	0.0116	0.1887	0.0000	764.1023	764.1023	0.0822	0.0523	781.7326
2027	5.0724	3.8853	8.7391	0.0262	1.8855	0.0717	1.9572	0.5034	0.0683	0.5717	0.0000	2,418.9520	2,418.9520	0.2098	0.1576	2,471.1485
Maximum	5.0724	3.8853	8.7391	0.0262	1.8855	0.0717	1.9572	0.5034	0.0683	0.5717	0.0000	2,418.9520	2,418.9520	0.2098	0.1576	2,471.1485

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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	4.06	34.12	-5.18	0.00	7.02	60.65	11.04	10.78	59.72	20.88	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	7-1-2026	9-30-2026	1.2103	0.3572
2	10-1-2026	12-31-2026	1.2073	0.9297
3	1-1-2027	3-31-2027	1.3435	1.0590
4	4-1-2027	6-30-2027	3.0149	2.5874
5	7-1-2027	9-30-2027	3.3069	2.7663
		Highest	3.3069	2.7663

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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****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	3.5666	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2,127.8979	2,127.8979	0.3443	0.0417	2,148.9390
Mobile	15.0144	22.5659	191.0389	0.5073	72.9892	0.2603	73.2495	19.5332	0.2439	19.7771	0.0000	46,873.1400	46,873.1400	2.1114	1.9569	47,509.0646
Stationary	0.5353	0.2625	1.3650	2.5700e-003		0.0263	0.0263		0.0263	0.0263	0.0000	248.4342	248.4342	0.0348	0.0000	249.3050
Waste						0.0000	0.0000		0.0000	0.0000	389.5397	0.0000	389.5397	23.0211	0.0000	965.0680
Water						0.0000	0.0000		0.0000	0.0000	19.6856	31.0651	50.7507	2.0269	0.0484	115.8323
Total	19.1164	22.8286	192.4254	0.5099	72.9892	0.2866	73.2759	19.5332	0.2702	19.8034	409.2253	49,280.5794	49,689.8046	27.5386	2.0469	50,988.2538

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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	3.5666	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2,035.1094	2,035.1094	0.3292	0.0399	2,055.2330
Mobile	15.0144	22.5659	191.0389	0.5073	72.9892	0.2603	73.2495	19.5332	0.2439	19.7771	0.0000	46,873.1400	46,873.1400	2.1114	1.9569	47,509.0646
Stationary	0.5353	0.2625	1.3650	2.5700e-003		0.0263	0.0263		0.0263	0.0263	0.0000	248.4342	248.4342	0.0348	0.0000	249.3050
Waste						0.0000	0.0000		0.0000	0.0000	194.7698	0.0000	194.7698	11.5106	0.0000	482.5340
Water						0.0000	0.0000		0.0000	0.0000	19.6856	31.0651	50.7507	2.0269	0.0484	115.8323
Total	19.1164	22.8286	192.4254	0.5099	72.9892	0.2866	73.2759	19.5332	0.2702	19.8034	214.4554	49,187.7909	49,402.2463	16.0131	2.0451	50,412.0139

	ROG	NOx	CO	SO2	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	47.59	0.19	0.58	41.85	0.09	1.13

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-295.1200
Total	-295.1200

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2026	7/14/2026	5	10	
2	Site Preparation	Site Preparation	7/1/2026	7/21/2026	5	15	
3	Grading	Grading	7/22/2026	9/15/2026	5	40	
4	Building Construction	Building Construction	9/16/2026	12/28/2027	5	335	
5	Architectural Coating	Architectural Coating	3/23/2027	12/27/2027	5	200	
6	Paving	Paving	6/15/2027	10/18/2027	5	90	

Acres of Grading (Site Preparation Phase): 22.5**Acres of Grading (Grading Phase): 120****Acres of Paving: 0**

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,158,881; Non-Residential Outdoor: 386,294; Striped Parking Area: 101,364 (Architectural Coating – sqft)

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

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Architectural Coating	Pavers	2	8.00	130	0.42
Architectural Coating	Paving Equipment	2	8.00	132	0.36
Architectural Coating	Rollers	2	8.00	80	0.38

Trips and VMT

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

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
Demolition	6	15.00	0.00	29.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,250.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	986.00	404.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	7	197.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	7	197.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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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 Demolition - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.1500e-003	0.0000	3.1500e-003	4.8000e-004	0.0000	4.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0105	0.0960	0.0971	1.9000e-004		4.2600e-003	4.2600e-003		3.9600e-003	3.9600e-003	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175
Total	0.0105	0.0960	0.0971	1.9000e-004	3.1500e-003	4.2600e-003	7.4100e-003	4.8000e-004	3.9600e-003	4.4400e-003	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175

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	3.0000e-005	2.0100e-003	4.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.8358	0.8358	3.0000e-005	1.3000e-004	0.8759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.3000e-004	1.6400e-003	0.0000	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4316	0.4316	1.0000e-005	1.0000e-005	0.4356
Total	2.5000e-004	2.1400e-003	2.0900e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.5000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	1.2674	1.2674	4.0000e-005	1.4000e-004	1.3115

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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 Demolition - 2026****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					1.4200e-003	0.0000	1.4200e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4700e-003	0.0200	0.1153	1.9000e-004		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175
Total	3.4700e-003	0.0200	0.1153	1.9000e-004	1.4200e-003	5.0000e-004	1.9200e-003	2.1000e-004	5.0000e-004	7.1000e-004	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175

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	3.0000e-005	2.0100e-003	4.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.8358	0.8358	3.0000e-005	1.3000e-004	0.8759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.3000e-004	1.6400e-003	0.0000	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4316	0.4316	1.0000e-005	1.0000e-005	0.4356
Total	2.5000e-004	2.1400e-003	2.0900e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.5000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	1.2674	1.2674	4.0000e-005	1.4000e-004	1.3115

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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 Site Preparation - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1474	0.0000	0.1474	0.0758	0.0000	0.0758	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0186	0.1893	0.1343	2.9000e-004		8.1500e-003	8.1500e-003		7.5000e-003	7.5000e-003	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032
Total	0.0186	0.1893	0.1343	2.9000e-004	0.1474	8.1500e-003	0.1556	0.0758	7.5000e-003	0.0833	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032

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	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841
Total	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841

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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 Site Preparation - 2026****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					0.0663	0.0000	0.0663	0.0341	0.0000	0.0341	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4900e-003	0.0151	0.1565	2.9000e-004		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032
Total	3.4900e-003	0.0151	0.1565	2.9000e-004	0.0663	7.0000e-005	0.0664	0.0341	7.0000e-005	0.0342	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032

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	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841
Total	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841

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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 Grading - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1846	0.0000	0.1846	0.0732	0.0000	0.0732	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0580	0.5589	0.5266	1.2400e-003		0.0226	0.0226		0.0208	0.0208	0.0000	109.0124	109.0124	0.0353	0.0000	109.8939
Total	0.0580	0.5589	0.5266	1.2400e-003	0.1846	0.0226	0.2073	0.0732	0.0208	0.0940	0.0000	109.0124	109.0124	0.0353	0.0000	109.8939

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	1.2400e-003	0.0865	0.0196	3.6000e-004	0.0104	6.1000e-004	0.0110	2.8500e-003	5.8000e-004	3.4300e-003	0.0000	36.0257	36.0257	1.1900e-003	5.7000e-003	37.7547
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	6.9000e-004	8.7200e-003	3.0000e-005	3.1400e-003	2.0000e-005	3.1600e-003	8.4000e-004	1.0000e-005	8.5000e-004	0.0000	2.3018	2.3018	7.0000e-005	7.0000e-005	2.3231
Total	2.3900e-003	0.0872	0.0283	3.9000e-004	0.0135	6.3000e-004	0.0142	3.6900e-003	5.9000e-004	4.2800e-003	0.0000	38.3274	38.3274	1.2600e-003	5.7700e-003	40.0778

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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 Grading - 2026****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					0.0831	0.0000	0.0831	0.0329	0.0000	0.0329	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.0660	0.6600	1.2400e-003		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	109.0123	109.0123	0.0353	0.0000	109.8937
Total	0.0152	0.0660	0.6600	1.2400e-003	0.0831	3.0000e-004	0.0834	0.0329	3.0000e-004	0.0332	0.0000	109.0123	109.0123	0.0353	0.0000	109.8937

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	1.2400e-003	0.0865	0.0196	3.6000e-004	0.0104	6.1000e-004	0.0110	2.8500e-003	5.8000e-004	3.4300e-003	0.0000	36.0257	36.0257	1.1900e-003	5.7000e-003	37.7547
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	6.9000e-004	8.7200e-003	3.0000e-005	3.1400e-003	2.0000e-005	3.1600e-003	8.4000e-004	1.0000e-005	8.5000e-004	0.0000	2.3018	2.3018	7.0000e-005	7.0000e-005	2.3231
Total	2.3900e-003	0.0872	0.0283	3.9000e-004	0.0135	6.3000e-004	0.0142	3.6900e-003	5.9000e-004	4.2800e-003	0.0000	38.3274	38.3274	1.2600e-003	5.7700e-003	40.0778

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0526	0.4801	0.6193	1.0400e-003		0.0203	0.0203		0.0191	0.0191	0.0000	89.2890	89.2890	0.0210	0.0000	89.8137
Total	0.0526	0.4801	0.6193	1.0400e-003		0.0203	0.0203		0.0191	0.0191	0.0000	89.2890	89.2890	0.0210	0.0000	89.8137

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	0.0143	0.6630	0.1841	2.7200e-003	0.0913	3.4500e-003	0.0948	0.0264	3.3000e-003	0.0297	0.0000	264.8888	264.8888	5.4200e-003	0.0401	276.9632
Worker	0.1091	0.0656	0.8278	2.3800e-003	0.2979	1.5300e-003	0.2995	0.0793	1.4100e-003	0.0807	0.0000	218.4417	218.4417	6.3900e-003	6.2600e-003	220.4681
Total	0.1234	0.7286	1.0119	5.1000e-003	0.3892	4.9800e-003	0.3942	0.1057	4.7100e-003	0.1104	0.0000	483.3305	483.3305	0.0118	0.0463	497.4313

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****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	0.0271	0.1803	0.6629	1.0400e-003		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	89.2889	89.2889	0.0210	0.0000	89.8136
Total	0.0271	0.1803	0.6629	1.0400e-003		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	89.2889	89.2889	0.0210	0.0000	89.8136

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	0.0143	0.6630	0.1841	2.7200e-003	0.0913	3.4500e-003	0.0948	0.0264	3.3000e-003	0.0297	0.0000	264.8888	264.8888	5.4200e-003	0.0401	276.9632
Worker	0.1091	0.0656	0.8278	2.3800e-003	0.2979	1.5300e-003	0.2995	0.0793	1.4100e-003	0.0807	0.0000	218.4417	218.4417	6.3900e-003	6.2600e-003	220.4681
Total	0.1234	0.7286	1.0119	5.1000e-003	0.3892	4.9800e-003	0.3942	0.1057	4.7100e-003	0.1104	0.0000	483.3305	483.3305	0.0118	0.0463	497.4313

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****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	0.1764	1.6086	2.0749	3.4800e-003		0.0681	0.0681		0.0640	0.0640	0.0000	299.1761	299.1761	0.0703	0.0000	300.9343
Total	0.1764	1.6086	2.0749	3.4800e-003		0.0681	0.0681		0.0640	0.0640	0.0000	299.1761	299.1761	0.0703	0.0000	300.9343

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	0.0464	2.1946	0.6063	8.9300e-003	0.3059	0.0114	0.3173	0.0885	0.0109	0.0993	0.0000	869.9786	869.9786	0.0185	0.1316	909.6435
Worker	0.3425	0.1990	2.6006	7.7400e-003	0.9982	4.7900e-003	1.0030	0.2657	4.4100e-003	0.2701	0.0000	710.2180	710.2180	0.0195	0.0198	716.5990
Total	0.3889	2.3936	3.2069	0.0167	1.3042	0.0162	1.3203	0.3542	0.0153	0.3694	0.0000	1,580.1966	1,580.1966	0.0380	0.1513	1,626.2425

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****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	0.0909	0.6041	2.2211	3.4800e-003		0.0181	0.0181		0.0181	0.0181	0.0000	299.1757	299.1757	0.0703	0.0000	300.9339
Total	0.0909	0.6041	2.2211	3.4800e-003		0.0181	0.0181		0.0181	0.0181	0.0000	299.1757	299.1757	0.0703	0.0000	300.9339

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	0.0464	2.1946	0.6063	8.9300e-003	0.3059	0.0114	0.3173	0.0885	0.0109	0.0993	0.0000	869.9786	869.9786	0.0185	0.1316	909.6435
Worker	0.3425	0.1990	2.6006	7.7400e-003	0.9982	4.7900e-003	1.0030	0.2657	4.4100e-003	0.2701	0.0000	710.2180	710.2180	0.0195	0.0198	716.5990
Total	0.3889	2.3936	3.2069	0.0167	1.3042	0.0162	1.3203	0.3542	0.0153	0.3694	0.0000	1,580.1966	1,580.1966	0.0380	0.1513	1,626.2425

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.3809					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1086	0.9727	1.6387	2.5800e-003		0.0470	0.0470		0.0437	0.0437	0.0000	225.7251	225.7251	0.0661	0.0000	227.3786
Total	4.4895	0.9727	1.6387	2.5800e-003		0.0470	0.0470		0.0437	0.0437	0.0000	225.7251	225.7251	0.0661	0.0000	227.3786

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	0.1061	0.0617	0.8056	2.4000e-003	0.5761	1.4800e-003	0.5775	0.1478	1.3700e-003	0.1492	0.0000	219.9993	219.9993	6.0500e-003	6.1300e-003	221.9759
Total	0.1061	0.0617	0.8056	2.4000e-003	0.5761	1.4800e-003	0.5775	0.1478	1.3700e-003	0.1492	0.0000	219.9993	219.9993	6.0500e-003	6.1300e-003	221.9759

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****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	4.3809					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0769	0.6044	1.7746	2.5800e-003		0.0264	0.0264		0.0247	0.0247	0.0000	225.7248	225.7248	0.0661	0.0000	227.3783
Total	4.4578	0.6044	1.7746	2.5800e-003		0.0264	0.0264		0.0247	0.0247	0.0000	225.7248	225.7248	0.0661	0.0000	227.3783

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	0.1061	0.0617	0.8056	2.4000e-003	0.5761	1.4800e-003	0.5775	0.1478	1.3700e-003	0.1492	0.0000	219.9993	219.9993	6.0500e-003	6.1300e-003	221.9759
Total	0.1061	0.0617	0.8056	2.4000e-003	0.5761	1.4800e-003	0.5775	0.1478	1.3700e-003	0.1492	0.0000	219.9993	219.9993	6.0500e-003	6.1300e-003	221.9759

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Paving - 2027****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	0.0412	0.3862	0.6560	1.0300e-003		0.0188	0.0188		0.0173	0.0173	0.0000	90.0867	90.0867	0.0291	0.0000	90.8150
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0412	0.3862	0.6560	1.0300e-003		0.0188	0.0188		0.0173	0.0173	0.0000	90.0867	90.0867	0.0291	0.0000	90.8150

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029
Total	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Paving - 2027****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	0.0269	0.2204	0.7172	1.0300e-003		9.5400e-003	9.5400e-003		8.7900e-003	8.7900e-003	0.0000	90.0865	90.0865	0.0291	0.0000	90.8149
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0269	0.2204	0.7172	1.0300e-003		9.5400e-003	9.5400e-003		8.7900e-003	8.7900e-003	0.0000	90.0865	90.0865	0.0291	0.0000	90.8149

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029
Total	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029

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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	15.0144	22.5659	191.0389	0.5073	72.9892	0.2603	73.2495	19.5332	0.2439	19.7771	0.0000	46,873.14 00	46,873.14 00	2.1114	1.9569	47,509.06 46
Unmitigated	15.0144	22.5659	191.0389	0.5073	72.9892	0.2603	73.2495	19.5332	0.2439	19.7771	0.0000	46,873.14 00	46,873.14 00	2.1114	1.9569	47,509.06 46

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	800.00	820.00	820.00	7,648,879	7,648,879
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
User Defined Commercial	5,102.61	7,330.25	7330.25	93,765,911	93,765,911
User Defined Commercial	3,088.20	4,436.42	4436.42	56,749,026	56,749,026
User Defined Commercial	2,222.51	3,192.79	3192.79	40,840,943	40,840,943
User Defined Industrial	0.00	0.00	0.00		
Total	11,213.32	15,779.46	15,779.46	199,004,760	199,004,760

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
Hotel	14.70	55.00	10.00	19.40	61.60	19.00	58	38	4

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

	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
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Industrial	14.70	6.60	6.60	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
Hotel	0.607923	0.051236	0.156689	0.105527	0.021293	0.006087	0.015426	0.006394	0.001025	0.000244	0.024437	0.001187	0.002533
Parking Lot	0.607923	0.051236	0.156689	0.105527	0.021293	0.006087	0.015426	0.006394	0.001025	0.000244	0.024437	0.001187	0.002533
Unenclosed Parking with Elevator	0.607923	0.051236	0.156689	0.105527	0.021293	0.006087	0.015426	0.006394	0.001025	0.000244	0.024437	0.001187	0.002533
User Defined Commercial	0.607923	0.051236	0.156689	0.105527	0.021293	0.006087	0.015426	0.006394	0.001025	0.000244	0.024437	0.001187	0.002533
User Defined Industrial	0.607923	0.051236	0.156689	0.105527	0.021293	0.006087	0.015426	0.006394	0.001025	0.000244	0.024437	0.001187	0.002533

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

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

[illegible]

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

Unmitigated

[illegible]

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

Mitigated

[illegible]

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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			
Hotel	1.99008e+006	184.1299	0.0298	3.6100e-003	185.9506
Parking Lot	166355	15.3918	2.4900e-003	3.0000e-004	15.5440
Unenclosed Parking with Elevator	2.35535e+006	217.9262	0.0353	4.2700e-003	220.0811
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	1.55278e+007	1,436.6937	0.2324	0.0282	1,450.9000
User Defined Commercial	2.80568e+006	259.5918	0.0420	5.0900e-003	262.1587
User Defined Industrial	153090	14.1645	2.2900e-003	2.8000e-004	14.3045
Total		2,127.8979	0.3443	0.0417	2,148.9390

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

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.88896e+006	174.7741	0.0283	3.4300e-003	176.5023
Parking Lot	139738	12.9291	2.0900e-003	2.5000e-004	13.0570
Unenclosed Parking with Elevator	2.01541e+006	186.4730	0.0302	3.6600e-003	188.3169
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	1.50824e+007	1,395.4847	0.2258	0.0274	1,409.2835
User Defined Commercial	2.7252e+006	252.1459	0.0408	4.9400e-003	254.6391
User Defined Industrial	143776	13.3027	2.1500e-003	2.6000e-004	13.4343
Total		2,035.1094	0.3292	0.0399	2,055.2330

6.0 Area Detail

6.1 Mitigation Measures Area

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

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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
Category	tons/yr										MT/yr					
Mitigated	3.5666	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449
Unmitigated	3.5666	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4381					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.1265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9700e-003	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449
Total	3.5666	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449

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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	0.4381					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.1265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9700e-003	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449
Total	3.5666	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449

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	50.7507	2.0269	0.0484	115.8323
Unmitigated	50.7507	2.0269	0.0484	115.8323

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	62.05 / 0	50.7507	2.0269	0.0484	115.8323
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		50.7507	2.0269	0.0484	115.8323

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	62.05 / 0	50.7507	2.0269	0.0484	115.8323
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		50.7507	2.0269	0.0484	115.8323

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	194.7698	11.5106	0.0000	482.5340
Unmitigated	389.5397	23.0211	0.0000	965.0680

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	1919	389.5397	23.0211	0.0000	965.0680
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		389.5397	23.0211	0.0000	965.0680

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

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	959.5	194.7698	11.5106	0.0000	482.5340
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		194.7698	11.5106	0.0000	482.5340

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
Emergency Generator	4	0	48	2447	0.73	Diesel
Emergency Generator	5	0	12	2447	0.5	Diesel
Emergency Generator	1	0	60	1367	0.73	Diesel

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	0	40	14600	0.5	CNG

User Defined Equipment

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

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Boiler - CNG (0 - 2 MMBTU)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Emergency Generator - Diesel (750 - 9999 HP)	0.5353	0.2625	1.3650	2.5700e-003		0.0263	0.0263		0.0263	0.0263	0.0000	248.4342	248.4342	0.0348	0.0000	249.3050
Total	0.5353	0.2625	1.3650	2.5700e-003		0.0263	0.0263		0.0263	0.0263	0.0000	248.4342	248.4342	0.0348	0.0000	249.3050

11.0 Vegetation

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			
Unmitigated	-295.1200	0.0000	0.0000	-295.1200

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Cropland	61.7 / 14.1	-295.1200	0.0000	0.0000	-295.1200
Total		-295.1200	0.0000	0.0000	-295.1200

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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
User Defined Commercial	122.60	User Defined Unit	51.50	410,572.00	0
User Defined Commercial	74.20	User Defined Unit	0.00	74,185.00	0
User Defined Commercial	53.40	User Defined Unit	0.00	0.00	0
User Defined Industrial	18.90	User Defined Unit	0.00	18,900.00	0
Parking Lot	475.30	1000sqft	0.00	475,300.00	0
Unenclosed Parking with Elevator	1,214.10	1000sqft	0.00	1,214,100.00	0
Hotel	400.00	Room	0.00	268,930.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	75
Climate Zone	4			Operational Year	2050
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MW hr)	203.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - See input tables for assumptions.
- Construction Phase - See input tables for assumptions.
- Trips and VMT -
- Demolition -
- Grading - See input tables for assumptions.

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

Vehicle Trips - See input tables for assumptions.

Area Coating -

Energy Use - See input tables for assumptions.

Water And Wastewater - See input tables for assumptions.

Solid Waste - See input tables for assumptions.

Land Use Change - See input tables for assumptions.

Construction Off-road Equipment Mitigation - See input tables for assumptions.

Area Mitigation - Compliance with BAAQMD Rule 3

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - See detailed assumptions.

Stationary Sources - Process Boilers -

Stationary Sources - Emergency Generators and Fire Pumps EF - Based on generator specifications.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
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
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	70.00	10.00
tblConstructionPhase	NumDays	40.00	15.00
tblConstructionPhase	NumDays	110.00	40.00
tblConstructionPhase	NumDays	1,110.00	335.00
tblConstructionPhase	NumDays	75.00	200.00
tblConstructionPhase	NumDays	75.00	90.00
tblEnergyUse	LightingElect	0.00	6.78
tblEnergyUse	LightingElect	0.00	3.08
tblEnergyUse	NT24E	0.00	23.69
tblEnergyUse	NT24E	0.00	3.70
tblEnergyUse	NT24NG	4.75	0.00

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

tblEnergyUse	T24E	0.00	7.35
tblEnergyUse	T24E	0.00	1.32
tblEnergyUse	T24NG	39.16	0.00
tblGrading	MaterialImported	0.00	10,000.00
tblLandUse	LandUseSquareFeet	0.00	410,572.00
tblLandUse	LandUseSquareFeet	0.00	74,185.00
tblLandUse	LandUseSquareFeet	0.00	18,900.00
tblLandUse	LandUseSquareFeet	580,800.00	268,930.00
tblLandUse	LotAcreage	0.00	51.50
tblLandUse	LotAcreage	10.91	0.00
tblLandUse	LotAcreage	27.87	0.00
tblLandUse	LotAcreage	13.33	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	219.00	1,919.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	14,600.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	40.00
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,367.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00

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

tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	48.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	Load_Factor	0.73	0.50
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	4.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	5.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TTP	0.00	77.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TTP	0.00	18.00
tblVehicleTrips	CW_TTP	0.00	5.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	8.19	2.05
tblVehicleTrips	ST_TR	0.00	59.79
tblVehicleTrips	SU_TR	5.95	2.05
tblVehicleTrips	SU_TR	0.00	59.79
tblVehicleTrips	WD_TR	8.36	2.00
tblVehicleTrips	WD_TR	0.00	41.62
tblWater	IndoorWaterUseRate	10,146,708.00	0.00
tblWater	IndoorWaterUseRate	0.00	62,050,000.00
tblWater	OutdoorWaterUseRate	1,127,412.00	0.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
2026	0.2661	2.1424	2.4225	8.2700e-003	0.7399	0.0610	0.8008	0.2593	0.0567	0.3160	0.0000	764.1026	764.1026	0.0822	0.0523	781.7329
2027	5.2040	5.4238	8.3959	0.0262	1.8855	0.1516	2.0371	0.5034	0.1417	0.6450	0.0000	2,418.9528	2,418.9528	0.2098	0.1576	2,471.1492
Maximum	5.2040	5.4238	8.3959	0.0262	1.8855	0.1516	2.0371	0.5034	0.1417	0.6450	0.0000	2,418.9528	2,418.9528	0.2098	0.1576	2,471.1492

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					
2026	0.1757	1.0996	2.6400	8.2700e-003	0.5555	0.0119	0.5674	0.1771	0.0116	0.1887	0.0000	764.1023	764.1023	0.0822	0.0523	781.7326
2027	5.0724	3.8853	8.7391	0.0262	1.8855	0.0717	1.9572	0.5034	0.0683	0.5717	0.0000	2,418.9520	2,418.9520	0.2098	0.1576	2,471.1485
Maximum	5.0724	3.8853	8.7391	0.0262	1.8855	0.0717	1.9572	0.5034	0.0683	0.5717	0.0000	2,418.9520	2,418.9520	0.2098	0.1576	2,471.1485

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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	4.06	34.12	-5.18	0.00	7.02	60.65	11.04	10.78	59.72	20.88	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	7-1-2026	9-30-2026	1.2103	0.3572
2	10-1-2026	12-31-2026	1.2073	0.9297
3	1-1-2027	3-31-2027	1.3435	1.0590
4	4-1-2027	6-30-2027	3.0149	2.5874
5	7-1-2027	9-30-2027	3.3069	2.7663
		Highest	3.3069	2.7663

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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****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	3.5666	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2,127.8979	2,127.8979	0.3443	0.0417	2,148.9390
Mobile	13.5624	20.5096	177.1446	0.4884	72.9234	0.2143	73.1376	19.5049	0.2006	19.7055	0.0000	45,115.5060	45,115.5060	1.9357	1.8614	45,718.5987
Stationary	0.5353	0.2625	1.3650	2.5700e-003		0.0263	0.0263		0.0263	0.0263	0.0000	248.4342	248.4342	0.0348	0.0000	249.3050
Waste						0.0000	0.0000		0.0000	0.0000	389.5397	0.0000	389.5397	23.0211	0.0000	965.0680
Water						0.0000	0.0000		0.0000	0.0000	19.6856	31.0651	50.7507	2.0269	0.0484	115.8323
Total	17.6643	20.7722	178.5311	0.4910	72.9234	0.2406	73.1640	19.5049	0.2269	19.7318	409.2253	47,522.9453	47,932.1706	27.3629	1.9515	49,197.7879

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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	3.5666	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2,035.1094	2,035.1094	0.3292	0.0399	2,055.2330
Mobile	13.5624	20.5096	177.1446	0.4884	72.9234	0.2143	73.1376	19.5049	0.2006	19.7055	0.0000	45,115.5060	45,115.5060	1.9357	1.8614	45,718.5987
Stationary	0.5353	0.2625	1.3650	2.5700e-003		0.0263	0.0263		0.0263	0.0263	0.0000	248.4342	248.4342	0.0348	0.0000	249.3050
Waste						0.0000	0.0000		0.0000	0.0000	194.7698	0.0000	194.7698	11.5106	0.0000	482.5340
Water						0.0000	0.0000		0.0000	0.0000	19.6856	31.0651	50.7507	2.0269	0.0484	115.8323
Total	17.6643	20.7722	178.5311	0.4910	72.9234	0.2406	73.1640	19.5049	0.2269	19.7318	214.4554	47,430.1569	47,644.6123	15.8374	1.9497	48,621.5480

	ROG	NOx	CO	SO2	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	47.59	0.20	0.60	42.12	0.09	1.17

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-295.1200
Total	-295.1200

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2026	7/14/2026	5	10	
2	Site Preparation	Site Preparation	7/1/2026	7/21/2026	5	15	
3	Grading	Grading	7/22/2026	9/15/2026	5	40	
4	Building Construction	Building Construction	9/16/2026	12/28/2027	5	335	
5	Architectural Coating	Architectural Coating	3/23/2027	12/27/2027	5	200	
6	Paving	Paving	6/15/2027	10/18/2027	5	90	

Acres of Grading (Site Preparation Phase): 22.5**Acres of Grading (Grading Phase): 120****Acres of Paving: 0**

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,158,881; Non-Residential Outdoor: 386,294; Striped Parking Area: 101,364 (Architectural Coating – sqft)

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

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Architectural Coating	Pavers	2	8.00	130	0.42
Architectural Coating	Paving Equipment	2	8.00	132	0.36
Architectural Coating	Rollers	2	8.00	80	0.38

Trips and VMT

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

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
Demolition	6	15.00	0.00	29.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,250.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	986.00	404.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	7	197.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	7	197.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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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 Demolition - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.1500e-003	0.0000	3.1500e-003	4.8000e-004	0.0000	4.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0105	0.0960	0.0971	1.9000e-004		4.2600e-003	4.2600e-003		3.9600e-003	3.9600e-003	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175
Total	0.0105	0.0960	0.0971	1.9000e-004	3.1500e-003	4.2600e-003	7.4100e-003	4.8000e-004	3.9600e-003	4.4400e-003	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175

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	3.0000e-005	2.0100e-003	4.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.8358	0.8358	3.0000e-005	1.3000e-004	0.8759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.3000e-004	1.6400e-003	0.0000	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4316	0.4316	1.0000e-005	1.0000e-005	0.4356
Total	2.5000e-004	2.1400e-003	2.0900e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.5000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	1.2674	1.2674	4.0000e-005	1.4000e-004	1.3115

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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 Demolition - 2026****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					1.4200e-003	0.0000	1.4200e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4700e-003	0.0200	0.1153	1.9000e-004		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175
Total	3.4700e-003	0.0200	0.1153	1.9000e-004	1.4200e-003	5.0000e-004	1.9200e-003	2.1000e-004	5.0000e-004	7.1000e-004	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175

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	3.0000e-005	2.0100e-003	4.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.8358	0.8358	3.0000e-005	1.3000e-004	0.8759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.3000e-004	1.6400e-003	0.0000	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4316	0.4316	1.0000e-005	1.0000e-005	0.4356
Total	2.5000e-004	2.1400e-003	2.0900e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.5000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	1.2674	1.2674	4.0000e-005	1.4000e-004	1.3115

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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 Site Preparation - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1474	0.0000	0.1474	0.0758	0.0000	0.0758	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0186	0.1893	0.1343	2.9000e-004		8.1500e-003	8.1500e-003		7.5000e-003	7.5000e-003	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032
Total	0.0186	0.1893	0.1343	2.9000e-004	0.1474	8.1500e-003	0.1556	0.0758	7.5000e-003	0.0833	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032

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	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841
Total	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841

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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 Site Preparation - 2026****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					0.0663	0.0000	0.0663	0.0341	0.0000	0.0341	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4900e-003	0.0151	0.1565	2.9000e-004		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032
Total	3.4900e-003	0.0151	0.1565	2.9000e-004	0.0663	7.0000e-005	0.0664	0.0341	7.0000e-005	0.0342	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032

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	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841
Total	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841

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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 Grading - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1846	0.0000	0.1846	0.0732	0.0000	0.0732	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0580	0.5589	0.5266	1.2400e-003		0.0226	0.0226		0.0208	0.0208	0.0000	109.0124	109.0124	0.0353	0.0000	109.8939
Total	0.0580	0.5589	0.5266	1.2400e-003	0.1846	0.0226	0.2073	0.0732	0.0208	0.0940	0.0000	109.0124	109.0124	0.0353	0.0000	109.8939

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	1.2400e-003	0.0865	0.0196	3.6000e-004	0.0104	6.1000e-004	0.0110	2.8500e-003	5.8000e-004	3.4300e-003	0.0000	36.0257	36.0257	1.1900e-003	5.7000e-003	37.7547
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	6.9000e-004	8.7200e-003	3.0000e-005	3.1400e-003	2.0000e-005	3.1600e-003	8.4000e-004	1.0000e-005	8.5000e-004	0.0000	2.3018	2.3018	7.0000e-005	7.0000e-005	2.3231
Total	2.3900e-003	0.0872	0.0283	3.9000e-004	0.0135	6.3000e-004	0.0142	3.6900e-003	5.9000e-004	4.2800e-003	0.0000	38.3274	38.3274	1.2600e-003	5.7700e-003	40.0778

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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 Grading - 2026****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					0.0831	0.0000	0.0831	0.0329	0.0000	0.0329	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.0660	0.6600	1.2400e-003		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	109.0123	109.0123	0.0353	0.0000	109.8937
Total	0.0152	0.0660	0.6600	1.2400e-003	0.0831	3.0000e-004	0.0834	0.0329	3.0000e-004	0.0332	0.0000	109.0123	109.0123	0.0353	0.0000	109.8937

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	1.2400e-003	0.0865	0.0196	3.6000e-004	0.0104	6.1000e-004	0.0110	2.8500e-003	5.8000e-004	3.4300e-003	0.0000	36.0257	36.0257	1.1900e-003	5.7000e-003	37.7547
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	6.9000e-004	8.7200e-003	3.0000e-005	3.1400e-003	2.0000e-005	3.1600e-003	8.4000e-004	1.0000e-005	8.5000e-004	0.0000	2.3018	2.3018	7.0000e-005	7.0000e-005	2.3231
Total	2.3900e-003	0.0872	0.0283	3.9000e-004	0.0135	6.3000e-004	0.0142	3.6900e-003	5.9000e-004	4.2800e-003	0.0000	38.3274	38.3274	1.2600e-003	5.7700e-003	40.0778

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0526	0.4801	0.6193	1.0400e-003		0.0203	0.0203		0.0191	0.0191	0.0000	89.2890	89.2890	0.0210	0.0000	89.8137
Total	0.0526	0.4801	0.6193	1.0400e-003		0.0203	0.0203		0.0191	0.0191	0.0000	89.2890	89.2890	0.0210	0.0000	89.8137

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	0.0143	0.6630	0.1841	2.7200e-003	0.0913	3.4500e-003	0.0948	0.0264	3.3000e-003	0.0297	0.0000	264.8888	264.8888	5.4200e-003	0.0401	276.9632
Worker	0.1091	0.0656	0.8278	2.3800e-003	0.2979	1.5300e-003	0.2995	0.0793	1.4100e-003	0.0807	0.0000	218.4417	218.4417	6.3900e-003	6.2600e-003	220.4681
Total	0.1234	0.7286	1.0119	5.1000e-003	0.3892	4.9800e-003	0.3942	0.1057	4.7100e-003	0.1104	0.0000	483.3305	483.3305	0.0118	0.0463	497.4313

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****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	0.0271	0.1803	0.6629	1.0400e-003		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	89.2889	89.2889	0.0210	0.0000	89.8136
Total	0.0271	0.1803	0.6629	1.0400e-003		5.4100e-003	5.4100e-003		5.4100e-003	5.4100e-003	0.0000	89.2889	89.2889	0.0210	0.0000	89.8136

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	0.0143	0.6630	0.1841	2.7200e-003	0.0913	3.4500e-003	0.0948	0.0264	3.3000e-003	0.0297	0.0000	264.8888	264.8888	5.4200e-003	0.0401	276.9632
Worker	0.1091	0.0656	0.8278	2.3800e-003	0.2979	1.5300e-003	0.2995	0.0793	1.4100e-003	0.0807	0.0000	218.4417	218.4417	6.3900e-003	6.2600e-003	220.4681
Total	0.1234	0.7286	1.0119	5.1000e-003	0.3892	4.9800e-003	0.3942	0.1057	4.7100e-003	0.1104	0.0000	483.3305	483.3305	0.0118	0.0463	497.4313

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****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	0.1764	1.6086	2.0749	3.4800e-003		0.0681	0.0681		0.0640	0.0640	0.0000	299.1761	299.1761	0.0703	0.0000	300.9343
Total	0.1764	1.6086	2.0749	3.4800e-003		0.0681	0.0681		0.0640	0.0640	0.0000	299.1761	299.1761	0.0703	0.0000	300.9343

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	0.0464	2.1946	0.6063	8.9300e-003	0.3059	0.0114	0.3173	0.0885	0.0109	0.0993	0.0000	869.9786	869.9786	0.0185	0.1316	909.6435
Worker	0.3425	0.1990	2.6006	7.7400e-003	0.9982	4.7900e-003	1.0030	0.2657	4.4100e-003	0.2701	0.0000	710.2180	710.2180	0.0195	0.0198	716.5990
Total	0.3889	2.3936	3.2069	0.0167	1.3042	0.0162	1.3203	0.3542	0.0153	0.3694	0.0000	1,580.1966	1,580.1966	0.0380	0.1513	1,626.2425

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****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	0.0909	0.6041	2.2211	3.4800e-003		0.0181	0.0181		0.0181	0.0181	0.0000	299.1757	299.1757	0.0703	0.0000	300.9339
Total	0.0909	0.6041	2.2211	3.4800e-003		0.0181	0.0181		0.0181	0.0181	0.0000	299.1757	299.1757	0.0703	0.0000	300.9339

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	0.0464	2.1946	0.6063	8.9300e-003	0.3059	0.0114	0.3173	0.0885	0.0109	0.0993	0.0000	869.9786	869.9786	0.0185	0.1316	909.6435
Worker	0.3425	0.1990	2.6006	7.7400e-003	0.9982	4.7900e-003	1.0030	0.2657	4.4100e-003	0.2701	0.0000	710.2180	710.2180	0.0195	0.0198	716.5990
Total	0.3889	2.3936	3.2069	0.0167	1.3042	0.0162	1.3203	0.3542	0.0153	0.3694	0.0000	1,580.1966	1,580.1966	0.0380	0.1513	1,626.2425

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.3809					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1086	0.9727	1.6387	2.5800e-003		0.0470	0.0470		0.0437	0.0437	0.0000	225.7251	225.7251	0.0661	0.0000	227.3786
Total	4.4895	0.9727	1.6387	2.5800e-003		0.0470	0.0470		0.0437	0.0437	0.0000	225.7251	225.7251	0.0661	0.0000	227.3786

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	0.1061	0.0617	0.8056	2.4000e-003	0.5761	1.4800e-003	0.5775	0.1478	1.3700e-003	0.1492	0.0000	219.9993	219.9993	6.0500e-003	6.1300e-003	221.9759
Total	0.1061	0.0617	0.8056	2.4000e-003	0.5761	1.4800e-003	0.5775	0.1478	1.3700e-003	0.1492	0.0000	219.9993	219.9993	6.0500e-003	6.1300e-003	221.9759

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****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	4.3809					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0769	0.6044	1.7746	2.5800e-003		0.0264	0.0264		0.0247	0.0247	0.0000	225.7248	225.7248	0.0661	0.0000	227.3783
Total	4.4578	0.6044	1.7746	2.5800e-003		0.0264	0.0264		0.0247	0.0247	0.0000	225.7248	225.7248	0.0661	0.0000	227.3783

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	0.1061	0.0617	0.8056	2.4000e-003	0.5761	1.4800e-003	0.5775	0.1478	1.3700e-003	0.1492	0.0000	219.9993	219.9993	6.0500e-003	6.1300e-003	221.9759
Total	0.1061	0.0617	0.8056	2.4000e-003	0.5761	1.4800e-003	0.5775	0.1478	1.3700e-003	0.1492	0.0000	219.9993	219.9993	6.0500e-003	6.1300e-003	221.9759

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Paving - 2027****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	0.0412	0.3862	0.6560	1.0300e-003		0.0188	0.0188		0.0173	0.0173	0.0000	90.0867	90.0867	0.0291	0.0000	90.8150
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0412	0.3862	0.6560	1.0300e-003		0.0188	0.0188		0.0173	0.0173	0.0000	90.0867	90.0867	0.0291	0.0000	90.8150

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029
Total	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Paving - 2027****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	0.0269	0.2204	0.7172	1.0300e-003		9.5400e-003	9.5400e-003		8.7900e-003	8.7900e-003	0.0000	90.0865	90.0865	0.0291	0.0000	90.8149
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0269	0.2204	0.7172	1.0300e-003		9.5400e-003	9.5400e-003		8.7900e-003	8.7900e-003	0.0000	90.0865	90.0865	0.0291	0.0000	90.8149

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029
Total	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029

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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	13.5624	20.5096	177.1446	0.4884	72.9234	0.2143	73.1376	19.5049	0.2006	19.7055	0.0000	45,115.50 60	45,115.50 60	1.9357	1.8614	45,718.59 87
Unmitigated	13.5624	20.5096	177.1446	0.4884	72.9234	0.2143	73.1376	19.5049	0.2006	19.7055	0.0000	45,115.50 60	45,115.50 60	1.9357	1.8614	45,718.59 87

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	800.00	820.00	820.00	7,648,879	7,648,879
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
User Defined Commercial	5,102.61	7,330.25	7330.25	93,765,911	93,765,911
User Defined Commercial	3,088.20	4,436.42	4436.42	56,749,026	56,749,026
User Defined Commercial	2,222.51	3,192.79	3192.79	40,840,943	40,840,943
User Defined Industrial	0.00	0.00	0.00		
Total	11,213.32	15,779.46	15,779.46	199,004,760	199,004,760

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
Hotel	14.70	55.00	10.00	19.40	61.60	19.00	58	38	4

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

	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
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Industrial	14.70	6.60	6.60	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
Hotel	0.616156	0.051063	0.155535	0.103256	0.019012	0.005633	0.015595	0.006508	0.001026	0.000227	0.022797	0.000869	0.002322
Parking Lot	0.616156	0.051063	0.155535	0.103256	0.019012	0.005633	0.015595	0.006508	0.001026	0.000227	0.022797	0.000869	0.002322
Unenclosed Parking with Elevator	0.616156	0.051063	0.155535	0.103256	0.019012	0.005633	0.015595	0.006508	0.001026	0.000227	0.022797	0.000869	0.002322
User Defined Commercial	0.616156	0.051063	0.155535	0.103256	0.019012	0.005633	0.015595	0.006508	0.001026	0.000227	0.022797	0.000869	0.002322
User Defined Industrial	0.616156	0.051063	0.155535	0.103256	0.019012	0.005633	0.015595	0.006508	0.001026	0.000227	0.022797	0.000869	0.002322

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

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

[illegible]

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

Unmitigated

[illegible]

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

Mitigated

[illegible]

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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			
Hotel	1.99008e+006	184.1299	0.0298	3.6100e-003	185.9506
Parking Lot	166355	15.3918	2.4900e-003	3.0000e-004	15.5440
Unenclosed Parking with Elevator	2.35535e+006	217.9262	0.0353	4.2700e-003	220.0811
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	1.55278e+007	1,436.6937	0.2324	0.0282	1,450.9000
User Defined Commercial	2.80568e+006	259.5918	0.0420	5.0900e-003	262.1587
User Defined Industrial	153090	14.1645	2.2900e-003	2.8000e-004	14.3045
Total		2,127.8979	0.3443	0.0417	2,148.9390

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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****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.88896e+006	174.7741	0.0283	3.4300e-003	176.5023
Parking Lot	139738	12.9291	2.0900e-003	2.5000e-004	13.0570
Unenclosed Parking with Elevator	2.01541e+006	186.4730	0.0302	3.6600e-003	188.3169
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	1.50824e+007	1,395.4847	0.2258	0.0274	1,409.2835
User Defined Commercial	2.7252e+006	252.1459	0.0408	4.9400e-003	254.6391
User Defined Industrial	143776	13.3027	2.1500e-003	2.6000e-004	13.4343
Total		2,035.1094	0.3292	0.0399	2,055.2330

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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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
Category	tons/yr										MT/yr					
Mitigated	3.5666	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449
Unmitigated	3.5666	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4381					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.1265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9700e-003	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449
Total	3.5666	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449

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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	0.4381					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.1265					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9700e-003	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449
Total	3.5666	1.9000e-004	0.0215	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0421	0.0421	1.1000e-004	0.0000	0.0449

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	50.7507	2.0269	0.0484	115.8323
Unmitigated	50.7507	2.0269	0.0484	115.8323

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	62.05 / 0	50.7507	2.0269	0.0484	115.8323
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		50.7507	2.0269	0.0484	115.8323

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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			
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	62.05 / 0	50.7507	2.0269	0.0484	115.8323
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		50.7507	2.0269	0.0484	115.8323

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	194.7698	11.5106	0.0000	482.5340
Unmitigated	389.5397	23.0211	0.0000	965.0680

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	1919	389.5397	23.0211	0.0000	965.0680
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		389.5397	23.0211	0.0000	965.0680

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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****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	959.5	194.7698	11.5106	0.0000	482.5340
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		194.7698	11.5106	0.0000	482.5340

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
Emergency Generator	4	0	48	2447	0.73	Diesel
Emergency Generator	5	0	12	2447	0.5	Diesel
Emergency Generator	1	0	60	1367	0.73	Diesel

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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	0	40	14600	0.5	CNG

User Defined Equipment

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

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Boiler - CNG (0 - 2 MMBTU)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Emergency Generator - Diesel (750 - 9999 HP)	0.5353	0.2625	1.3650	2.5700e-003		0.0263	0.0263		0.0263	0.0263	0.0000	248.4342	248.4342	0.0348	0.0000	249.3050
Total	0.5353	0.2625	1.3650	2.5700e-003		0.0263	0.0263		0.0263	0.0263	0.0000	248.4342	248.4342	0.0348	0.0000	249.3050

11.0 Vegetation

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			
Unmitigated	-295.1200	0.0000	0.0000	-295.1200

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres				
Cropland	61.7 / 14.1	-295.1200	0.0000	0.0000	-295.1200
Total		-295.1200	0.0000	0.0000	-295.1200

Alternative B - Inputs

Input	Type of Input	Proposed Project	Source/Notes
Project Name	Project Name	Koi Nation Shiloh Resort and Casino Project	Project Description
Project Location	County	Sonoma (San Francisco)	Project Description
Climate zone	Climate Zone Number	4	Appendix F of CalEEMod User Guide
Land Use Setting	Urban or Rural	Rural	Site and Vicinity Figure
Start of Construction	Date	July 2026	Section 2 of the EA/TEIR
Operational Year	1st year of operation after full buildout.	2028	Section 2 of the EA/TEIR
Utility Company	Utility Company Name	PG&E	Section 2 of the EA/TEIR
Land Use Type and Subtype	Residential, Commercial, Recreation, etc.	See Table 1	See Table 1
Unit Amount	Size of Buildings or Number of units for each Land Use Type.	See Table 1	See Table 1
Lot Acreage	Acreage of each Land Use Type	See Table 1	See Table 1
Population	Population based on persons/household	Default	Default
Construction Phases	Type of construction phase (Demo, Site Prep, etc.) and beginning and ending dates	See Table 2	See Table 2
Off-Road Equipment	Type of equipment (Excavator, Dozer, etc.) and number of units per construction phase	See Table 2	See Table 2
Dust From Material Haul	Import/Export Material (Cu Yd or Tons)	10,000 CY import	Grading and Hydrology Report (Section 3.4)
	Total Acres Graded	46.8	Site plan
Demolition	Sq ft or tons of Demo (Tons or Sqft)	6,400 sq ft	Google Earth, 2022
Construction Trip Gen Rate	Average number of one-way trips per day	Default	Defaults
Operational Trip Reductions	% reduction in trips.	See Table 3	See Table 3
Operational Trip Gen Rate and trip length	Trips and trip lengths	See Table 3	See Table 3
Area Sources	Hearths – # of wood-burning fireplaces, # of gas fireplaces, and # of units with no fireplace.	NA	No hearths are included in project design.

Alternative B - Inputs (cont.)

Input	Type of Input	Proposed Project	Source/Notes
Energy Use	Project Specific Emission Factors.	See Table 4	See Table 4
Water and Wastewater	Indoor and outdoor water use for each Land Use Subtype in gallons per year.	See Table 1	See Table 1
Solid waste	Tons of solid waste generated per year	1,267 ton/year	EA/TEIR Section 3.10
	Land Fill No Gas Capture, Landfill Capture Gas Flare Rate	Default	CalEEMod 2020.4.0 Default
Operational off-road equipment	Excavator, Dozer, etc.	--	--
Stationary Sources	Emergency Generators	Three Tier 4 1,650-KW (2,447 HP) emergency gen/sets operating 60 hours per year. One Tier 4 1,650-KW (2,447 HP) emergency gen/set operating 12 hours per year. One Tier 4 900-KW (1,367 HP) emergency gen/set operating 60 hours per year.	Section 2 of the EA/TEIR
Land Use Change	Vegetation land use type (cropland, etc.) and initial and final acreage	Initial Cropland: 61.7 acres Final Cropland: 17.75 acres	GIS analysis
Sequestration	Type and net number of new trees added	Not Applicable	Insignificant increase in the number of trees on project site for modeling purposes

Alternative B – Mitigation Inputs

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Off-Road Equipment	C-1	Yes	Engine Type, DPF Level, and Oxidation Catalyst	See Off-Road Equipment Mitigation Inputs	See Off-Road Equipment Mitigation Inputs
Soil Stabilizer for Unpaved Roads	N/A	Yes	PM ₁₀ (% Reduction)	10%	Default % Reduction.
	N/A		PM _{2.5} (% Reduction)	10%	Default % Reduction.
Water Exposed Area	N/A	Yes	Frequency (per day)	2 times per day	Section 2 of the EA/TEIR
	N/A		PM ₁₀ (% Reduction)	55%	Default % Reduction.
	N/A		PM _{2.5} (% Reduction)	55%	Default % Reduction.
Replace Ground Cover of Area Disturbed	N/A	No	PM ₁₀ (% Reduction)	--	--
	N/A		PM _{2.5} (% Reduction)	--	--
Unpaved Road Mitigation	N/A	No	Moisture Content (%)	--	--
	N/A	Yes	Vehicle Speed (mph)	15 mph	Section 2 of the EA/TEIR
Type of Residential	N/A	No	Type of Residential	--	--
Increased Density	LUT-1	No	Dwelling Units/Acre	--	--
			Job/Job Acre	--	--
Increased Diversity	LUT-3	No	Yes or No	--	--
Improved Walkability Design	LUT-9	No	Intersections/Square Miles	--	--
Improve Destination Accessibility	LUT-4	No	Distance to Downtown/Job Ctr	--	--
Increased Transit Accessibility	LUT-5	No	Average Distance to Transit Station (miles)	--	--
Integrated Below Market Rate Housing	LUT-6	No	# Dwelling Units Below Market Rate	--	--
Improve Pedestrian Network	SDT-1	No	Yes or No; Project Site, Project Site and Connecting off-site, and Rural	--	--

Alternative B – Mitigation Inputs (cont.)

Mitigation Input	CAPCOA Mitigation	Include in Model?		Project Specific Inputs	
				Inputs	Source/Notes
Provide Traffic Calming Measures	SDT-2	No	% Streets with Improvement	--	--
		No	% Intersections with Improvement	--	--
Implement Neighborhood Electric Vehicle (NEV) Network	SDT-3	No	% of streets equipped with NEV network.	--	--
Limit Parking Supply	PDT-1	No	% Reduction in Spaces	--	--
Unbundled Parking Costs	PDT-2	No	Monthly Parking Costs (\$)	--	--
On-Street Market Pricing	PDT-3	No	% Increase in Price	--	--
Provide a Bus Rapid Transit System	TST-1	No	% Lines BRT	--	--
Expand Transit Network	TST-3	No	% Increase Transit Coverage	--	--
Increase Transit Frequency	TST-4	No	Level of Implementation	--	--
		No	% Reduction in Headways	--	--
Implement Trip Reduction Program	TRT-1, TRT-2	No	% employee eligible	--	--
		No	Program Type	--	--
Transit Subsidy	TRT-4	No	% employee eligible	--	--
		No	Daily Transit Subsidy Amount (\$)	--	--
Implement Employee Parking "Cash-Out"	TRT-15	No	% employee eligible	--	--
Workplace Parking Charge	TRT-14	No	% employee eligible	--	--
		No	Daily Parking Charge (\$)	--	--
Encourage Telecommuting and Alternative Work Schedules	TRT-6	No	% employee work 9/80	--	--
		No	% employee work 4/40	--	--
		No	% employee telecommute 1.5 days	--	--

Alternative B – Mitigation Inputs (cont.)

Mitigation Input	CAPCOA Mitigation	Include in Model?		Project Specific Inputs	
				Inputs	Source/Notes
Market Commute Trip Reduction Option	TRT-7	No	% employee eligible	--	--
Employee Vanpool/Shuttle	TRT-11	No	% employee eligible	--	--
		No	% vanpool mode share	--	--
Provide Ride Sharing Program	TRT-3	No	% employee eligible	--	--
Implement School Bus Program	TRT-13	No	% family using	--	--
Only Natural Gas Hearth	N/A	No	Yes or No	--	--
No hearth	N/A	No	Yes or No	--	--
Use of Low VOC Cleaning Supplies	N/A	No	Yes or No	--	--
Use low VOC Paint (Residential Interior)	N/A	Yes	Emission Factor (EF) (g/l)	100	BAAQMD Rule 3 Architectural Coatings (Nonflat Coating)
Use low VOC Paint (Residential Exterior)	N/A	Yes	EF (g/l)	100	BAAQMD Rule 3 Architectural Coatings (Nonflat Coating)
Use low VOC Paint (Non-residential Interior)	N/A	Yes	EF (g/l)	100	BAAQMD Rule 3 Architectural Coatings (Nonflat Coating)
Use low VOC Paint (Non-residential Exterior)	N/A	Yes	EF (g/l)	100	BAAQMD Rule 3 Architectural Coatings (Nonflat Coating)
Electric Lawnmower	A-1	No	Percent of equipment type that will be electric.	--	--
Electric Leafblower	A-1	No	Percent of equipment type that will be electric.	--	--
Electric Chainsaw	A-1	No	Percent of equipment type that will be electric.	--	--
Exceed Title 24	BE-1	No	Percentage improvement selected for the Project.	--	--

Alternative B – Mitigation Inputs (cont.)

Mitigation Input	CAPCOA Mitigation	Include in Model?	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Install High Efficiently Lighting	LE-1	Yes	% Lighting Energy Reduction	16	CAPCOA, 2010.
On-site Renewable Energy	E-1, AE-2, AE-3	No	kWh Generated	--	--
		No	% of Electricity Use Generated	--	--
Energy Efficient Appliances	BE-4	Yes	Appliance Type, Land Use Subtype, % Improvement	Use Default Values	Defaults
Apply Water Conservation Strategy	WUW-2	No	% Reduction Indoor	--	--
		No	% Reduction Outdoor	--	--
Use Reclaimed Water	WSW-1	No	% Indoor Water Use	--	--
		No	% Outdoor Water Use	--	--
Use Grey Water	WSW-2	No	% Indoor Water Use	--	--
		No	% Outdoor Water Use	--	--
Install Low-Flow Bathroom Faucet	WUW-1	No	% Reduction in flow	--	Included in Project
Install Low-flow Kitchen Faucet	WUW-1	No	% Reduction in flow	--	Included in Project
Install Low-flow Toilet	WUW-1	No	% Reduction in flow	--	Included in Project
Install Low-flow Shower	WUW-1	No	% Reduction in flow	--	Included in Project
Turf Reduction	WUW-5	No	Turf Reduction Area (sqft)	--	--
		No	% Reduction turf	--	--
Use Water-Efficient Irrigation Systems	WUW-4	No	% Reduction	--	--
Water Efficient Landscape	WUW-3	No	Maximum Applied Water Allowance (MAWA) (gal/yr)	--	--
		No	Estimated Total Water Use (ETWU) (gal/yr)	--	--
Institute Recycling and Composting Service	SW-1	Yes	% Reduction in Waste Disposal	50%	Tribe will use County facilities which are required to divert 50 percent of waste from landfills

Table 1: Alternative B – Land Use Inputs

Land Use Inputs						
Land Use Type	Land Use Subtype ¹	Unit Amount	Size Metric	Lot Acreage	Square Feet	Water Demand (gal/yr) ²
Commercial	User Defined (Casino) ³	122.6	ksf	46.8	372,747	42,705,000
Recreational	Hotel	200	rooms	0	147,380	
Commercial	User Defined (Convention) ⁴	33.1	ksf	0	33,135	
Parking	Unenclosed Parking Structure with Elevator	3,692	spaces	0	1,214,080	
Parking	Parking Lot	769	spaces	0	292,200	
Industrial	User Defined (WWTP)	18.9	Ksf	0	18,900	

Notes:

ksf = 1,000 square feet

1 - Source: Section 2, Project Description.

2 - Source: Water and Wastewater Feasibility Report, Appendix A.

3 – Unit amount includes gaming floor and high limits gaming, square feet is total casino.

4 – Includes ballrooms and meeting rooms.

Table 2: Alternative B – Construction Equipment

Equipment	Construction Phase Activities					
	Demolition (7/1/26 – 7/14/26)	Site Preparation (7/1/26 – 7/21/26)	Grading (7/22/26 – 9/15/26)	Construction (9/16/26 – 12/28/27)	Paving (6/15/27 – 10/18/27)	Architectural Coating (3/23/27 – 12/27/27)
All Heavy Equipment	Default	Default	Default	Default	Default	Default
Worker Trips	Default	Default	Default	Default	Default	Default
Soil Haul Trips	Default	Default	Default	Default	Default	Default
Soil Haul	Default	Default	Default	Default	Default	Default
Total Days	10	15	40	335	90	200

Table 3: Alternative B – Trip Generation

Land Use Subtype	Daily Trip Generation Rate ¹		Average Trip Length (miles) ²			Trip Type (%) ³			Trip Purpose (%) ⁴		
	Weekday	Saturday/Sunday	Commercial-Customer Trips (C-C)	Commercial - Work Trips (C-W)	Commercial-Nonwork Trips (C-NW)	Primary	Diverted	Pass-By	Commercial-Customer Trips(C-C)	Commercial-Work Trips (C-W)	Commercial-Nonwork Trips (C-NW)
Commercial User Defined (Casino/Event Center/Convention)	53.71	82.91	55	Default	10	100	0	0	77	5	18
Recreation Hotel	2.0	2.05	55	Default	10	Default	Default	Default	Default	Default	Default

Notes:

- 1 Trip Generation Rates for Casino, Event Center and Convention Center adjusted for consistency with Traffic Impact Analysis Report (TJKM, 2022).
- 2 Average trip length for non-work trips based on distance from Santa Rosa area to project site. Average trip length for customer trips based on the market analysis (Meister, 2021).
- 3 All Trip Type percentages, with exception of the Casino/Event Center/Convention, are CalEEMod default values. The Casino/Event Center/Convention Trip Type percentage conservatively assumes that all trips are primary.
- 4 All Trip Purpose percentages, with exception of the Casino/Event Center/Convention, are CalEEMod default values. The Casino/Event Center/Convention Trip Purpose is based on estimated employee and service trips.

Table 4: Alternative B – Energy Use

Land Use Subtype	Title-24 Electricity Energy Intensity (KWhr/size/yr)	Nontitle-24 Electricity Energy Intensity (KWhr/size/yr)	Lighting Energy Intensity (KWhr/size/yr)	Title-24 Natural Gas Intensity (KBtu/size/yr)	Non-title-24 Natural Gas Intensity (KBtu/size/yr)
User Defined (Casino, Event Center, Convention)	7.35	23.69	6.78	0	0
Hotel	Default	Default	Default	0	0
Unenclosed Parking Structure with Elevator	Default	Default	Default	Default	Default
Parking Lot	Default	Default	Default	Default	Default
User Defined (WWTP)	1.32	3.7	3.08	0	0

Notes: Casino, Event Center, Convention energy use based on CalEEMod default values for quality restaurant energy use. WWTP energy use based on CalEEMod default values for general light industrial. No natural gas use expected.

Alternative B – Off-Road Equipment Mitigation Inputs

Equipment Type	Engine Tier	Number of Equipment Mitigated	Diesel Particulate Filter (DPF) Level 2014
Welders, Air Compressors, Concrete/Industrial Saws	No Change	0	No Change
All Other Equipment	Tier 4	All	3

Mitigation Measures incorporated into EA/TEIR

- The Tribe shall use Tier 4 construction equipment for diesel equipment with a horsepower rating of greater than 50.
- The Tribe shall use soil stabilizer on unpaved roads.
- The Tribe shall apply water to exposed construction areas twice a day.
- The Tribe shall restrict vehicle speeds on the construction site to 15 miles per hour.
- The Tribe shall restrict construction vehicle idling to five minutes.
- The Tribe shall use energy efficient lighting
- The Tribe shall use reclaimed water for outdoor landscape irrigation (included as part of the Project Description; however, input as a mitigation measure for the purposes of CalEEMod).

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	122.60	User Defined Unit	46.80	372,747.00	0
User Defined Commercial	33.10	User Defined Unit	0.00	33,135.00	0
User Defined Industrial	18.90	User Defined Unit	0.00	18,900.00	0
Parking Lot	769.00	Space	0.00	292,200.00	0
Unenclosed Parking with Elevator	3,692.00	Space	0.00	1,214,080.00	0
Hotel	200.00	Room	0.00	147,380.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	56
Climate Zone	4			Operational Year	2028
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - See input tables.
- Construction Phase - See input tables.
- Trips and VMT - See input tables.
- Demolition -
- Grading -
- Vehicle Trips - See input tables.

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- Energy Use - See input tables.
- Water And Wastewater - See input tables.
- Solid Waste - See input tables.
- Land Use Change -
- Construction Off-road Equipment Mitigation - See input tables.
- Area Mitigation - See input tables.
- Water Mitigation -
- Waste Mitigation -
- Stationary Sources - Emergency Generators and Fire Pumps - See input tables.
- Stationary Sources - Emergency Generators and Fire Pumps EF - Tier 4 generators

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	100
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
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
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	50.00	10.00
tblConstructionPhase	NumDays	30.00	15.00
tblConstructionPhase	NumDays	75.00	40.00
tblConstructionPhase	NumDays	740.00	335.00
tblConstructionPhase	NumDays	55.00	200.00
tblConstructionPhase	NumDays	55.00	90.00
tblEnergyUse	LightingElect	0.00	6.78
tblEnergyUse	LightingElect	0.00	3.08
tblEnergyUse	NT24E	0.00	23.69

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tblEnergyUse	NT24E	0.00	3.70
tblEnergyUse	NT24NG	4.75	0.00
tblEnergyUse	T24E	0.00	7.35
tblEnergyUse	T24E	0.00	1.32
tblEnergyUse	T24NG	39.16	0.00
tblLandUse	LandUseSquareFeet	0.00	372,747.00
tblLandUse	LandUseSquareFeet	0.00	33,135.00
tblLandUse	LandUseSquareFeet	0.00	18,900.00
tblLandUse	LandUseSquareFeet	307,600.00	292,200.00
tblLandUse	LandUseSquareFeet	1,476,800.00	1,214,080.00
tblLandUse	LandUseSquareFeet	290,400.00	147,380.00
tblLandUse	LotAcreage	0.00	46.80
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	33.23	0.00
tblLandUse	LotAcreage	6.67	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	109.50	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,267.00
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,367.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00

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tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	Load_Factor	0.73	0.50
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,250.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TTP	0.00	77.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TTP	0.00	18.00
tblVehicleTrips	CW_TTP	0.00	5.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	8.19	2.05
tblVehicleTrips	ST_TR	0.00	82.91
tblVehicleTrips	SU_TR	5.95	2.05
tblVehicleTrips	SU_TR	0.00	82.91
tblVehicleTrips	WD_TR	8.36	2.00
tblVehicleTrips	WD_TR	0.00	53.71
tblWater	IndoorWaterUseRate	5,073,354.00	0.00
tblWater	IndoorWaterUseRate	0.00	42,705,000.00
tblWater	OutdoorWaterUseRate	563,706.00	0.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
2026	0.2293	1.9869	2.1689	7.5500e-003	0.6831	0.0606	0.7436	0.2439	0.0563	0.3002	0.0000	691.4293	691.4293	0.0753	0.0423	705.9217
2027	3.8442	4.0530	5.6442	0.0203	1.2519	0.1072	1.3591	0.3390	0.1009	0.4399	0.0000	1,863.2414	1,863.2414	0.1217	0.1227	1,902.8396
Maximum	3.8442	4.0530	5.6442	0.0203	1.2519	0.1072	1.3591	0.3390	0.1009	0.4399	0.0000	1,863.2414	1,863.2414	0.1217	0.1227	1,902.8396

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					
2026	0.1312	0.8629	2.4015	7.5500e-003	0.4990	7.9000e-003	0.5069	0.1618	7.6300e-003	0.1694	0.0000	691.4291	691.4291	0.0753	0.0423	705.9215
2027	3.7042	2.4449	5.9639	0.0203	1.2519	0.0266	1.2785	0.3390	0.0258	0.3648	0.0000	1,863.2409	1,863.2409	0.1217	0.1227	1,902.8391
Maximum	3.7042	2.4449	5.9639	0.0203	1.2519	0.0266	1.2785	0.3390	0.0258	0.3648	0.0000	1,863.2409	1,863.2409	0.1217	0.1227	1,902.8391

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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	5.84	45.24	-7.07	0.00	9.51	79.44	15.09	14.09	78.74	27.82	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	7-1-2026	9-30-2026	1.1760	0.3106
2	10-1-2026	12-31-2026	1.0446	0.6910
3	1-1-2027	3-31-2027	1.1234	0.7775
4	4-1-2027	6-30-2027	2.1735	1.7780
5	7-1-2027	9-30-2027	2.4559	1.8394
		Highest	2.4559	1.8394

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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****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	2.6658	4.0000e-004	0.0443	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1,762.7393	1,762.7393	0.2852	0.0346	1,780.1696
Mobile	15.4393	27.0291	193.6518	0.5128	59.9390	0.3841	60.3232	16.0089	0.3600	16.3689	0.0000	47,348.6500	47,348.6500	2.1215	1.9884	47,994.2323
Stationary	0.4452	0.2183	1.1352	2.1400e-003		0.0218	0.0218		0.0218	0.0218	0.0000	206.6176	206.6176	0.0290	0.0000	207.3418
Waste						0.0000	0.0000		0.0000	0.0000	257.1896	0.0000	257.1896	15.1995	0.0000	637.1762
Water						0.0000	0.0000		0.0000	0.0000	13.5483	21.3801	34.9284	1.3950	0.0333	79.7199
Total	18.5503	27.2478	194.8313	0.5149	59.9390	0.4061	60.3452	16.0089	0.3820	16.3909	270.7379	49,339.4734	49,610.2113	19.0304	2.0563	50,698.7319

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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	2.6326	4.0000e-004	0.0443	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1,762.7393	1,762.7393	0.2852	0.0346	1,780.1696
Mobile	15.4393	27.0291	193.6518	0.5128	59.9390	0.3841	60.3232	16.0089	0.3600	16.3689	0.0000	47,348.6500	47,348.6500	2.1215	1.9884	47,994.2323
Stationary	0.4452	0.2183	1.1352	2.1400e-003		0.0218	0.0218		0.0218	0.0218	0.0000	206.6176	206.6176	0.0290	0.0000	207.3418
Waste						0.0000	0.0000		0.0000	0.0000	128.5948	0.0000	128.5948	7.5997	0.0000	318.5881
Water						0.0000	0.0000		0.0000	0.0000	12.1935	19.2421	31.4356	1.2555	0.0300	71.7479
Total	18.5171	27.2478	194.8313	0.5149	59.9390	0.4061	60.3452	16.0089	0.3820	16.3909	140.7883	49,337.3354	49,478.1237	11.2911	2.0529	50,372.1718

	ROG	NOx	CO	SO2	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	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.00	0.00	0.27	40.67	0.16	0.64

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-272.4900
Total	-272.4900

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2026	7/14/2026	5	10	
2	Site Preparation	Site Preparation	7/1/2026	7/21/2026	5	15	
3	Grading	Grading	7/22/2026	9/15/2026	5	40	
4	Building Construction	Building Construction	9/16/2026	12/28/2027	5	335	
5	Architectural Coating	Architectural Coating	3/23/2027	12/27/2027	5	200	
6	Paving	Paving	6/15/2027	10/18/2027	5	90	

Acres of Grading (Site Preparation Phase): 22.5**Acres of Grading (Grading Phase): 120****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 858,243; Non-Residential Outdoor: 286,081; Striped Parking Area: 90,377 (Architectural Coating – sqft)**

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

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	29.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,250.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

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

Building Construction	9	832.00	341.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	166.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2026**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.1500e-003	0.0000	3.1500e-003	4.8000e-004	0.0000	4.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0105	0.0960	0.0971	1.9000e-004		4.2600e-003	4.2600e-003		3.9600e-003	3.9600e-003	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175
Total	0.0105	0.0960	0.0971	1.9000e-004	3.1500e-003	4.2600e-003	7.4100e-003	4.8000e-004	3.9600e-003	4.4400e-003	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175

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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 Demolition - 2026****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	3.0000e-005	1.8300e-003	4.2000e-004	1.0000e-005	2.5000e-004	2.0000e-005	2.6000e-004	7.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.7798	0.7798	0.0000	1.2000e-004	0.8165
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.0000e-004	1.3500e-003	0.0000	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4354	0.4354	1.0000e-005	1.0000e-005	0.4390
Total	2.0000e-004	1.9300e-003	1.7700e-003	1.0000e-005	8.5000e-004	2.0000e-005	8.6000e-004	2.3000e-004	2.0000e-005	2.4000e-004	0.0000	1.2153	1.2153	1.0000e-005	1.3000e-004	1.2555

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					1.4200e-003	0.0000	1.4200e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4700e-003	0.0200	0.1153	1.9000e-004		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175
Total	3.4700e-003	0.0200	0.1153	1.9000e-004	1.4200e-003	5.0000e-004	1.9200e-003	2.1000e-004	5.0000e-004	7.1000e-004	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175

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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 Demolition - 2026

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	3.0000e-005	1.8300e-003	4.2000e-004	1.0000e-005	2.5000e-004	2.0000e-005	2.6000e-004	7.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.7798	0.7798	0.0000	1.2000e-004	0.8165
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.0000e-004	1.3500e-003	0.0000	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4354	0.4354	1.0000e-005	1.0000e-005	0.4390
Total	2.0000e-004	1.9300e-003	1.7700e-003	1.0000e-005	8.5000e-004	2.0000e-005	8.6000e-004	2.3000e-004	2.0000e-005	2.4000e-004	0.0000	1.2153	1.2153	1.0000e-005	1.3000e-004	1.2555

3.3 Site Preparation - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1474	0.0000	0.1474	0.0758	0.0000	0.0758	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0186	0.1893	0.1343	2.9000e-004		8.1500e-003	8.1500e-003		7.5000e-003	7.5000e-003	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032
Total	0.0186	0.1893	0.1343	2.9000e-004	0.1474	8.1500e-003	0.1556	0.0758	7.5000e-003	0.0833	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032

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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 Site Preparation - 2026****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	3.0000e-004	1.8000e-004	2.4300e-003	1.0000e-005	1.0700e-003	0.0000	1.0800e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.7838	0.7838	2.0000e-005	2.0000e-005	0.7902
Total	3.0000e-004	1.8000e-004	2.4300e-003	1.0000e-005	1.0700e-003	0.0000	1.0800e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.7838	0.7838	2.0000e-005	2.0000e-005	0.7902

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					0.0663	0.0000	0.0663	0.0341	0.0000	0.0341	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4900e-003	0.0151	0.1565	2.9000e-004		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032
Total	3.4900e-003	0.0151	0.1565	2.9000e-004	0.0663	7.0000e-005	0.0664	0.0341	7.0000e-005	0.0342	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032

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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 Site Preparation - 2026

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	3.0000e-004	1.8000e-004	2.4300e-003	1.0000e-005	1.0700e-003	0.0000	1.0800e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.7838	0.7838	2.0000e-005	2.0000e-005	0.7902
Total	3.0000e-004	1.8000e-004	2.4300e-003	1.0000e-005	1.0700e-003	0.0000	1.0800e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.7838	0.7838	2.0000e-005	2.0000e-005	0.7902

3.4 Grading - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1841	0.0000	0.1841	0.0731	0.0000	0.0731	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0580	0.5589	0.5266	1.2400e-003		0.0226	0.0226		0.0208	0.0208	0.0000	109.0124	109.0124	0.0353	0.0000	109.8939
Total	0.0580	0.5589	0.5266	1.2400e-003	0.1841	0.0226	0.2067	0.0731	0.0208	0.0939	0.0000	109.0124	109.0124	0.0353	0.0000	109.8939

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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 Grading - 2026****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	1.3600e-003	0.0790	0.0180	3.5000e-004	0.0106	7.3000e-004	0.0114	2.9300e-003	7.0000e-004	3.6200e-003	0.0000	33.6131	33.6131	2.1000e-004	5.2900e-003	35.1942
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	9.0000e-004	5.4000e-004	7.2000e-003	3.0000e-005	3.1800e-003	1.0000e-005	3.1900e-003	8.4000e-004	1.0000e-005	8.6000e-004	0.0000	2.3224	2.3224	6.0000e-005	6.0000e-005	2.3413
Total	2.2600e-003	0.0795	0.0252	3.8000e-004	0.0138	7.4000e-004	0.0146	3.7700e-003	7.1000e-004	4.4800e-003	0.0000	35.9354	35.9354	2.7000e-004	5.3500e-003	37.5356

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					0.0828	0.0000	0.0828	0.0329	0.0000	0.0329	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.0660	0.6600	1.2400e-003		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	109.0123	109.0123	0.0353	0.0000	109.8937
Total	0.0152	0.0660	0.6600	1.2400e-003	0.0828	3.0000e-004	0.0831	0.0329	3.0000e-004	0.0332	0.0000	109.0123	109.0123	0.0353	0.0000	109.8937

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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 Grading - 2026****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	1.3600e-003	0.0790	0.0180	3.5000e-004	0.0106	7.3000e-004	0.0114	2.9300e-003	7.0000e-004	3.6200e-003	0.0000	33.6131	33.6131	2.1000e-004	5.2900e-003	35.1942
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	9.0000e-004	5.4000e-004	7.2000e-003	3.0000e-005	3.1800e-003	1.0000e-005	3.1900e-003	8.4000e-004	1.0000e-005	8.6000e-004	0.0000	2.3224	2.3224	6.0000e-005	6.0000e-005	2.3413
Total	2.2600e-003	0.0795	0.0252	3.8000e-004	0.0138	7.4000e-004	0.0146	3.7700e-003	7.1000e-004	4.4800e-003	0.0000	35.9354	35.9354	2.7000e-004	5.3500e-003	37.5356

3.5 Building Construction - 2026**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0526	0.4801	0.6193	1.0400e-003		0.0203	0.0203		0.0191	0.0191	0.0000	89.2890	89.2890	0.0210	0.0000	89.8137
Total	0.0526	0.4801	0.6193	1.0400e-003		0.0203	0.0203		0.0191	0.0191	0.0000	89.2890	89.2890	0.0210	0.0000	89.8137

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****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	0.0149	0.5377	0.1857	2.3700e-003	0.0783	3.3100e-003	0.0816	0.0227	3.1600e-003	0.0258	0.0000	227.1200	227.1200	1.3200e-003	0.0321	236.7177
Worker	0.0720	0.0434	0.5765	2.0300e-003	0.2544	1.1500e-003	0.2555	0.0676	1.0600e-003	0.0687	0.0000	185.9744	185.9744	4.6100e-003	4.7100e-003	187.4945
Total	0.0869	0.5810	0.7622	4.4000e-003	0.3327	4.4600e-003	0.3371	0.0903	4.2200e-003	0.0945	0.0000	413.0944	413.0944	5.9300e-003	0.0368	424.2122

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	0.0194	0.0991	0.6782	1.0400e-003		1.7900e-003	1.7900e-003		1.7900e-003	1.7900e-003	0.0000	89.2889	89.2889	0.0210	0.0000	89.8136
Total	0.0194	0.0991	0.6782	1.0400e-003		1.7900e-003	1.7900e-003		1.7900e-003	1.7900e-003	0.0000	89.2889	89.2889	0.0210	0.0000	89.8136

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****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	0.0149	0.5377	0.1857	2.3700e-003	0.0783	3.3100e-003	0.0816	0.0227	3.1600e-003	0.0258	0.0000	227.1200	227.1200	1.3200e-003	0.0321	236.7177
Worker	0.0720	0.0434	0.5765	2.0300e-003	0.2544	1.1500e-003	0.2555	0.0676	1.0600e-003	0.0687	0.0000	185.9744	185.9744	4.6100e-003	4.7100e-003	187.4945
Total	0.0869	0.5810	0.7622	4.4000e-003	0.3327	4.4600e-003	0.3371	0.0903	4.2200e-003	0.0945	0.0000	413.0944	413.0944	5.9300e-003	0.0368	424.2122

3.5 Building Construction - 2027**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	0.1764	1.6086	2.0749	3.4800e-003		0.0681	0.0681		0.0640	0.0640	0.0000	299.1761	299.1761	0.0703	0.0000	300.9343
Total	0.1764	1.6086	2.0749	3.4800e-003		0.0681	0.0681		0.0640	0.0640	0.0000	299.1761	299.1761	0.0703	0.0000	300.9343

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****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	0.0489	1.7899	0.6111	7.8000e-003	0.2624	0.0110	0.2734	0.0759	0.0105	0.0864	0.0000	746.6668	746.6668	4.4000e-003	0.1053	778.1469
Worker	0.2265	0.1325	1.8272	6.5900e-003	0.8523	3.6300e-003	0.8559	0.2267	3.3400e-003	0.2300	0.0000	604.4844	604.4844	0.0141	0.0150	609.3052
Total	0.2754	1.9224	2.4383	0.0144	1.1147	0.0146	1.1293	0.3025	0.0139	0.3164	0.0000	1,351.151 2	1,351.151 2	0.0185	0.1203	1,387.452 1

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	0.0650	0.3319	2.2723	3.4800e-003		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	299.1757	299.1757	0.0703	0.0000	300.9339
Total	0.0650	0.3319	2.2723	3.4800e-003		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	299.1757	299.1757	0.0703	0.0000	300.9339

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

3.5 Building Construction - 2027

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	0.0489	1.7899	0.6111	7.8000e-003	0.2624	0.0110	0.2734	0.0759	0.0105	0.0864	0.0000	746.6668	746.6668	4.4000e-003	0.1053	778.1469
Worker	0.2265	0.1325	1.8272	6.5900e-003	0.8523	3.6300e-003	0.8559	0.2267	3.3400e-003	0.2300	0.0000	604.4844	604.4844	0.0141	0.0150	609.3052
Total	0.2754	1.9224	2.4383	0.0144	1.1147	0.0146	1.1293	0.3025	0.0139	0.3164	0.0000	1,351.1512	1,351.1512	0.0185	0.1203	1,387.4521

3.6 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.2976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1146	0.1809	3.0000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	25.5325	25.5325	1.3900e-003	0.0000	25.5674
Total	3.3147	0.1146	0.1809	3.0000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	25.5325	25.5325	1.3900e-003	0.0000	25.5674

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****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	0.0350	0.0205	0.2826	1.0200e-003	0.1318	5.6000e-004	0.1324	0.0351	5.2000e-004	0.0356	0.0000	93.4932	93.4932	2.1900e-003	2.3200e-003	94.2388
Total	0.0350	0.0205	0.2826	1.0200e-003	0.1318	5.6000e-004	0.1324	0.0351	5.2000e-004	0.0356	0.0000	93.4932	93.4932	2.1900e-003	2.3200e-003	94.2388

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	3.2976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1146	0.1809	3.0000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	25.5325	25.5325	1.3900e-003	0.0000	25.5673
Total	3.3147	0.1146	0.1809	3.0000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	25.5325	25.5325	1.3900e-003	0.0000	25.5673

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****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	0.0350	0.0205	0.2826	1.0200e-003	0.1318	5.6000e-004	0.1324	0.0351	5.2000e-004	0.0356	0.0000	93.4932	93.4932	2.1900e-003	2.3200e-003	94.2388
Total	0.0350	0.0205	0.2826	1.0200e-003	0.1318	5.6000e-004	0.1324	0.0351	5.2000e-004	0.0356	0.0000	93.4932	93.4932	2.1900e-003	2.3200e-003	94.2388

3.7 Paving - 2027**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	0.0412	0.3862	0.6560	1.0300e-003		0.0188	0.0188		0.0173	0.0173	0.0000	90.0867	90.0867	0.0291	0.0000	90.8150
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0412	0.3862	0.6560	1.0300e-003		0.0188	0.0188		0.0173	0.0173	0.0000	90.0867	90.0867	0.0291	0.0000	90.8150

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Paving - 2027****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	8.3000e-004	0.0115	4.0000e-005	5.3600e-003	2.0000e-005	5.3800e-003	1.4300e-003	2.0000e-005	1.4500e-003	0.0000	3.8017	3.8017	9.0000e-005	9.0000e-005	3.8320
Total	1.4200e-003	8.3000e-004	0.0115	4.0000e-005	5.3600e-003	2.0000e-005	5.3800e-003	1.4300e-003	2.0000e-005	1.4500e-003	0.0000	3.8017	3.8017	9.0000e-005	9.0000e-005	3.8320

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	0.0126	0.0547	0.7783	1.0300e-003		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	90.0865	90.0865	0.0291	0.0000	90.8149
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0126	0.0547	0.7783	1.0300e-003		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	90.0865	90.0865	0.0291	0.0000	90.8149

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

3.7 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	8.3000e-004	0.0115	4.0000e-005	5.3600e-003	2.0000e-005	5.3800e-003	1.4300e-003	2.0000e-005	1.4500e-003	0.0000	3.8017	3.8017	9.0000e-005	9.0000e-005	3.8320
Total	1.4200e-003	8.3000e-004	0.0115	4.0000e-005	5.3600e-003	2.0000e-005	5.3800e-003	1.4300e-003	2.0000e-005	1.4500e-003	0.0000	3.8017	3.8017	9.0000e-005	9.0000e-005	3.8320

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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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
Category	tons/yr										MT/yr					
Mitigated	15.4393	27.0291	193.6518	0.5128	59.9390	0.3841	60.3232	16.0089	0.3600	16.3689	0.0000	47,348.6500	47,348.6500	2.1215	1.9884	47,994.2323
Unmitigated	15.4393	27.0291	193.6518	0.5128	59.9390	0.3841	60.3232	16.0089	0.3600	16.3689	0.0000	47,348.6500	47,348.6500	2.1215	1.9884	47,994.2323

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	400.00	410.00	410.00	3,824,439	3,824,439
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
User Defined Commercial	6,584.85	10,164.77	10164.77	124,295,346	124,295,346
User Defined Commercial	1,777.80	2,744.32	2744.32	33,557,716	33,557,716
User Defined Industrial	0.00	0.00	0.00		
Total	8,762.65	13,319.09	13,319.09	161,677,501	161,677,501

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
Hotel	14.70	55.00	10.00	19.40	61.60	19.00	58	38	4
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

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
Hotel	0.574494	0.053520	0.164411	0.120035	0.024142	0.006389	0.008007	0.015461	0.001089	0.000375	0.027458	0.000780	0.003840
Parking Lot	0.574494	0.053520	0.164411	0.120035	0.024142	0.006389	0.008007	0.015461	0.001089	0.000375	0.027458	0.000780	0.003840
Unenclosed Parking with Elevator	0.574494	0.053520	0.164411	0.120035	0.024142	0.006389	0.008007	0.015461	0.001089	0.000375	0.027458	0.000780	0.003840
User Defined Commercial	0.574494	0.053520	0.164411	0.120035	0.024142	0.006389	0.008007	0.015461	0.001089	0.000375	0.027458	0.000780	0.003840
User Defined Industrial	0.574494	0.053520	0.164411	0.120035	0.024142	0.006389	0.008007	0.015461	0.001089	0.000375	0.027458	0.000780	0.003840

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

Unmitigated

[illegible]

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

Mitigated

[illegible]

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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			
Hotel	1.09061e+006	100.9075	0.0163	1.9800e-003	101.9053
Parking Lot	102270	9.4624	1.5300e-003	1.9000e-004	9.5560
Unenclosed Parking with Elevator	2.35532e+006	217.9227	0.0353	4.2700e-003	220.0775
User Defined Commercial	1.25317e+006	115.9476	0.0188	2.2700e-003	117.0941
User Defined Commercial	1.40973e+007	1,304.3346	0.2110	0.0256	1,317.2321
User Defined Industrial	153090	14.1645	2.2900e-003	2.8000e-004	14.3045
Total		1,762.7393	0.2852	0.0346	1,780.1696

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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****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.09061e+006	100.9075	0.0163	1.9800e-003	101.9053
Parking Lot	102270	9.4624	1.5300e-003	1.9000e-004	9.5560
Unenclosed Parking with Elevator	2.35532e+006	217.9227	0.0353	4.2700e-003	220.0775
User Defined Commercial	1.25317e+006	115.9476	0.0188	2.2700e-003	117.0941
User Defined Commercial	1.40973e+007	1,304.3346	0.2110	0.0256	1,317.2321
User Defined Industrial	153090	14.1645	2.2900e-003	2.8000e-004	14.3045
Total		1,762.7393	0.2852	0.0346	1,780.1696

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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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
Category	tons/yr										MT/yr					
Mitigated	2.6326	4.0000e-004	0.0443	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920
Unmitigated	2.6658	4.0000e-004	0.0443	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3298					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.3320					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0800e-003	4.0000e-004	0.0443	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920
Total	2.6658	4.0000e-004	0.0443	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920

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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	0.2966					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.3320					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0800e-003	4.0000e-004	0.0443	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920
Total	2.6326	4.0000e-004	0.0443	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920

7.0 Water Detail**7.1 Mitigation Measures Water**

Use Reclaimed 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	31.4356	1.2555	0.0300	71.7479
Unmitigated	34.9284	1.3950	0.0333	79.7199

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	42.705 / 0	34.9284	1.3950	0.0333	79.7199
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		34.9284	1.3950	0.0333	79.7199

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

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	38.4345 / 0	31.4356	1.2555	0.0300	71.7479
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		31.4356	1.2555	0.0300	71.7479

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	128.5948	7.5997	0.0000	318.5881
Unmitigated	257.1896	15.1995	0.0000	637.1762

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	1267	257.1896	15.1995	0.0000	637.1762
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		257.1896	15.1995	0.0000	637.1762

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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****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	633.5	128.5948	7.5997	0.0000	318.5881
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		128.5948	7.5997	0.0000	318.5881

9.0 Operational Offroad

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
Emergency Generator	3	0	60	2447	0.73	Diesel
Emergency Generator	1	0	12	2447	0.5	Diesel
Emergency Generator	1	0	60	1367	0.73	Diesel

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

Boilers

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

User Defined Equipment

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

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750 - 9999 HP)	0.4452	0.2183	1.1352	2.1400e-003		0.0218	0.0218		0.0218	0.0218	0.0000	206.6176	206.6176	0.0290	0.0000	207.3418
Total	0.4452	0.2183	1.1352	2.1400e-003		0.0218	0.0218		0.0218	0.0218	0.0000	206.6176	206.6176	0.0290	0.0000	207.3418

11.0 Vegetation

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			
Unmitigated	-272.4900	0.0000	0.0000	-272.4900

11.1 Vegetation Land Change
Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres				
	MT				
Cropland	61.7 / 17.75	-272.4900	0.0000	0.0000	-272.4900
Total		-272.4900	0.0000	0.0000	-272.4900

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

Koi Nation Shiloh Resort and Casino - Alternative B
Solano-San Francisco County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	122.60	User Defined Unit	46.80	372,747.00	0
User Defined Commercial	33.10	User Defined Unit	0.00	33,135.00	0
User Defined Industrial	18.90	User Defined Unit	0.00	18,900.00	0
Parking Lot	769.00	Space	0.00	292,200.00	0
Unenclosed Parking with Elevator	3,692.00	Space	0.00	1,214,080.00	0
Hotel	200.00	Room	0.00	147,380.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	56
Climate Zone	4			Operational Year	2028
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - See input tables.
- Construction Phase - See input tables.
- Trips and VMT - See input tables.
- Demolition -
- Grading -
- Vehicle Trips - See input tables.

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

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

Energy Use - See input tables.

Water And Wastewater - See input tables.

Solid Waste - See input tables.

Land Use Change -

Construction Off-road Equipment Mitigation - See input tables.

Area Mitigation - See input tables.

Water Mitigation -

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - See input tables.

Stationary Sources - Emergency Generators and Fire Pumps EF - Tier 4 generators

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	100
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
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
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	50.00	10.00
tblConstructionPhase	NumDays	30.00	15.00
tblConstructionPhase	NumDays	75.00	40.00
tblConstructionPhase	NumDays	740.00	335.00
tblConstructionPhase	NumDays	55.00	200.00
tblConstructionPhase	NumDays	55.00	90.00
tblEnergyUse	LightingElect	0.00	6.78
tblEnergyUse	LightingElect	0.00	3.08
tblEnergyUse	NT24E	0.00	23.69

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

tblEnergyUse	NT24E	0.00	3.70
tblEnergyUse	NT24NG	4.75	0.00
tblEnergyUse	T24E	0.00	7.35
tblEnergyUse	T24E	0.00	1.32
tblEnergyUse	T24NG	39.16	0.00
tblLandUse	LandUseSquareFeet	0.00	372,747.00
tblLandUse	LandUseSquareFeet	0.00	33,135.00
tblLandUse	LandUseSquareFeet	0.00	18,900.00
tblLandUse	LandUseSquareFeet	307,600.00	292,200.00
tblLandUse	LandUseSquareFeet	1,476,800.00	1,214,080.00
tblLandUse	LandUseSquareFeet	290,400.00	147,380.00
tblLandUse	LotAcreage	0.00	46.80
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	33.23	0.00
tblLandUse	LotAcreage	6.67	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	109.50	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,267.00
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,367.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00

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

tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	Load_Factor	0.73	0.50
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,250.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TTP	0.00	77.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TTP	0.00	18.00
tblVehicleTrips	CW_TTP	0.00	5.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	8.19	2.05
tblVehicleTrips	ST_TR	0.00	82.91
tblVehicleTrips	SU_TR	5.95	2.05
tblVehicleTrips	SU_TR	0.00	82.91
tblVehicleTrips	WD_TR	8.36	2.00
tblVehicleTrips	WD_TR	0.00	53.71
tblWater	IndoorWaterUseRate	5,073,354.00	0.00
tblWater	IndoorWaterUseRate	0.00	42,705,000.00
tblWater	OutdoorWaterUseRate	563,706.00	0.00

2.0 Emissions Summary

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	4.6528	44.8197	38.0600	0.1451	20.6089	1.9441	22.5530	10.2837	1.7961	12.0798	0.0000	14,769.23 11	14,769.23 11	2.2455	1.0424	15,098.90 87
2027	38.1524	36.5922	55.8859	0.1799	10.4126	1.1169	11.5295	2.8095	1.0457	3.8552	0.0000	18,169.65 88	18,169.65 88	1.5049	1.0425	18,517.93 77
Maximum	38.1524	44.8197	55.8859	0.1799	20.6089	1.9441	22.5530	10.2837	1.7961	12.0798	0.0000	18,169.65 88	18,169.65 88	2.2455	1.0425	18,517.93 77

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	2.9418	16.9425	44.6649	0.1451	9.4511	0.1622	9.5657	4.6749	0.1561	4.7893	0.0000	14,769.23 11	14,769.23 11	2.2455	1.0424	15,098.90 87
2027	36.6541	19.3290	60.1340	0.1799	10.4126	0.2230	10.6356	2.8095	0.2166	3.0261	0.0000	18,169.65 88	18,169.65 88	1.5049	1.0425	18,517.93 77
Maximum	36.6541	19.3290	60.1340	0.1799	10.4126	0.2230	10.6356	4.6749	0.2166	4.7893	0.0000	18,169.65 88	18,169.65 88	2.2455	1.0425	18,517.93 77

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco 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	7.50	55.45	-11.55	0.00	35.97	87.42	40.73	42.84	86.89	50.95	0.00	0.00	0.00	0.00	0.00	0.00

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	14.6301	4.4600e-003	0.4924	4.0000e-005		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003		1.0583	1.0583	2.7500e-003		1.1271
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	115.4469	181.6535	1,496.3111	3.9626	452.5136	2.8071	455.3207	120.5364	2.6311	123.1674		403,171.4263	403,171.4263	16.8468	15.3732	408,173.8000
Stationary	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	130.0770	181.6579	1,496.8035	3.9626	452.5136	2.8089	455.3225	120.5364	2.6328	123.1692		403,172.4846	403,172.4846	16.8495	15.3732	408,174.9271

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco 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
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	14.4484	4.4600e-003	0.4924	4.0000e-005		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003		1.0583	1.0583	2.7500e-003		1.1271
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	115.4469	181.6535	1,496.3111	3.9626	452.5136	2.8071	455.3207	120.5364	2.6311	123.1674		403,171.4263	403,171.4263	16.8468	15.3732	408,173.8000
Stationary	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	129.8953	181.6579	1,496.8035	3.9626	452.5136	2.8089	455.3225	120.5364	2.6328	123.1692		403,172.4846	403,172.4846	16.8495	15.3732	408,174.9271

	ROG	NOx	CO	SO2	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	0.14	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	Demolition	Demolition	7/1/2026	7/14/2026	5	10	
2	Site Preparation	Site Preparation	7/1/2026	7/21/2026	5	15	
3	Grading	Grading	7/22/2026	9/15/2026	5	40	
4	Building Construction	Building Construction	9/16/2026	12/28/2027	5	335	

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

5	Architectural Coating	Architectural Coating	3/23/2027	12/27/2027	5	200
6	Paving	Paving	6/15/2027	10/18/2027	5	90

Acres of Grading (Site Preparation Phase): 22.5**Acres of Grading (Grading Phase): 120****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 858,243; Non-Residential Outdoor: 286,081; Striped Parking Area: 90,377 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

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

Paving	Rollers	2	8.00	80	0.38
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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
Demolition	6	15.00	0.00	29.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,250.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	832.00	341.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	166.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Use DPF for Construction Equipment
- Use Soil Stabilizer
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Demolition - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6300	0.0000	0.6300	0.0954	0.0000	0.0954			0.0000			0.0000
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920		3,747.5996	3,747.5996	1.0464		3,773.7606
Total	2.0926	19.1966	19.4184	0.0388	0.6300	0.8528	1.4828	0.0954	0.7920	0.8874		3,747.5996	3,747.5996	1.0464		3,773.7606

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	6.5300e-003	0.3494	0.0828	1.6200e-003	0.0508	3.3800e-003	0.0542	0.0139	3.2400e-003	0.0172		171.8223	171.8223	1.0900e-003	0.0270	179.9047
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
Worker	0.0368	0.0181	0.2941	1.0200e-003	0.1232	5.4000e-004	0.1238	0.0327	4.9000e-004	0.0332		103.0498	103.0498	2.2200e-003	2.2600e-003	103.7777
Total	0.0433	0.3675	0.3769	2.6400e-003	0.1741	3.9200e-003	0.1780	0.0466	3.7300e-003	0.0504		274.8720	274.8720	3.3100e-003	0.0293	283.6824

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Demolition - 2026****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					0.2835	0.0000	0.2835	0.0429	0.0000	0.0429			0.0000			0.0000
Off-Road	0.6948	4.0014	23.0661	0.0388		0.1008	0.1008		0.1008	0.1008	0.0000	3,747.599 6	3,747.599 6	1.0464		3,773.760 6
Total	0.6948	4.0014	23.0661	0.0388	0.2835	0.1008	0.3843	0.0429	0.1008	0.1437	0.0000	3,747.599 6	3,747.599 6	1.0464		3,773.760 6

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	6.5300e-003	0.3494	0.0828	1.6200e-003	0.0508	3.3800e-003	0.0542	0.0139	3.2400e-003	0.0172		171.8223	171.8223	1.0900e-003	0.0270	179.9047
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
Worker	0.0368	0.0181	0.2941	1.0200e-003	0.1232	5.4000e-004	0.1238	0.0327	4.9000e-004	0.0332		103.0498	103.0498	2.2200e-003	2.2600e-003	103.7777
Total	0.0433	0.3675	0.3769	2.6400e-003	0.1741	3.9200e-003	0.1780	0.0466	3.7300e-003	0.0504		274.8720	274.8720	3.3100e-003	0.0293	283.6824

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Site Preparation - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931		3,718.9320
Total	2.4727	25.2339	17.9118	0.0381	19.6570	1.0868	20.7438	10.1025	0.9999	11.1023		3,689.1037	3,689.1037	1.1931		3,718.9320

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	0.0000	0.0000	0.0000	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	0.0441	0.0217	0.3529	1.2200e-003	0.1479	6.4000e-004	0.1485	0.0392	5.9000e-004	0.0398		123.6598	123.6598	2.6600e-003	2.7100e-003	124.5332
Total	0.0441	0.0217	0.3529	1.2200e-003	0.1479	6.4000e-004	0.1485	0.0392	5.9000e-004	0.0398		123.6598	123.6598	2.6600e-003	2.7100e-003	124.5332

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Site Preparation - 2026****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					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0381		9.3100e-003	9.3100e-003		9.3100e-003	9.3100e-003	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
Total	0.4656	2.0175	20.8690	0.0381	8.8457	9.3100e-003	8.8550	4.5461	9.3100e-003	4.5554	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320

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	0.0000	0.0000	0.0000	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	0.0441	0.0217	0.3529	1.2200e-003	0.1479	6.4000e-004	0.1485	0.0392	5.9000e-004	0.0398		123.6598	123.6598	2.6600e-003	2.7100e-003	124.5332
Total	0.0441	0.0217	0.3529	1.2200e-003	0.1479	6.4000e-004	0.1485	0.0392	5.9000e-004	0.0398		123.6598	123.6598	2.6600e-003	2.7100e-003	124.5332

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Grading - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.281 4	6,008.281 4	1.9432		6,056.861 4
Total	2.9012	27.9429	26.3311	0.0621	9.2036	1.1309	10.3345	3.6538	1.0404	4.6942		6,008.281 4	6,008.281 4	1.9432		6,056.861 4

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	0.0704	3.7650	0.8921	0.0174	0.5478	0.0364	0.5842	0.1503	0.0349	0.1851		1,851.532 8	1,851.532 8	0.0117	0.2913	1,938.628 5
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
Worker	0.0491	0.0242	0.3921	1.3600e-003	0.1643	7.2000e-004	0.1650	0.0436	6.6000e-004	0.0442		137.3997	137.3997	2.9600e-003	3.0100e-003	138.3702
Total	0.1194	3.7892	1.2842	0.0188	0.7121	0.0372	0.7492	0.1938	0.0355	0.2294		1,988.932 5	1,988.932 5	0.0147	0.2943	2,076.998 7

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Grading - 2026****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					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621		0.0152	0.0152		0.0152	0.0152	0.0000	6,008.281 4	6,008.281 4	1.9432		6,056.861 4
Total	0.7616	3.3000	32.9991	0.0621	4.1416	0.0152	4.1568	1.6442	0.0152	1.6594	0.0000	6,008.281 4	6,008.281 4	1.9432		6,056.861 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0704	3.7650	0.8921	0.0174	0.5478	0.0364	0.5842	0.1503	0.0349	0.1851		1,851.532 8	1,851.532 8	0.0117	0.2913	1,938.628 5
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
Worker	0.0491	0.0242	0.3921	1.3600e-003	0.1643	7.2000e-004	0.1650	0.0436	6.6000e-004	0.0442		137.3997	137.3997	2.9600e-003	3.0100e-003	138.3702
Total	0.1194	3.7892	1.2842	0.0188	0.7121	0.0372	0.7492	0.1938	0.0355	0.2294		1,988.932 5	1,988.932 5	0.0147	0.2943	2,076.998 7

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 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	0.3977	13.3651	4.7370	0.0616	2.0910	0.0858	2.1768	0.6022	0.0821	0.6843		6,496.928 5	6,496.928 5	0.0381	0.9172	6,771.209 8
Worker	2.0403	1.0046	16.3130	0.0566	6.8347	0.0298	6.8645	1.8129	0.0274	1.8403		5,715.828 2	5,715.828 2	0.1230	0.1252	5,756.200 9
Total	2.4380	14.3697	21.0500	0.1181	8.9257	0.1156	9.0413	2.4151	0.1095	2.5246		12,212.75 67	12,212.75 67	0.1611	1.0424	12,527.41 06

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****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	0.5038	2.5728	17.6150	0.0270		0.0466	0.0466		0.0466	0.0466	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	0.5038	2.5728	17.6150	0.0270		0.0466	0.0466		0.0466	0.0466	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 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	0.3977	13.3651	4.7370	0.0616	2.0910	0.0858	2.1768	0.6022	0.0821	0.6843		6,496.928 5	6,496.928 5	0.0381	0.9172	6,771.209 8
Worker	2.0403	1.0046	16.3130	0.0566	6.8347	0.0298	6.8645	1.8129	0.0274	1.8403		5,715.828 2	5,715.828 2	0.1230	0.1252	5,756.200 9
Total	2.4380	14.3697	21.0500	0.1181	8.9257	0.1156	9.0413	2.4151	0.1095	2.5246		12,212.75 67	12,212.75 67	0.1611	1.0424	12,527.41 06

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 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	0.3901	13.2796	4.6515	0.0604	2.0911	0.0851	2.1761	0.6022	0.0814	0.6836		6,374.533 4	6,374.533 4	0.0380	0.8978	6,643.034 8
Worker	1.9157	0.9164	15.4101	0.0549	6.8347	0.0281	6.8628	1.8129	0.0259	1.8388		5,544.305 0	5,544.305 0	0.1124	0.1188	5,582.518 9
Total	2.3058	14.1960	20.0617	0.1153	8.9257	0.1132	9.0389	2.4151	0.1073	2.5224		11,918.83 84	11,918.83 84	0.1504	1.0166	12,225.55 38

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****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	0.5038	2.5728	17.6150	0.0270		0.0466	0.0466		0.0466	0.0466	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	0.5038	2.5728	17.6150	0.0270		0.0466	0.0466		0.0466	0.0466	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 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	0.3901	13.2796	4.6515	0.0604	2.0911	0.0851	2.1761	0.6022	0.0814	0.6836		6,374.533 4	6,374.533 4	0.0380	0.8978	6,643.034 8
Worker	1.9157	0.9164	15.4101	0.0549	6.8347	0.0281	6.8628	1.8129	0.0259	1.8388		5,544.305 0	5,544.305 0	0.1124	0.1188	5,582.518 9
Total	2.3058	14.1960	20.0617	0.1153	8.9257	0.1132	9.0389	2.4151	0.1073	2.5224		11,918.83 84	11,918.83 84	0.1504	1.0166	12,225.55 38

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.9764					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	33.1473	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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	0.0000	0.0000	0.0000	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	0.3822	0.1828	3.0746	0.0109	1.3637	5.6200e-003	1.3693	0.3617	5.1700e-003	0.3669		1,106.1955	1,106.1955	0.0224	0.0237	1,113.8199
Total	0.3822	0.1828	3.0746	0.0109	1.3637	5.6200e-003	1.3693	0.3617	5.1700e-003	0.3669		1,106.1955	1,106.1955	0.0224	0.0237	1,113.8199

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.9764					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	33.1473	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

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	0.0000	0.0000	0.0000	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	0.3822	0.1828	3.0746	0.0109	1.3637	5.6200e-003	1.3693	0.3617	5.1700e-003	0.3669		1,106.1955	1,106.1955	0.0224	0.0237	1,113.8199
Total	0.3822	0.1828	3.0746	0.0109	1.3637	5.6200e-003	1.3693	0.3617	5.1700e-003	0.3669		1,106.1955	1,106.1955	0.0224	0.0237	1,113.8199

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Paving - 2027****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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8

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	0.0000	0.0000	0.0000	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	0.0345	0.0165	0.2778	9.9000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		99.9574	99.9574	2.0300e-003	2.1400e-003	100.6464
Total	0.0345	0.0165	0.2778	9.9000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		99.9574	99.9574	2.0300e-003	2.1400e-003	100.6464

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Paving - 2027****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	0.2805	1.2154	17.2957	0.0228		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2805	1.2154	17.2957	0.0228		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

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	0.0000	0.0000	0.0000	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	0.0345	0.0165	0.2778	9.9000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		99.9574	99.9574	2.0300e-003	2.1400e-003	100.6464
Total	0.0345	0.0165	0.2778	9.9000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		99.9574	99.9574	2.0300e-003	2.1400e-003	100.6464

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco 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	115.4469	181.6535	1,496.311 1	3.9626	452.5136	2.8071	455.3207	120.5364	2.6311	123.1674		403,171.4 263	403,171.4 263	16.8468	15.3732	408,173.8 000
Unmitigated	115.4469	181.6535	1,496.311 1	3.9626	452.5136	2.8071	455.3207	120.5364	2.6311	123.1674		403,171.4 263	403,171.4 263	16.8468	15.3732	408,173.8 000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	400.00	410.00	410.00	3,824,439	3,824,439
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
User Defined Commercial	6,584.85	10,164.77	10164.77	124,295,346	124,295,346
User Defined Commercial	1,777.80	2,744.32	2744.32	33,557,716	33,557,716
User Defined Industrial	0.00	0.00	0.00		
Total	8,762.65	13,319.09	13,319.09	161,677,501	161,677,501

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
Hotel	14.70	55.00	10.00	19.40	61.60	19.00	58	38	4

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

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

	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
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Industrial	14.70	6.60	6.60	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
Hotel	0.574494	0.053520	0.164411	0.120035	0.024142	0.006389	0.008007	0.015461	0.001089	0.000375	0.027458	0.000780	0.003840
Parking Lot	0.574494	0.053520	0.164411	0.120035	0.024142	0.006389	0.008007	0.015461	0.001089	0.000375	0.027458	0.000780	0.003840
Unenclosed Parking with Elevator	0.574494	0.053520	0.164411	0.120035	0.024142	0.006389	0.008007	0.015461	0.001089	0.000375	0.027458	0.000780	0.003840
User Defined Commercial	0.574494	0.053520	0.164411	0.120035	0.024142	0.006389	0.008007	0.015461	0.001089	0.000375	0.027458	0.000780	0.003840
User Defined Industrial	0.574494	0.053520	0.164411	0.120035	0.024142	0.006389	0.008007	0.015461	0.001089	0.000375	0.027458	0.000780	0.003840

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco 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
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					
Hotel	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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	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
User Defined Commercial	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
User Defined Industrial	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

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco 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					
Hotel	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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	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
User Defined Commercial	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
User Defined Industrial	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

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

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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
Category	lb/day										lb/day					
Mitigated	14.4484	4.4600e-003	0.4924	4.0000e-005		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003		1.0583	1.0583	2.7500e-003		1.1271
Unmitigated	14.6301	4.4600e-003	0.4924	4.0000e-005		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003		1.0583	1.0583	2.7500e-003		1.1271

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	1.8069					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	12.7778					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0453	4.4600e-003	0.4924	4.0000e-005		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003		1.0583	1.0583	2.7500e-003		1.1271
Total	14.6301	4.4600e-003	0.4924	4.0000e-005		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003		1.0583	1.0583	2.7500e-003		1.1271

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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	lb/day										lb/day					
Architectural Coating	1.6253					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	12.7778					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0453	4.4600e-003	0.4924	4.0000e-005		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003		1.0583	1.0583	2.7500e-003		1.1271
Total	14.4484	4.4600e-003	0.4924	4.0000e-005		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003		1.0583	1.0583	2.7500e-003		1.1271

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

Koi Nation Shiloh Resort and Casino - Alternative B - Solano-San Francisco County, Summer

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

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	0	60	2447	0.73	Diesel
Emergency Generator	1	0	12	2447	0.5	Diesel
Emergency Generator	1	0	60	1367	0.73	Diesel

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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10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (750 - 9999 HP)	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

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
User Defined Commercial	122.60	User Defined Unit	46.80	372,747.00	0
User Defined Commercial	33.10	User Defined Unit	0.00	33,135.00	0
User Defined Industrial	18.90	User Defined Unit	0.00	18,900.00	0
Parking Lot	769.00	Space	0.00	292,200.00	0
Unenclosed Parking with Elevator	3,692.00	Space	0.00	1,214,080.00	0
Hotel	200.00	Room	0.00	147,380.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	56
Climate Zone	4			Operational Year	2040
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - See input tables.
- Construction Phase - See input tables.
- Grading -
- Demolition -
- Trips and VMT - See input tables.
- Vehicle Trips - See input tables.

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

- Energy Use - See input tables.
- Water And Wastewater - See input tables.
- Solid Waste - See input tables.
- Stationary Sources - Emergency Generators and Fire Pumps - See input tables.
- Land Use Change -
- Construction Off-road Equipment Mitigation - See input tables.
- Area Mitigation - See input tables.
- Water Mitigation -
- Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
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
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
tblEnergyUse	LightingElect	0.00	6.78
tblEnergyUse	LightingElect	0.00	3.08
tblEnergyUse	NT24E	0.00	23.69
tblEnergyUse	NT24E	0.00	3.70
tblEnergyUse	NT24NG	4.75	0.00
tblEnergyUse	T24E	0.00	7.35
tblEnergyUse	T24E	0.00	1.32
tblEnergyUse	T24NG	39.16	0.00
tblLandUse	LandUseSquareFeet	307,600.00	292,200.00
tblLandUse	LandUseSquareFeet	1,476,800.00	1,214,080.00
tblLandUse	LandUseSquareFeet	290,400.00	147,380.00
tblLandUse	LandUseSquareFeet	0.00	372,747.00
tblLandUse	LandUseSquareFeet	0.00	33,135.00

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

tblLandUse	LandUseSquareFeet	0.00	18,900.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	33.23	0.00
tblLandUse	LotAcreage	6.67	0.00
tblLandUse	LotAcreage	0.00	46.80
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	109.50	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,267.00
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,367.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	Load_Factor	0.73	0.50
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,250.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TTP	0.00	77.00
tblVehicleTrips	CNW_TL	6.60	10.00

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

tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TTP	0.00	18.00
tblVehicleTrips	CW_TTP	0.00	5.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	8.19	2.05
tblVehicleTrips	ST_TR	0.00	82.91
tblVehicleTrips	SU_TR	5.95	2.05
tblVehicleTrips	SU_TR	0.00	82.91
tblVehicleTrips	WD_TR	8.36	2.00
tblVehicleTrips	WD_TR	0.00	53.71
tblWater	IndoorWaterUseRate	5,073,354.00	0.00
tblWater	IndoorWaterUseRate	0.00	42,705,000.00
tblWater	OutdoorWaterUseRate	563,706.00	0.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
2026	0.1684	1.6431	1.4726	3.4800e-003	0.3146	0.0676	0.3822	0.1336	0.0624	0.1960	0.0000	307.7595	307.7595	0.0861	3.9600e-003	311.0928
2027	0.4511	3.6029	4.4756	0.0173	1.1339	0.0895	1.2234	0.3076	0.0840	0.3917	0.0000	1,596.4399	1,596.4399	0.1023	0.1126	1,632.5395
2028	0.4410	3.5392	4.4514	0.0177	1.1233	0.0830	1.2063	0.3049	0.0782	0.3831	0.0000	1,632.3486	1,632.3486	0.0884	0.1183	1,669.8155
2029	0.4065	3.3554	4.2042	0.0164	1.0467	0.0809	1.1276	0.2841	0.0761	0.3602	0.0000	1,511.5981	1,511.5981	0.0875	0.1075	1,545.8196
2030	3.3346	0.1565	0.4068	8.6000e-004	0.0384	6.6400e-003	0.0450	0.0102	6.6300e-003	0.0168	0.0000	75.5964	75.5964	2.8200e-003	6.0000e-004	75.8453
Maximum	3.3346	3.6029	4.4756	0.0177	1.1339	0.0895	1.2234	0.3076	0.0840	0.3917	0.0000	1,632.3486	1,632.3486	0.1023	0.1183	1,669.8155

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

2.1 Overall Construction

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					
2026	0.0478	0.2743	1.7815	3.4800e-003	0.1509	3.6200e-003	0.1545	0.0626	3.5900e-003	0.0662	0.0000	307.7592	307.7592	0.0861	3.9600e-003	311.0925
2027	0.3237	2.1418	4.7344	0.0173	1.0786	0.0194	1.0980	0.2927	0.0187	0.3114	0.0000	1,596.4395	1,596.4395	0.1023	0.1126	1,632.5391
2028	0.3288	2.2526	4.6504	0.0177	1.1233	0.0205	1.1438	0.3049	0.0197	0.3246	0.0000	1,632.3483	1,632.3483	0.0884	0.1183	1,669.8151
2029	0.2960	2.0879	4.4152	0.0164	1.0467	0.0188	1.0655	0.2841	0.0181	0.3022	0.0000	1,511.5977	1,511.5977	0.0875	0.1075	1,545.8193
2030	3.3148	0.0502	0.4328	8.6000e-004	0.0384	7.9000e-004	0.0392	0.0102	7.8000e-004	0.0110	0.0000	75.5963	75.5963	2.8200e-003	6.0000e-004	75.8452
Maximum	3.3148	2.2526	4.7344	0.0177	1.1233	0.0205	1.1438	0.3049	0.0197	0.3246	0.0000	1,632.3483	1,632.3483	0.1023	0.1183	1,669.8151

	ROG	NOx	CO	SO2	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	10.22	44.65	-6.69	0.00	5.99	80.74	12.14	8.26	80.18	24.66	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	7-1-2026	9-30-2026	0.7536	0.1406
2	10-1-2026	12-31-2026	1.0499	0.1810
3	1-1-2027	3-31-2027	1.0304	0.4957
4	4-1-2027	6-30-2027	0.9860	0.6363
5	7-1-2027	9-30-2027	0.9968	0.6433
6	10-1-2027	12-31-2027	1.0337	0.6801
7	1-1-2028	3-31-2028	1.0135	0.6638

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

8	4-1-2028	6-30-2028	0.9777	0.6280
9	7-1-2028	9-30-2028	0.9885	0.6349
10	10-1-2028	12-31-2028	1.0247	0.6711
11	1-1-2029	3-31-2029	0.9930	0.6471
12	4-1-2029	6-30-2029	0.9688	0.6191
13	7-1-2029	9-30-2029	0.9795	0.6259
14	10-1-2029	12-31-2029	0.8092	0.4822
15	1-1-2030	3-31-2030	1.8869	1.7617
16	4-1-2030	6-30-2030	1.6037	1.6037
		Highest	1.8869	1.7617

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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****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	2.6658	4.0000e-004	0.0442	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1,762.7393	1,762.7393	0.2852	0.0346	1,780.1696
Mobile	12.2842	19.0816	153.7494	0.4234	59.8784	0.2298	60.1082	15.9836	0.2159	16.1995	0.0000	39,095.9657	39,095.9657	1.7125	1.6144	39,619.8707
Stationary	0.4452	1.9910	1.1352	2.1400e-003		0.0655	0.0655		0.0655	0.0655	0.0000	206.6176	206.6176	0.0290	0.0000	207.3418
Waste						0.0000	0.0000		0.0000	0.0000	257.1896	0.0000	257.1896	15.1995	0.0000	637.1762
Water						0.0000	0.0000		0.0000	0.0000	13.5483	21.3801	34.9284	1.3950	0.0333	79.7199
Total	15.3951	21.0730	154.9287	0.4256	59.8784	0.2955	60.1739	15.9836	0.2815	16.2651	270.7379	41,086.7891	41,357.5270	18.6213	1.6823	42,324.3703

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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	2.6658	4.0000e-004	0.0442	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1,762.7393	1,762.7393	0.2852	0.0346	1,780.1696
Mobile	12.2842	19.0816	153.7494	0.4234	59.8784	0.2298	60.1082	15.9836	0.2159	16.1995	0.0000	39,095.9657	39,095.9657	1.7125	1.6144	39,619.8707
Stationary	0.4452	1.9910	1.1352	2.1400e-003		0.0655	0.0655		0.0655	0.0655	0.0000	206.6176	206.6176	0.0290	0.0000	207.3418
Waste						0.0000	0.0000		0.0000	0.0000	128.5948	0.0000	128.5948	7.5997	0.0000	318.5881
Water						0.0000	0.0000		0.0000	0.0000	12.1935	19.2421	31.4356	1.2555	0.0300	71.7479
Total	15.3951	21.0730	154.9287	0.4256	59.8784	0.2955	60.1739	15.9836	0.2815	16.2651	140.7883	41,084.6511	41,225.4394	10.8821	1.6789	41,997.8102

	ROG	NOx	CO	SO2	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	48.00	0.01	0.32	41.56	0.20	0.77

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-272.4900
Total	-272.4900

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2026	9/8/2026	5	50	
2	Site Preparation	Site Preparation	9/9/2026	10/20/2026	5	30	
3	Grading	Grading	10/21/2026	2/2/2027	5	75	
4	Building Construction	Building Construction	2/3/2027	12/4/2029	5	740	
5	Paving	Paving	12/5/2029	2/19/2030	5	55	
6	Architectural Coating	Architectural Coating	2/20/2030	5/7/2030	5	55	

Acres of Grading (Site Preparation Phase): 22.5**Acres of Grading (Grading Phase): 120****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 858,243; Non-Residential Outdoor: 286,081; Striped Parking Area: 90,377 (Architectural Coating – sqft)**

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

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	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
Architectural Coating	1	166.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	832.00	341.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	29.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

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Grading	8	20.00	0.00	1,250.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2026**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.1500e-003	0.0000	3.1500e-003	4.8000e-004	0.0000	4.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0523	0.4799	0.4855	9.7000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	84.9941	84.9941	0.0237	0.0000	85.5875
Total	0.0523	0.4799	0.4855	9.7000e-004	3.1500e-003	0.0213	0.0245	4.8000e-004	0.0198	0.0203	0.0000	84.9941	84.9941	0.0237	0.0000	85.5875

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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 Demolition - 2026****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	3.0000e-005	1.8300e-003	4.2000e-004	1.0000e-005	2.5000e-004	2.0000e-005	2.6000e-004	7.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.7798	0.7798	0.0000	1.2000e-004	0.8165
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	8.4000e-004	5.1000e-004	6.7500e-003	2.0000e-005	2.9800e-003	1.0000e-005	2.9900e-003	7.9000e-004	1.0000e-005	8.0000e-004	0.0000	2.1772	2.1772	5.0000e-005	6.0000e-005	2.1950
Total	8.7000e-004	2.3400e-003	7.1700e-003	3.0000e-005	3.2300e-003	3.0000e-005	3.2500e-003	8.6000e-004	3.0000e-005	8.8000e-004	0.0000	2.9570	2.9570	5.0000e-005	1.8000e-004	3.0115

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					1.4200e-003	0.0000	1.4200e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0174	0.1000	0.5767	9.7000e-004		2.5200e-003	2.5200e-003		2.5200e-003	2.5200e-003	0.0000	84.9940	84.9940	0.0237	0.0000	85.5874
Total	0.0174	0.1000	0.5767	9.7000e-004	1.4200e-003	2.5200e-003	3.9400e-003	2.1000e-004	2.5200e-003	2.7300e-003	0.0000	84.9940	84.9940	0.0237	0.0000	85.5874

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3.2 Demolition - 2026

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	3.0000e-005	1.8300e-003	4.2000e-004	1.0000e-005	2.5000e-004	2.0000e-005	2.6000e-004	7.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.7798	0.7798	0.0000	1.2000e-004	0.8165
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	8.4000e-004	5.1000e-004	6.7500e-003	2.0000e-005	2.9800e-003	1.0000e-005	2.9900e-003	7.9000e-004	1.0000e-005	8.0000e-004	0.0000	2.1772	2.1772	5.0000e-005	6.0000e-005	2.1950
Total	8.7000e-004	2.3400e-003	7.1700e-003	3.0000e-005	3.2300e-003	3.0000e-005	3.2500e-003	8.6000e-004	3.0000e-005	8.8000e-004	0.0000	2.9570	2.9570	5.0000e-005	1.8000e-004	3.0115

3.3 Site Preparation - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1474	0.0000	0.1474	0.0758	0.0000	0.0758	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0371	0.3785	0.2687	5.7000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	50.2005	50.2005	0.0162	0.0000	50.6064
Total	0.0371	0.3785	0.2687	5.7000e-004	0.1474	0.0163	0.1637	0.0758	0.0150	0.0908	0.0000	50.2005	50.2005	0.0162	0.0000	50.6064

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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 Site Preparation - 2026****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e-004	3.7000e-004	4.8600e-003	2.0000e-005	2.1400e-003	1.0000e-005	2.1500e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.5676	1.5676	4.0000e-005	4.0000e-005	1.5804
Total	6.1000e-004	3.7000e-004	4.8600e-003	2.0000e-005	2.1400e-003	1.0000e-005	2.1500e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.5676	1.5676	4.0000e-005	4.0000e-005	1.5804

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					0.0663	0.0000	0.0663	0.0341	0.0000	0.0341	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9800e-003	0.0303	0.3130	5.7000e-004		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	50.2004	50.2004	0.0162	0.0000	50.6063
Total	6.9800e-003	0.0303	0.3130	5.7000e-004	0.0663	1.4000e-004	0.0665	0.0341	1.4000e-004	0.0342	0.0000	50.2004	50.2004	0.0162	0.0000	50.6063

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3.3 Site Preparation - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e-004	3.7000e-004	4.8600e-003	2.0000e-005	2.1400e-003	1.0000e-005	2.1500e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.5676	1.5676	4.0000e-005	4.0000e-005	1.5804
Total	6.1000e-004	3.7000e-004	4.8600e-003	2.0000e-005	2.1400e-003	1.0000e-005	2.1500e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.5676	1.5676	4.0000e-005	4.0000e-005	1.5804

3.4 Grading - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1471	0.0000	0.1471	0.0528	0.0000	0.0528	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0754	0.7265	0.6846	1.6100e-003		0.0294	0.0294		0.0271	0.0271	0.0000	141.7162	141.7162	0.0458	0.0000	142.8620
Total	0.0754	0.7265	0.6846	1.6100e-003	0.1471	0.0294	0.1765	0.0528	0.0271	0.0798	0.0000	141.7162	141.7162	0.0458	0.0000	142.8620

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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 Grading - 2026****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	9.5000e-004	0.0548	0.0125	2.4000e-004	7.3800e-003	5.1000e-004	7.8800e-003	2.0300e-003	4.8000e-004	2.5100e-003	0.0000	23.3051	23.3051	1.5000e-004	3.6700e-003	24.4013
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1700e-003	7.0000e-004	9.3600e-003	3.0000e-005	4.1300e-003	2.0000e-005	4.1500e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.0191	3.0191	7.0000e-005	8.0000e-005	3.0437
Total	2.1200e-003	0.0555	0.0218	2.7000e-004	0.0115	5.3000e-004	0.0120	3.1300e-003	5.0000e-004	3.6300e-003	0.0000	26.3241	26.3241	2.2000e-004	3.7500e-003	27.4451

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					0.0662	0.0000	0.0662	0.0238	0.0000	0.0238	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0198	0.0858	0.8580	1.6100e-003		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	141.7160	141.7160	0.0458	0.0000	142.8618
Total	0.0198	0.0858	0.8580	1.6100e-003	0.0662	4.0000e-004	0.0666	0.0238	4.0000e-004	0.0242	0.0000	141.7160	141.7160	0.0458	0.0000	142.8618

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3.4 Grading - 2026

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	9.5000e-004	0.0548	0.0125	2.4000e-004	7.3800e-003	5.1000e-004	7.8800e-003	2.0300e-003	4.8000e-004	2.5100e-003	0.0000	23.3051	23.3051	1.5000e-004	3.6700e-003	24.4013
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1700e-003	7.0000e-004	9.3600e-003	3.0000e-005	4.1300e-003	2.0000e-005	4.1500e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.0191	3.0191	7.0000e-005	8.0000e-005	3.0437
Total	2.1200e-003	0.0555	0.0218	2.7000e-004	0.0115	5.3000e-004	0.0120	3.1300e-003	5.0000e-004	3.6300e-003	0.0000	26.3241	26.3241	2.2000e-004	3.7500e-003	27.4451

3.4 Grading - 2027

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					0.1006	0.0000	0.1006	0.0272	0.0000	0.0272	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0334	0.3213	0.3028	7.1000e-004		0.0130	0.0130		0.0120	0.0120	0.0000	62.6821	62.6821	0.0203	0.0000	63.1890
Total	0.0334	0.3213	0.3028	7.1000e-004	0.1006	0.0130	0.1136	0.0272	0.0120	0.0391	0.0000	62.6821	62.6821	0.0203	0.0000	63.1890

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.2000e-004	0.0240	5.5000e-003	1.0000e-004	3.2600e-003	2.2000e-004	3.4800e-003	9.0000e-004	2.1000e-004	1.1100e-003	0.0000	10.0675	10.0675	7.0000e-005	1.5800e-003	10.5411
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	4.9000e-004	2.8000e-004	3.9200e-003	1.0000e-005	1.8300e-003	1.0000e-005	1.8300e-003	4.9000e-004	1.0000e-005	4.9000e-004	0.0000	1.2954	1.2954	3.0000e-005	3.0000e-005	1.3057
Total	9.1000e-004	0.0243	9.4200e-003	1.1000e-004	5.0900e-003	2.3000e-004	5.3100e-003	1.3900e-003	2.2000e-004	1.6000e-003	0.0000	11.3629	11.3629	1.0000e-004	1.6100e-003	11.8468

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					0.0453	0.0000	0.0453	0.0122	0.0000	0.0122	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.7600e-003	0.0380	0.3795	7.1000e-004		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	62.6821	62.6821	0.0203	0.0000	63.1889
Total	8.7600e-003	0.0380	0.3795	7.1000e-004	0.0453	1.8000e-004	0.0454	0.0122	1.8000e-004	0.0124	0.0000	62.6821	62.6821	0.0203	0.0000	63.1889

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.2000e-004	0.0240	5.5000e-003	1.0000e-004	3.2600e-003	2.2000e-004	3.4800e-003	9.0000e-004	2.1000e-004	1.1100e-003	0.0000	10.0675	10.0675	7.0000e-005	1.5800e-003	10.5411
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	4.9000e-004	2.8000e-004	3.9200e-003	1.0000e-005	1.8300e-003	1.0000e-005	1.8300e-003	4.9000e-004	1.0000e-005	4.9000e-004	0.0000	1.2954	1.2954	3.0000e-005	3.0000e-005	1.3057
Total	9.1000e-004	0.0243	9.4200e-003	1.1000e-004	5.0900e-003	2.3000e-004	5.3100e-003	1.3900e-003	2.2000e-004	1.6000e-003	0.0000	11.3629	11.3629	1.0000e-004	1.6100e-003	11.8468

3.5 Building Construction - 2027**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	0.1627	1.4839	1.9141	3.2100e-003		0.0628	0.0628		0.0591	0.0591	0.0000	275.9842	275.9842	0.0649	0.0000	277.6060
Total	0.1627	1.4839	1.9141	3.2100e-003		0.0628	0.0628		0.0591	0.0591	0.0000	275.9842	275.9842	0.0649	0.0000	277.6060

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

3.5 Building Construction - 2027

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	0.0451	1.6512	0.5637	7.1900e-003	0.2420	0.0101	0.2522	0.0700	9.6900e-003	0.0797	0.0000	688.7856	688.7856	4.0600e-003	0.0971	717.8254
Worker	0.2089	0.1222	1.6855	6.0800e-003	0.7862	3.3500e-003	0.7896	0.2091	3.0800e-003	0.2122	0.0000	557.6251	557.6251	0.0130	0.0138	562.0722
Total	0.2541	1.7734	2.2493	0.0133	1.0283	0.0135	1.0417	0.2791	0.0128	0.2919	0.0000	1,246.4108	1,246.4108	0.0171	0.1109	1,279.8976

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	0.0600	0.3062	2.0962	3.2100e-003		5.5400e-003	5.5400e-003		5.5400e-003	5.5400e-003	0.0000	275.9838	275.9838	0.0649	0.0000	277.6057
Total	0.0600	0.3062	2.0962	3.2100e-003		5.5400e-003	5.5400e-003		5.5400e-003	5.5400e-003	0.0000	275.9838	275.9838	0.0649	0.0000	277.6057

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

3.5 Building Construction - 2027

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	0.0451	1.6512	0.5637	7.1900e-003	0.2420	0.0101	0.2522	0.0700	9.6900e-003	0.0797	0.0000	688.7856	688.7856	4.0600e-003	0.0971	717.8254
Worker	0.2089	0.1222	1.6855	6.0800e-003	0.7862	3.3500e-003	0.7896	0.2091	3.0800e-003	0.2122	0.0000	557.6251	557.6251	0.0130	0.0138	562.0722
Total	0.2541	1.7734	2.2493	0.0133	1.0283	0.0135	1.0417	0.2791	0.0128	0.2919	0.0000	1,246.4108	1,246.4108	0.0171	0.1109	1,279.8976

3.5 Building Construction - 2028

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	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671
Total	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2028****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	0.0485	1.7953	0.6071	7.7100e-003	0.2644	0.0110	0.2754	0.0765	0.0105	0.0870	0.0000	738.5805	738.5805	4.4300e-003	0.1039	769.6465
Worker	0.2148	0.1229	1.7533	6.4600e-003	0.8589	3.4300e-003	0.8623	0.2284	3.1600e-003	0.2316	0.0000	592.2728	592.2728	0.0131	0.0144	596.9019
Total	0.2633	1.9182	2.3604	0.0142	1.1233	0.0144	1.1377	0.3049	0.0137	0.3185	0.0000	1,330.8533	1,330.8533	0.0176	0.1183	1,366.5484

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	0.0655	0.3345	2.2900	3.5000e-003		6.0500e-003	6.0500e-003		6.0500e-003	6.0500e-003	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667
Total	0.0655	0.3345	2.2900	3.5000e-003		6.0500e-003	6.0500e-003		6.0500e-003	6.0500e-003	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2028****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	0.0485	1.7953	0.6071	7.7100e-003	0.2644	0.0110	0.2754	0.0765	0.0105	0.0870	0.0000	738.5805	738.5805	4.4300e-003	0.1039	769.6465
Worker	0.2148	0.1229	1.7533	6.4600e-003	0.8589	3.4300e-003	0.8623	0.2284	3.1600e-003	0.2316	0.0000	592.2728	592.2728	0.0131	0.0144	596.9019
Total	0.2633	1.9182	2.3604	0.0142	1.1233	0.0144	1.1377	0.3049	0.0137	0.3185	0.0000	1,330.8533	1,330.8533	0.0176	0.1183	1,366.5484

3.5 Building Construction - 2029**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	0.1655	1.5088	1.9462	3.2600e-003		0.0638	0.0638		0.0601	0.0601	0.0000	280.6225	280.6225	0.0660	0.0000	282.2717
Total	0.1655	1.5088	1.9462	3.2600e-003		0.0638	0.0638		0.0601	0.0601	0.0000	280.6225	280.6225	0.0660	0.0000	282.2717

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2029****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	0.0444	1.6589	0.5566	7.0400e-003	0.2461	0.0101	0.2562	0.0712	9.6800e-003	0.0809	0.0000	674.0248	674.0248	4.1300e-003	0.0946	702.3093
Worker	0.1877	0.1060	1.5607	5.8600e-003	0.7994	2.9900e-003	0.8024	0.2126	2.7500e-003	0.2153	0.0000	537.1721	537.1721	0.0113	0.0129	541.3004
Total	0.2321	1.7649	2.1173	0.0129	1.0456	0.0131	1.0587	0.2838	0.0124	0.2962	0.0000	1,211.1969	1,211.1969	0.0154	0.1075	1,243.6097

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	0.0610	0.3113	2.1314	3.2600e-003		5.6300e-003	5.6300e-003		5.6300e-003	5.6300e-003	0.0000	280.6222	280.6222	0.0660	0.0000	282.2713
Total	0.0610	0.3113	2.1314	3.2600e-003		5.6300e-003	5.6300e-003		5.6300e-003	5.6300e-003	0.0000	280.6222	280.6222	0.0660	0.0000	282.2713

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

3.5 Building Construction - 2029

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	0.0444	1.6589	0.5566	7.0400e-003	0.2461	0.0101	0.2562	0.0712	9.6800e-003	0.0809	0.0000	674.0248	674.0248	4.1300e-003	0.0946	702.3093
Worker	0.1877	0.1060	1.5607	5.8600e-003	0.7994	2.9900e-003	0.8024	0.2126	2.7500e-003	0.2153	0.0000	537.1721	537.1721	0.0113	0.0129	541.3004
Total	0.2321	1.7649	2.1173	0.0129	1.0456	0.0131	1.0587	0.2838	0.0124	0.2962	0.0000	1,211.1969	1,211.1969	0.0154	0.1075	1,243.6097

3.6 Paving - 2029

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	8.6900e-003	0.0815	0.1385	2.2000e-004		3.9800e-003	3.9800e-003		3.6600e-003	3.6600e-003	0.0000	19.0183	19.0183	6.1500e-003	0.0000	19.1721
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.6900e-003	0.0815	0.1385	2.2000e-004		3.9800e-003	3.9800e-003		3.6600e-003	3.6600e-003	0.0000	19.0183	19.0183	6.1500e-003	0.0000	19.1721

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Paving - 2029****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	2.7000e-004	1.5000e-004	2.2100e-003	1.0000e-005	1.1300e-003	0.0000	1.1400e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.7604	0.7604	2.0000e-005	2.0000e-005	0.7662
Total	2.7000e-004	1.5000e-004	2.2100e-003	1.0000e-005	1.1300e-003	0.0000	1.1400e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.7604	0.7604	2.0000e-005	2.0000e-005	0.7662

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	2.6600e-003	0.0116	0.1643	2.2000e-004		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	19.0183	19.0183	6.1500e-003	0.0000	19.1720
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.6600e-003	0.0116	0.1643	2.2000e-004		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	19.0183	19.0183	6.1500e-003	0.0000	19.1720

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	1.5000e-004	2.2100e-003	1.0000e-005	1.1300e-003	0.0000	1.1400e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.7604	0.7604	2.0000e-005	2.0000e-005	0.7662
Total	2.7000e-004	1.5000e-004	2.2100e-003	1.0000e-005	1.1300e-003	0.0000	1.1400e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.7604	0.7604	2.0000e-005	2.0000e-005	0.7662

3.6 Paving - 2030**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	0.0249	0.1282	0.2853	5.0000e-004		5.9500e-003	5.9500e-003		5.9500e-003	5.9500e-003	0.0000	43.3791	43.3791	2.0300e-003	0.0000	43.4300
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0249	0.1282	0.2853	5.0000e-004		5.9500e-003	5.9500e-003		5.9500e-003	5.9500e-003	0.0000	43.3791	43.3791	2.0300e-003	0.0000	43.4300

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Paving - 2030****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	4.7000e-004	2.7000e-004	4.0200e-003	2.0000e-005	2.1400e-003	1.0000e-005	2.1500e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.4070	1.4070	3.0000e-005	3.0000e-005	1.4177
Total	4.7000e-004	2.7000e-004	4.0200e-003	2.0000e-005	2.1400e-003	1.0000e-005	2.1500e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.4070	1.4070	3.0000e-005	3.0000e-005	1.4177

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	5.0500e-003	0.0219	0.3113	5.0000e-004		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	43.3791	43.3791	2.0300e-003	0.0000	43.4299
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.0500e-003	0.0219	0.3113	5.0000e-004		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	43.3791	43.3791	2.0300e-003	0.0000	43.4299

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Paving - 2030****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	4.7000e-004	2.7000e-004	4.0200e-003	2.0000e-005	2.1400e-003	1.0000e-005	2.1500e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.4070	1.4070	3.0000e-005	3.0000e-005	1.4177
Total	4.7000e-004	2.7000e-004	4.0200e-003	2.0000e-005	2.1400e-003	1.0000e-005	2.1500e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.4070	1.4070	3.0000e-005	3.0000e-005	1.4177

3.7 Architectural Coating - 2030**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.2976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-003	0.0236	0.0494	8.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	7.0215	7.0215	2.8000e-004	0.0000	7.0286
Total	3.3012	0.0236	0.0494	8.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	7.0215	7.0215	2.8000e-004	0.0000	7.0286

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Architectural Coating - 2030****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	7.9900e-003	4.4800e-003	0.0680	2.6000e-004	0.0363	1.3000e-004	0.0364	9.6400e-003	1.2000e-004	9.7600e-003	0.0000	23.7888	23.7888	4.7000e-004	5.7000e-004	23.9691
Total	7.9900e-003	4.4800e-003	0.0680	2.6000e-004	0.0363	1.3000e-004	0.0364	9.6400e-003	1.2000e-004	9.7600e-003	0.0000	23.7888	23.7888	4.7000e-004	5.7000e-004	23.9691

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	3.2976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-003	0.0236	0.0494	8.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	7.0214	7.0214	2.8000e-004	0.0000	7.0285
Total	3.3012	0.0236	0.0494	8.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	7.0214	7.0214	2.8000e-004	0.0000	7.0285

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

3.7 Architectural Coating - 2030

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	7.9900e-003	4.4800e-003	0.0680	2.6000e-004	0.0363	1.3000e-004	0.0364	9.6400e-003	1.2000e-004	9.7600e-003	0.0000	23.7888	23.7888	4.7000e-004	5.7000e-004	23.9691
Total	7.9900e-003	4.4800e-003	0.0680	2.6000e-004	0.0363	1.3000e-004	0.0364	9.6400e-003	1.2000e-004	9.7600e-003	0.0000	23.7888	23.7888	4.7000e-004	5.7000e-004	23.9691

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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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
Category	tons/yr										MT/yr					
Mitigated	12.2842	19.0816	153.7494	0.4234	59.8784	0.2298	60.1082	15.9836	0.2159	16.1995	0.0000	39,095.9657	39,095.9657	1.7125	1.6144	39,619.8707
Unmitigated	12.2842	19.0816	153.7494	0.4234	59.8784	0.2298	60.1082	15.9836	0.2159	16.1995	0.0000	39,095.9657	39,095.9657	1.7125	1.6144	39,619.8707

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	400.00	410.00	410.00	3,824,439	3,824,439
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
User Defined Commercial	6,584.85	10,164.77	10164.77	124,295,346	124,295,346
User Defined Commercial	1,777.80	2,744.32	2744.32	33,557,716	33,557,716
User Defined Industrial	0.00	0.00	0.00		
Total	8,762.65	13,319.09	13,319.09	161,677,501	161,677,501

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
Hotel	14.70	55.00	10.00	19.40	61.60	19.00	58	38	4
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Commercial	14.70	55.00	10.00	5.00	77.00	18.00	100	0	0
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.593703	0.053498	0.163652	0.110620	0.020455	0.005826	0.007387	0.014979	0.001194	0.000317	0.024946	0.000731	0.002692
Parking Lot	0.593703	0.053498	0.163652	0.110620	0.020455	0.005826	0.007387	0.014979	0.001194	0.000317	0.024946	0.000731	0.002692
Unenclosed Parking with Elevator	0.593703	0.053498	0.163652	0.110620	0.020455	0.005826	0.007387	0.014979	0.001194	0.000317	0.024946	0.000731	0.002692
User Defined Commercial	0.593703	0.053498	0.163652	0.110620	0.020455	0.005826	0.007387	0.014979	0.001194	0.000317	0.024946	0.000731	0.002692
User Defined Industrial	0.593703	0.053498	0.163652	0.110620	0.020455	0.005826	0.007387	0.014979	0.001194	0.000317	0.024946	0.000731	0.002692

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	tons/yr										MT/yr			
	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	1,762.739	3	1,762.739	0.2852
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	1,762.739	3	1,762.739	0.0346
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
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
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	1,762.739	3	1,762.739	0.0346
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	1,762.739	3	1,762.739	1,780.169
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
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

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

Unmitigated

[illegible]

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

Mitigated

[illegible]

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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			
Hotel	1.09061e+006	100.9075	0.0163	1.9800e-003	101.9053
Parking Lot	102270	9.4624	1.5300e-003	1.9000e-004	9.5560
Unenclosed Parking with Elevator	2.35532e+006	217.9227	0.0353	4.2700e-003	220.0775
User Defined Commercial	1.25317e+006	115.9476	0.0188	2.2700e-003	117.0941
User Defined Commercial	1.40973e+007	1,304.3346	0.2110	0.0256	1,317.2321
User Defined Industrial	153090	14.1645	2.2900e-003	2.8000e-004	14.3045
Total		1,762.7393	0.2852	0.0346	1,780.1696

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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

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.09061e+006	100.9075	0.0163	1.9800e-003	101.9053
Parking Lot	102270	9.4624	1.5300e-003	1.9000e-004	9.5560
Unenclosed Parking with Elevator	2.35532e+006	217.9227	0.0353	4.2700e-003	220.0775
User Defined Commercial	1.25317e+006	115.9476	0.0188	2.2700e-003	117.0941
User Defined Commercial	1.40973e+007	1,304.3346	0.2110	0.0256	1,317.2321
User Defined Industrial	153090	14.1645	2.2900e-003	2.8000e-004	14.3045
Total		1,762.7393	0.2852	0.0346	1,780.1696

6.0 Area Detail

6.1 Mitigation Measures Area

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

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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
Category	tons/yr										MT/yr					
Mitigated	2.6658	4.0000e-004	0.0442	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920
Unmitigated	2.6658	4.0000e-004	0.0442	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3298					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.3320					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0400e-003	4.0000e-004	0.0442	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920
Total	2.6658	4.0000e-004	0.0442	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920

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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	0.3298					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.3320					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0400e-003	4.0000e-004	0.0442	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920
Total	2.6658	4.0000e-004	0.0442	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0864	0.0864	2.2000e-004	0.0000	0.0920

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed 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	31.4356	1.2555	0.0300	71.7479
Unmitigated	34.9284	1.3950	0.0333	79.7199

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	42.705 / 0	34.9284	1.3950	0.0333	79.7199
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		34.9284	1.3950	0.0333	79.7199

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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			
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	38.4345 / 0	31.4356	1.2555	0.0300	71.7479
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		31.4356	1.2555	0.0300	71.7479

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	128.5948	7.5997	0.0000	318.5881
Unmitigated	257.1896	15.1995	0.0000	637.1762

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	1267	257.1896	15.1995	0.0000	637.1762
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		257.1896	15.1995	0.0000	637.1762

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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

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	633.5	128.5948	7.5997	0.0000	318.5881
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		128.5948	7.5997	0.0000	318.5881

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
Emergency Generator	3	0	60	2447	0.73	Diesel
Emergency Generator	1	0	12	2447	0.5	Diesel
Emergency Generator	1	0	60	1367	0.73	Diesel

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

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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10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750 - 9999 HP)	0.4452	1.9910	1.1352	2.1400e-003		0.0655	0.0655		0.0655	0.0655	0.0000	206.6176	206.6176	0.0290	0.0000	207.3418
Total	0.4452	1.9910	1.1352	2.1400e-003		0.0655	0.0655		0.0655	0.0655	0.0000	206.6176	206.6176	0.0290	0.0000	207.3418

11.0 Vegetation

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

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11.1 Vegetation Land Change

Vegetation Type

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-272.4900	0.0000	0.0000	-272.4900

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres				
Cropland	61.7 / 17.75	-272.4900	0.0000	0.0000	-272.4900
Total		-272.4900	0.0000	0.0000	-272.4900

Alternative C - Inputs

Input	Type of Input	Proposed Project	Source/Notes
Project Name	Project Name	Koi Nation Shiloh Resort and Casino Project	Project Description
Project Location	County	Sonoma (San Francisco)	Project Description
Climate zone	Climate Zone Number	4	Appendix F of CalEEMod User Guide
Land Use Setting	Urban or Rural	Rural	Site and Vicinity Figure
Start of Construction	Date	July 2026	Section 2 of the EA/TEIR
Operational Year	1st year of operation after full buildout.	2028	Section 2 of the EA/TEIR
Utility Company	Utility Company Name	PG&E	Section 2 of the EA/TEIR
Land Use Type and Subtype	Residential, Commercial, Recreation, etc.	See Table 1	See Table 1
Unit Amount	Size of Buildings or Number of units for each Land Use Type.	See Table 1	See Table 1
Lot Acreage	Acreage of each Land Use Type	See Table 1	See Table 1
Population	Population based on persons/household	Default	Default
Construction Phases	Type of construction phase (Demo, Site Prep, etc.) and beginning and ending dates	See Table 2	See Table 2
Off-Road Equipment	Type of equipment (Excavator, Dozer, etc.) and number of units per construction phase	See Table 2	See Table 2
Dust From Material Haul	Import/Export Material (Cu Yd or Tons)	10,000 CY import	Grading and Hydrology Report (Section 3.4)
	Total Acres Graded	25	Site plan
Demolition	Sq ft or tons of Demo (Tons or Sqft)	6,400 sq ft	Google Earth, 2022
Construction Trip Gen Rate	Average number of one-way trips per day	Default	Defaults
Operational Trip Reductions	% reduction in trips.	See Table 3	See Table 3
Operational Trip Gen Rate and trip length	Trips and trip lengths	See Table 3	See Table 3
Area Sources	Hearths – # of wood-burning fireplaces, # of gas fireplaces, and # of units with no fireplace.	NA	No hearths are included in project design.

Alternative C - Inputs (cont.)

Input	Type of Input	Proposed Project	Source/Notes
Energy Use	Project Specific Emission Factors.	See Table 4	See Table 4
Water and Wastewater	Indoor and outdoor water use for each Land Use Subtype in gallons per year.	See Table 1	See Table 1
Solid waste	Tons of solid waste generated per year	133 ton/year	EA/TEIR Section 3.10
	Land Fill No Gas Capture, Landfill Capture Gas Flare Rate	Default	CalEEMod 2020.4.0 Default
Operational off-road equipment	Excavator, Dozer, etc.	--	--
Stationary Sources	Emergency Generators	Two Tier4 1,650-KW (2,447 HP) emergency gen/sets operating 60 hours per year. One Tier4 1,650-KW (2,447 HP) emergency gen/set operating 12 hours per year. One Tier 4 900-KW (1,367 HP) emergency gen/set operating 60 hours per year.	Section 2 of the EA/TEIR
Land Use Change	Vegetation land use type (cropland, etc.) and initial and final acreage	Initial Cropland: 61.7 acres Final Cropland: 38 acres	GIS analysis
Sequestration	Type and net number of new trees added	Not Applicable	Insignificant increase in the number of trees on project site for modeling purposes

Alternative C – Mitigation Inputs

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Off-Road Equipment	C-1	Yes	Engine Type, DPF Level, and Oxidation Catalyst	See Off-Road Equipment Mitigation Inputs	See Off-Road Equipment Mitigation Inputs
Soil Stabilizer for Unpaved Roads	N/A	Yes	PM ₁₀ (% Reduction)	10%	Default % Reduction.
	N/A		PM _{2.5} (% Reduction)	10%	Default % Reduction.
Water Exposed Area	N/A	Yes	Frequency (per day)	2 times per day	Section 2 of the EA/TEIR
	N/A		PM ₁₀ (% Reduction)	55%	Default % Reduction.
	N/A		PM _{2.5} (% Reduction)	55%	Default % Reduction.
Replace Ground Cover of Area Disturbed	N/A	No	PM ₁₀ (% Reduction)	--	--
	N/A		PM _{2.5} (% Reduction)	--	--
Unpaved Road Mitigation	N/A	No	Moisture Content (%)	--	--
	N/A	Yes	Vehicle Speed (mph)	15 mph	Section 2 of the EA/TEIR
Type of Residential	N/A	No	Type of Residential	--	--
Increased Density	LUT-1	No	Dwelling Units/Acre	--	--
			Job/Job Acre	--	--
Increased Diversity	LUT-3	No	Yes or No	--	--
Improved Walkability Design	LUT-9	No	Intersections/Square Miles	--	--
Improve Destination Accessibility	LUT-4	No	Distance to Downtown/Job Ctr	--	--
Increased Transit Accessibility	LUT-5	No	Average Distance to Transit Station (miles)	--	--
Integrated Below Market Rate Housing	LUT-6	No	# Dwelling Units Below Market Rate	--	--
Improve Pedestrian Network	SDT-1	No	Yes or No; Project Site, Project Site and Connecting off-site, and Rural	--	--

Alternative C – Mitigation Inputs (cont.)

Mitigation Input	CAPCOA Mitigation	Include in Model?		Project Specific Inputs	
				Inputs	Source/Notes
Provide Traffic Calming Measures	SDT-2	No	% Streets with Improvement	--	--
		No	% Intersections with Improvement	--	--
Implement Neighborhood Electric Vehicle (NEV) Network	SDT-3	No	% of streets equipped with NEV network.	--	--
Limit Parking Supply	PDT-1	No	% Reduction in Spaces	--	--
Unbundled Parking Costs	PDT-2	No	Monthly Parking Costs (\$)	--	--
On-Street Market Pricing	PDT-3	No	% Increase in Price	--	--
Provide a Bus Rapid Transit System	TST-1	No	% Lines BRT	--	--
Expand Transit Network	TST-3	No	% Increase Transit Coverage	--	--
Increase Transit Frequency	TST-4	No	Level of Implementation	--	--
		No	% Reduction in Headways	--	--
Implement Trip Reduction Program	TRT-1, TRT-2	No	% employee eligible	--	--
		No	Program Type	--	--
Transit Subsidy	TRT-4	No	% employee eligible	--	--
		No	Daily Transit Subsidy Amount (\$)	--	--
Implement Employee Parking "Cash-Out"	TRT-15	No	% employee eligible	--	--
Workplace Parking Charge	TRT-14	No	% employee eligible	--	--
		No	Daily Parking Charge (\$)	--	--
Encourage Telecommuting and Alternative Work Schedules	TRT-6	No	% employee work 9/80	--	--
		No	% employee work 4/40	--	--
		No	% employee telecommute 1.5 days	--	--

Alternative C – Mitigation Inputs (cont.)

Mitigation Input	CAPCOA Mitigation	Include in Model?		Project Specific Inputs	
				Inputs	Source/Notes
Market Commute Trip Reduction Option	TRT-7	No	% employee eligible	--	--
Employee Vanpool/Shuttle	TRT-11	No	% employee eligible	--	--
		No	% vanpool mode share	--	--
Provide Ride Sharing Program	TRT-3	No	% employee eligible	--	--
Implement School Bus Program	TRT-13	No	% family using	--	--
Only Natural Gas Hearth	N/A	No	Yes or No	--	--
No hearth	N/A	No	Yes or No	--	--
Use of Low VOC Cleaning Supplies	N/A	No	Yes or No	--	--
Use low VOC Paint (Residential Interior)	N/A	Yes	Emission Factor (EF) (g/l)	100	BAAQMD Rule 3 Architectural Coatings (Nonflat Coating)
Use low VOC Paint (Residential Exterior)	N/A	Yes	EF (g/l)	100	BAAQMD Rule 3 Architectural Coatings (Nonflat Coating)
Use low VOC Paint (Non-residential Interior)	N/A	Yes	EF (g/l)	100	BAAQMD Rule 3 Architectural Coatings (Nonflat Coating)
Use low VOC Paint (Non-residential Exterior)	N/A	Yes	EF (g/l)	100	BAAQMD Rule 3 Architectural Coatings (Nonflat Coating)
Electric Lawnmower	A-1	No	Percent of equipment type that will be electric.	--	--
Electric Leafblower	A-1	No	Percent of equipment type that will be electric.	--	--
Electric Chainsaw	A-1	No	Percent of equipment type that will be electric.	--	--
Exceed Title 24	BE-1	No	Percentage improvement selected for the Project.	--	--

Alternative C – Mitigation Inputs (cont.)

Mitigation Input	CAPCOA Mitigation	Include in Model?	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Install High Efficiently Lighting	LE-1	Yes	% Lighting Energy Reduction	16	CAPCOA, 2010.
On-site Renewable Energy	E-1, AE-2, AE-3	No	kWh Generated	--	--
		No	% of Electricity Use Generated	--	--
Energy Efficient Appliances	BE-4	Yes	Appliance Type, Land Use Subtype, % Improvement	Use Default Values	Defaults
Apply Water Conservation Strategy	WUW-2	No	% Reduction Indoor	--	--
		No	% Reduction Outdoor	--	--
Use Reclaimed Water	WSW-1	No	% Indoor Water Use	--	--
		No	% Outdoor Water Use	--	--
Use Grey Water	WSW-2	No	% Indoor Water Use	--	--
		No	% Outdoor Water Use	--	--
Install Low-Flow Bathroom Faucet	WUW-1	No	% Reduction in flow	--	Included in Project
Install Low-flow Kitchen Faucet	WUW-1	No	% Reduction in flow	--	Included in Project
Install Low-flow Toilet	WUW-1	No	% Reduction in flow	--	Included in Project
Install Low-flow Shower	WUW-1	No	% Reduction in flow	--	Included in Project
Turf Reduction	WUW-5	No	Turf Reduction Area (sqft)	--	--
		No	% Reduction turf	--	--
Use Water-Efficient Irrigation Systems	WUW-4	No	% Reduction	--	--
Water Efficient Landscape	WUW-3	No	Maximum Applied Water Allowance (MAWA) (gal/yr)	--	--
		No	Estimated Total Water Use (ETWU) (gal/yr)	--	--
Institute Recycling and Composting Service	SW-1	Yes	% Reduction in Waste Disposal	50%	Tribe will use County facilities which are required to divert 50 percent of waste from landfills

Table 1: Alternative C – Land Use Inputs

Land Use Inputs						
Land Use Type	Land Use Subtype ¹	Unit Amount	Size Metric	Lot Acreage	Square Feet	Water Demand (gal/yr) ²
Recreational	Quality Restaurant (Visitor Center)	5.0	ksf	25	5,000	6,935,000
Commercial	User Defined (Winery)	20.0	ksf	0	20,000	
Recreational	Hotel	200	rooms	0	161,400	
Parking	Parking Lot	492	spaces	0	145,800	
Industrial	User Defined (WWTP)	18.9	Ksf	0	18,900	

Notes:

ksf = 1,000 square feet

1 - Source: Section 2, Project Description.

2 - Source: Water and Wastewater Feasibility Report, Appendix A.

Table 2: Alternative C – Construction Equipment

Equipment	Construction Phase Activities					
	Demolition (7/1/26 – 7/14/26)	Site Preparation (7/1/26 – 7/21/26)	Grading (7/22/26 – 9/15/26)	Construction (9/16/26 – 12/28/27)	Paving (6/15/27 – 10/18/27)	Architectural Coating (3/23/27 – 12/27/27)
All Heavy Equipment	Default	Default	Default	Default	Default	Default
Worker Trips	Default	Default	Default	Default	Default	Default
Soil Haul Trips	Default	Default	Default	Default	Default	Default
Soil Haul	Default	Default	Default	Default	Default	Default
Total Days	10	15	40	335	90	200

Table 3: Alternative C – Trip Generation

Land Use Subtype	Daily Trip Generation Rate ¹		Average Trip Length (miles) ²			Trip Type (%) ³			Trip Purpose (%) ⁴		
	Weekday	Saturday/ Sunday	Commercial- Customer Trips (C-C)	Commercial- Work Trips (C-W)	Commercial- Nonwork Trips (C-NW)	Primary	Diverted	Pass-By	Commercial- Customer Trips(C-C)	Commercial- Work Trips (C-W)	Commercial- Nonwork Trips (C-NW)
Recreational Quality Restaurant (Visitor Center)	80	208.6	55	Default	10	Default	Default	Default	Default	Default	Default
Commercial User Defined (Winery)	4.5	1.15	Default	Default	10	80	0	20	10	37	53
Recreational Hotel	7.99	8.19/ Default	55	Default	10	Default	Default	Default	Default	Default	Default

Notes:

- 1 Trip Generation Rates adjusted for consistency with Traffic Impact Analysis Report (TJKM, 2022).
- 2 Average trip length for non-work trips based on distance from Santa Rosa area to project site. Average trip length for customer trips based on the market analysis (Meister, 2021).
- 3 All Trip Type percentages, with exception of the Winery, are CalEEMod default values
- 4 All Trip Purpose percentages, with exception of the Winery, are CalEEMod default values.

Table 4: Alternative C – Energy Use

Land Use Subtype	Title-24 Electricity Energy Intensity (KWhr/size/yr)	Nontitle-24 Electricity Energy Intensity (KWhr/size/yr)	Lighting Energy Intensity (KWhr/size/yr)	Title-24 Natural Gas Intensity (KBtu/size/yr)	Non-title-24 Natural Gas Intensity (KBtu/size/yr)
Quality Restaurant (Visitor Center)	Default	Default	Default	0	0
User Defined (Winery)	4.52	22.3	5.35	0	0
Hotel	Default	Default	Default	Default	Default
Unenclosed Parking Structure with Elevator	Default	Default	Default	Default	Default
Parking Lot	Default	Default	Default	Default	Default
User Defined (WWTP)	1.32	3.7	3.08	0	0

Notes: Winery based on CalEEMod default values for quality restaurant energy use. WWTP energy use based on CalEEMod default values for general light industrial. No natural gas use expected.

Alternative C – Off-Road Equipment Mitigation Inputs

Equipment Type	Engine Tier	Number of Equipment Mitigated	Diesel Particulate Filter (DPF) Level 2014
Welders, Air Compressors, Concrete/Industrial Saws	No Change	0	No Change
All Other Equipment	Tier 4	All	3

Mitigation Measures incorporated into EA/TEIR

- The Tribe shall use Tier 4 construction equipment for diesel equipment with a horsepower rating of greater than 50.
- The Tribe shall use soil stabilizer on unpaved roads.
- The Tribe shall apply water to exposed construction areas twice a day.
- The Tribe shall restrict vehicle speeds on the construction site to 15 miles per hour.
- The Tribe shall restrict construction vehicle idling to five minutes.
- The Tribe shall use energy efficient lighting
- The Tribe shall use reclaimed water for outdoor landscape irrigation (included as part of the Project Description; however, input as a mitigation measure for the purposes of CalEEMod).

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	20.00	User Defined Unit	0.00	20,000.00	0
User Defined Industrial	18.90	User Defined Unit	0.00	18,900.00	0
Parking Lot	492.00	Space	0.00	145,800.00	0
Hotel	200.00	Room	0.00	161,400.00	0
Quality Restaurant	5.00	1000sqft	25.00	5,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	75
Climate Zone	4			Operational Year	2028
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - See input tables for assumptions.
- Construction Phase - See input tables for assumptions.
- Trips and VMT - See input tables
- Demolition -
- Grading - See input tables for assumptions.
- Vehicle Trips - See input tables for assumptions.
- Energy Use - See input tables for assumptions.

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Water And Wastewater - See input tables for assumptions.

Solid Waste - See input tables for assumptions.

Land Use Change - See input tables for assumptions.

Construction Off-road Equipment Mitigation - See input tables for assumptions.

Area Mitigation - See input tables for assumptions.

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - See input tables for assumptions.

Stationary Sources - Process Boilers - See input tables for assumptions.

Stationary Sources - Emergency Generators and Fire Pumps EF - Tier 4 Generators

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	100
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
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
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	20.00	10.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	35.00	40.00
tblConstructionPhase	NumDays	370.00	335.00
tblConstructionPhase	NumDays	20.00	200.00
tblConstructionPhase	NumDays	20.00	90.00
tblEnergyUse	LightingElect	0.00	3.08
tblEnergyUse	NT24E	0.00	3.70

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tblEnergyUse	NT24NG	4.75	0.00
tblEnergyUse	NT24NG	147.47	0.00
tblEnergyUse	T24E	0.00	1.32
tblEnergyUse	T24NG	39.16	0.00
tblEnergyUse	T24NG	59.80	0.00
tblLandUse	LandUseSquareFeet	0.00	20,000.00
tblLandUse	LandUseSquareFeet	0.00	18,900.00
tblLandUse	LandUseSquareFeet	196,800.00	145,800.00
tblLandUse	LandUseSquareFeet	290,400.00	161,400.00
tblLandUse	LotAcreage	4.43	0.00
tblLandUse	LotAcreage	6.67	0.00
tblLandUse	LotAcreage	0.11	25.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	0.00	18.94
tblStationaryBoilersUse	AnnualHeatInput	0.00	7,300.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	20.00
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,367.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00

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tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	Load_Factor	0.73	0.50
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	2.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	989.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TTP	0.00	10.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TTP	0.00	53.00
tblVehicleTrips	CW_TTP	0.00	37.00
tblVehicleTrips	PB_TP	0.00	20.00
tblVehicleTrips	PR_TP	0.00	80.00
tblVehicleTrips	ST_TR	90.04	208.60
tblVehicleTrips	ST_TR	0.00	1.15
tblVehicleTrips	SU_TR	71.97	208.60
tblVehicleTrips	SU_TR	0.00	1.15
tblVehicleTrips	WD_TR	8.36	7.99
tblVehicleTrips	WD_TR	83.84	80.00
tblVehicleTrips	WD_TR	0.00	4.50

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
2026	0.1605	1.5005	1.5547	3.8400e-003	0.4048	0.0566	0.4614	0.1684	0.0526	0.2209	0.0000	343.4023	343.4023	0.0719	0.0114	348.6022
2027	1.4022	2.4592	3.4544	7.4400e-003	0.2188	0.0945	0.3133	0.0592	0.0888	0.1481	0.0000	664.0989	664.0989	0.1069	0.0224	673.4325
Maximum	1.4022	2.4592	3.4544	7.4400e-003	0.4048	0.0945	0.4614	0.1684	0.0888	0.2209	0.0000	664.0989	664.0989	0.1069	0.0224	673.4325

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					
2026	0.0625	0.3766	1.7874	3.8400e-003	0.2208	3.9100e-003	0.2247	0.0862	3.8500e-003	0.0901	0.0000	343.4020	343.4020	0.0719	0.0114	348.6019
2027	1.2623	0.8511	3.7741	7.4400e-003	0.2188	0.0139	0.2327	0.0592	0.0137	0.0730	0.0000	664.0984	664.0984	0.1069	0.0224	673.4320
Maximum	1.2623	0.8511	3.7741	7.4400e-003	0.2208	0.0139	0.2327	0.0862	0.0137	0.0901	0.0000	664.0984	664.0984	0.1069	0.0224	673.4320

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	15.23	69.00	-11.03	0.00	29.52	88.23	40.97	36.08	87.56	55.81	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	7-1-2026	9-30-2026	1.0939	0.2284
2	10-1-2026	12-31-2026	0.5633	0.2097
3	1-1-2027	3-31-2027	0.5883	0.2424
4	4-1-2027	6-30-2027	1.0072	0.6118
5	7-1-2027	9-30-2027	1.2771	0.6607
		Highest	1.2771	0.6607

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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****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	0.9219	6.0000e-005	6.7400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	144.2751	144.2751	0.0233	2.8300e-003	145.7017
Mobile	2.1219	3.6275	24.8896	0.0590	6.8643	0.0483	6.9126	1.8393	0.0453	1.8846	0.0000	5,446.5439	5,446.5439	0.2759	0.2480	5,527.3553
Stationary	0.3247	0.1592	0.8280	1.5600e-003		0.0159	0.0159		0.0159	0.0159	0.0000	150.7090	150.7090	0.0211	0.0000	151.2372
Waste						0.0000	0.0000		0.0000	0.0000	26.9978	0.0000	26.9978	1.5955	0.0000	66.8859
Water						0.0000	0.0000		0.0000	0.0000	2.0910	3.5137	5.6047	0.2153	5.1400e-003	12.5199
Total	3.3686	3.7868	25.7244	0.0605	6.8643	0.0643	6.9285	1.8393	0.0612	1.9006	29.0888	5,745.0548	5,774.1436	2.1313	0.2560	5,903.7141

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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	0.9100	6.0000e-005	6.7400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	136.6470	136.6470	0.0221	2.6800e-003	137.9982
Mobile	2.1219	3.6275	24.8896	0.0590	6.8643	0.0483	6.9126	1.8393	0.0453	1.8846	0.0000	5,446.5439	5,446.5439	0.2759	0.2480	5,527.3553
Stationary	0.3247	0.1592	0.8280	1.5600e-003		0.0159	0.0159		0.0159	0.0159	0.0000	150.7090	150.7090	0.0211	0.0000	151.2372
Waste						0.0000	0.0000		0.0000	0.0000	13.4989	0.0000	13.4989	0.7978	0.0000	33.4430
Water						0.0000	0.0000		0.0000	0.0000	1.8819	3.0981	4.9801	0.1938	4.6200e-003	11.2031
Total	3.3567	3.7868	25.7244	0.0605	6.8643	0.0643	6.9285	1.8393	0.0612	1.9006	15.3808	5,737.0111	5,752.3919	1.3108	0.2553	5,861.2508

	ROG	NOx	CO	SO2	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	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.12	0.14	0.38	38.50	0.26	0.72

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-146.9400
Total	-146.9400

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2026	7/14/2026	5	10	
2	Site Preparation	Site Preparation	7/1/2026	7/21/2026	5	15	
3	Grading	Grading	7/22/2026	9/15/2026	5	40	
4	Building Construction	Building Construction	9/16/2026	12/28/2027	5	335	
5	Architectural Coating	Architectural Coating	3/23/2027	12/27/2027	5	200	
6	Paving	Paving	6/15/2027	10/18/2027	5	90	

Acres of Grading (Site Preparation Phase): 22.5**Acres of Grading (Grading Phase): 120****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 307,950; Non-Residential Outdoor: 102,650; Striped Parking Area: 8,748 (Architectural Coating – sqft)**

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

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	29.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	989.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

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Building Construction	9	145.00	58.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	29.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2026**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.1500e-003	0.0000	3.1500e-003	4.8000e-004	0.0000	4.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0105	0.0960	0.0971	1.9000e-004		4.2600e-003	4.2600e-003		3.9600e-003	3.9600e-003	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175
Total	0.0105	0.0960	0.0971	1.9000e-004	3.1500e-003	4.2600e-003	7.4100e-003	4.8000e-004	3.9600e-003	4.4400e-003	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175

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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 Demolition - 2026****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	3.0000e-005	2.0100e-003	4.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.8358	0.8358	3.0000e-005	1.3000e-004	0.8759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.3000e-004	1.6400e-003	0.0000	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4316	0.4316	1.0000e-005	1.0000e-005	0.4356
Total	2.5000e-004	2.1400e-003	2.0900e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.5000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	1.2674	1.2674	4.0000e-005	1.4000e-004	1.3115

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					1.4200e-003	0.0000	1.4200e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4700e-003	0.0200	0.1153	1.9000e-004		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175
Total	3.4700e-003	0.0200	0.1153	1.9000e-004	1.4200e-003	5.0000e-004	1.9200e-003	2.1000e-004	5.0000e-004	7.1000e-004	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175

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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 Demolition - 2026****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	3.0000e-005	2.0100e-003	4.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.8358	0.8358	3.0000e-005	1.3000e-004	0.8759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.3000e-004	1.6400e-003	0.0000	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4316	0.4316	1.0000e-005	1.0000e-005	0.4356
Total	2.5000e-004	2.1400e-003	2.0900e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.5000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	1.2674	1.2674	4.0000e-005	1.4000e-004	1.3115

3.3 Site Preparation - 2026**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1474	0.0000	0.1474	0.0758	0.0000	0.0758	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0186	0.1893	0.1343	2.9000e-004		8.1500e-003	8.1500e-003		7.5000e-003	7.5000e-003	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032
Total	0.0186	0.1893	0.1343	2.9000e-004	0.1474	8.1500e-003	0.1556	0.0758	7.5000e-003	0.0833	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032

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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 Site Preparation - 2026****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	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841
Total	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841

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					0.0663	0.0000	0.0663	0.0341	0.0000	0.0341	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4900e-003	0.0151	0.1565	2.9000e-004		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032
Total	3.4900e-003	0.0151	0.1565	2.9000e-004	0.0663	7.0000e-005	0.0664	0.0341	7.0000e-005	0.0342	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032

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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 Site Preparation - 2026****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	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841
Total	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841

3.4 Grading - 2026**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1841	0.0000	0.1841	0.0731	0.0000	0.0731	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0580	0.5589	0.5266	1.2400e-003		0.0226	0.0226		0.0208	0.0208	0.0000	109.0124	109.0124	0.0353	0.0000	109.8939
Total	0.0580	0.5589	0.5266	1.2400e-003	0.1841	0.0226	0.2067	0.0731	0.0208	0.0939	0.0000	109.0124	109.0124	0.0353	0.0000	109.8939

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.8000e-004	0.0685	0.0155	2.9000e-004	8.2200e-003	4.8000e-004	8.7000e-003	2.2500e-003	4.6000e-004	2.7100e-003	0.0000	28.5035	28.5035	9.4000e-004	4.5100e-003	29.8715
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	6.9000e-004	8.7200e-003	3.0000e-005	3.1400e-003	2.0000e-005	3.1600e-003	8.4000e-004	1.0000e-005	8.5000e-004	0.0000	2.3018	2.3018	7.0000e-005	7.0000e-005	2.3231
Total	2.1300e-003	0.0692	0.0242	3.2000e-004	0.0114	5.0000e-004	0.0119	3.0900e-003	4.7000e-004	3.5600e-003	0.0000	30.8052	30.8052	1.0100e-003	4.5800e-003	32.1946

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					0.0828	0.0000	0.0828	0.0329	0.0000	0.0329	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.0660	0.6600	1.2400e-003		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	109.0123	109.0123	0.0353	0.0000	109.8937
Total	0.0152	0.0660	0.6600	1.2400e-003	0.0828	3.0000e-004	0.0831	0.0329	3.0000e-004	0.0332	0.0000	109.0123	109.0123	0.0353	0.0000	109.8937

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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 Grading - 2026****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	9.8000e-004	0.0685	0.0155	2.9000e-004	8.2200e-003	4.8000e-004	8.7000e-003	2.2500e-003	4.6000e-004	2.7100e-003	0.0000	28.5035	28.5035	9.4000e-004	4.5100e-003	29.8715
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	6.9000e-004	8.7200e-003	3.0000e-005	3.1400e-003	2.0000e-005	3.1600e-003	8.4000e-004	1.0000e-005	8.5000e-004	0.0000	2.3018	2.3018	7.0000e-005	7.0000e-005	2.3231
Total	2.1300e-003	0.0692	0.0242	3.2000e-004	0.0114	5.0000e-004	0.0119	3.0900e-003	4.7000e-004	3.5600e-003	0.0000	30.8052	30.8052	1.0100e-003	4.5800e-003	32.1946

3.5 Building Construction - 2026**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0526	0.4801	0.6193	1.0400e-003		0.0203	0.0203		0.0191	0.0191	0.0000	89.2890	89.2890	0.0210	0.0000	89.8137
Total	0.0526	0.4801	0.6193	1.0400e-003		0.0203	0.0203		0.0191	0.0191	0.0000	89.2890	89.2890	0.0210	0.0000	89.8137

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****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	2.0500e-003	0.0952	0.0264	3.9000e-004	0.0131	5.0000e-004	0.0136	3.7900e-003	4.7000e-004	4.2600e-003	0.0000	38.0286	38.0286	7.8000e-004	5.7500e-003	39.7620
Worker	0.0160	9.6500e-003	0.1217	3.5000e-004	0.0438	2.2000e-004	0.0440	0.0117	2.1000e-004	0.0119	0.0000	32.1238	32.1238	9.4000e-004	9.2000e-004	32.4218
Total	0.0181	0.1048	0.1482	7.4000e-004	0.0569	7.2000e-004	0.0576	0.0155	6.8000e-004	0.0161	0.0000	70.1524	70.1524	1.7200e-003	6.6700e-003	72.1838

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	0.0194	0.0991	0.6782	1.0400e-003		1.7900e-003	1.7900e-003		1.7900e-003	1.7900e-003	0.0000	89.2889	89.2889	0.0210	0.0000	89.8136
Total	0.0194	0.0991	0.6782	1.0400e-003		1.7900e-003	1.7900e-003		1.7900e-003	1.7900e-003	0.0000	89.2889	89.2889	0.0210	0.0000	89.8136

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****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	2.0500e-003	0.0952	0.0264	3.9000e-004	0.0131	5.0000e-004	0.0136	3.7900e-003	4.7000e-004	4.2600e-003	0.0000	38.0286	38.0286	7.8000e-004	5.7500e-003	39.7620
Worker	0.0160	9.6500e-003	0.1217	3.5000e-004	0.0438	2.2000e-004	0.0440	0.0117	2.1000e-004	0.0119	0.0000	32.1238	32.1238	9.4000e-004	9.2000e-004	32.4218
Total	0.0181	0.1048	0.1482	7.4000e-004	0.0569	7.2000e-004	0.0576	0.0155	6.8000e-004	0.0161	0.0000	70.1524	70.1524	1.7200e-003	6.6700e-003	72.1838

3.5 Building Construction - 2027**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	0.1764	1.6086	2.0749	3.4800e-003		0.0681	0.0681		0.0640	0.0640	0.0000	299.1761	299.1761	0.0703	0.0000	300.9343
Total	0.1764	1.6086	2.0749	3.4800e-003		0.0681	0.0681		0.0640	0.0640	0.0000	299.1761	299.1761	0.0703	0.0000	300.9343

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.6600e-003	0.3151	0.0871	1.2800e-003	0.0439	1.6300e-003	0.0456	0.0127	1.5600e-003	0.0143	0.0000	124.8979	124.8979	2.6500e-003	0.0189	130.5924
Worker	0.0504	0.0293	0.3824	1.1400e-003	0.1468	7.0000e-004	0.1475	0.0391	6.5000e-004	0.0397	0.0000	104.4438	104.4438	2.8700e-003	2.9100e-003	105.3822
Total	0.0570	0.3443	0.4695	2.4200e-003	0.1907	2.3300e-003	0.1931	0.0518	2.2100e-003	0.0540	0.0000	229.3417	229.3417	5.5200e-003	0.0218	235.9746

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	0.0650	0.3319	2.2723	3.4800e-003		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	299.1757	299.1757	0.0703	0.0000	300.9339
Total	0.0650	0.3319	2.2723	3.4800e-003		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	299.1757	299.1757	0.0703	0.0000	300.9339

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****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	6.6600e-003	0.3151	0.0871	1.2800e-003	0.0439	1.6300e-003	0.0456	0.0127	1.5600e-003	0.0143	0.0000	124.8979	124.8979	2.6500e-003	0.0189	130.5924
Worker	0.0504	0.0293	0.3824	1.1400e-003	0.1468	7.0000e-004	0.1475	0.0391	6.5000e-004	0.0397	0.0000	104.4438	104.4438	2.8700e-003	2.9100e-003	105.3822
Total	0.0570	0.3443	0.4695	2.4200e-003	0.1907	2.3300e-003	0.1931	0.0518	2.2100e-003	0.0540	0.0000	229.3417	229.3417	5.5200e-003	0.0218	235.9746

3.6 Architectural Coating - 2027**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1009					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1146	0.1809	3.0000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	25.5325	25.5325	1.3900e-003	0.0000	25.5674
Total	1.1180	0.1146	0.1809	3.0000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	25.5325	25.5325	1.3900e-003	0.0000	25.5674

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****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	7.8100e-003	4.5400e-003	0.0593	1.8000e-004	0.0228	1.1000e-004	0.0229	6.0600e-003	1.0000e-004	6.1600e-003	0.0000	16.1928	16.1928	4.5000e-004	4.5000e-004	16.3383
Total	7.8100e-003	4.5400e-003	0.0593	1.8000e-004	0.0228	1.1000e-004	0.0229	6.0600e-003	1.0000e-004	6.1600e-003	0.0000	16.1928	16.1928	4.5000e-004	4.5000e-004	16.3383

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	1.1009					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1146	0.1809	3.0000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	25.5325	25.5325	1.3900e-003	0.0000	25.5673
Total	1.1180	0.1146	0.1809	3.0000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	25.5325	25.5325	1.3900e-003	0.0000	25.5673

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****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	7.8100e-003	4.5400e-003	0.0593	1.8000e-004	0.0228	1.1000e-004	0.0229	6.0600e-003	1.0000e-004	6.1600e-003	0.0000	16.1928	16.1928	4.5000e-004	4.5000e-004	16.3383
Total	7.8100e-003	4.5400e-003	0.0593	1.8000e-004	0.0228	1.1000e-004	0.0229	6.0600e-003	1.0000e-004	6.1600e-003	0.0000	16.1928	16.1928	4.5000e-004	4.5000e-004	16.3383

3.7 Paving - 2027**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	0.0412	0.3862	0.6560	1.0300e-003		0.0188	0.0188		0.0173	0.0173	0.0000	90.0867	90.0867	0.0291	0.0000	90.8150
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0412	0.3862	0.6560	1.0300e-003		0.0188	0.0188		0.0173	0.0173	0.0000	90.0867	90.0867	0.0291	0.0000	90.8150

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Paving - 2027****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029
Total	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029

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	0.0126	0.0547	0.7783	1.0300e-003		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	90.0865	90.0865	0.0291	0.0000	90.8149
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0126	0.0547	0.7783	1.0300e-003		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	90.0865	90.0865	0.0291	0.0000	90.8149

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

3.7 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029
Total	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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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
Category	tons/yr										MT/yr					
Mitigated	2.1219	3.6275	24.8896	0.0590	6.8643	0.0483	6.9126	1.8393	0.0453	1.8846	0.0000	5,446.5439	5,446.5439	0.2759	0.2480	5,527.3553
Unmitigated	2.1219	3.6275	24.8896	0.0590	6.8643	0.0483	6.9126	1.8393	0.0453	1.8846	0.0000	5,446.5439	5,446.5439	0.2759	0.2480	5,527.3553

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,598.00	1,638.00	1190.00	14,671,200	14,671,200
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	400.00	1,043.00	1043.00	3,767,118	3,767,118
User Defined Commercial	90.00	23.00	23.00	235,718	235,718
User Defined Industrial	0.00	0.00	0.00		
Total	2,088.00	2,704.00	2,256.00	18,674,037	18,674,037

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
Hotel	14.70	55.00	10.00	19.40	61.60	19.00	58	38	4
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Quality Restaurant	14.70	55.00	10.00	12.00	69.00	19.00	38	18	44
User Defined Commercial	14.70	6.60	10.00	37.00	10.00	53.00	80	0	20
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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
Hotel	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
Parking Lot	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
Quality Restaurant	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
User Defined Commercial	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
User Defined Industrial	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

[illegible]

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

Unmitigated

[illegible]

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

Mitigated

[illegible]

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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			
Hotel	1.19436e+006	110.5067	0.0179	2.1700e-003	111.5994
Parking Lot	51030	4.7215	7.6000e-004	9.0000e-005	4.7682
Quality Restaurant	160850	14.8825	2.4100e-003	2.9000e-004	15.0296
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	153090	14.1645	2.2900e-003	2.8000e-004	14.3045
Total		144.2751	0.0233	2.8300e-003	145.7017

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

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.13367e+006	104.8918	0.0170	2.0600e-003	105.9290
Parking Lot	42865.2	3.9661	6.4000e-004	8.0000e-005	4.0053
Quality Restaurant	156570	14.4865	2.3400e-003	2.8000e-004	14.6297
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	143776	13.3027	2.1500e-003	2.6000e-004	13.4343
Total		136.6470	0.0221	2.6800e-003	137.9982

6.0 Area Detail

6.1 Mitigation Measures Area

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

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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
Category	tons/yr										MT/yr					
Mitigated	0.9100	6.0000e-005	6.7400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140
Unmitigated	0.9219	6.0000e-005	6.7400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8112					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.2000e-004	6.0000e-005	6.7400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140
Total	0.9219	6.0000e-005	6.7400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco 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	0.0982					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8112					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.2000e-004	6.0000e-005	6.7400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140
Total	0.9100	6.0000e-005	6.7400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed 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	4.9801	0.1938	4.6200e-003	11.2031
Unmitigated	5.6047	0.2153	5.1400e-003	12.5199

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	5.07335 / 0.563706	4.3320	0.1658	3.9600e-003	9.6551
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.51767 / 0.0968725	1.2727	0.0496	1.1800e-003	2.8648
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		5.6047	0.2153	5.1400e-003	12.5199

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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			
Hotel	4.56602 / 0.338224	3.8441	0.1492	3.5600e-003	8.6343
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.3659 / 0.0581235	1.1360	0.0446	1.0600e-003	2.5688
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		4.9801	0.1938	4.6200e-003	11.2031

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	13.4989	0.7978	0.0000	33.4430
Unmitigated	26.9978	1.5955	0.0000	66.8859

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	109.5	22.2275	1.3136	0.0000	55.0677
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	4.56	0.9256	0.0547	0.0000	2.2932
User Defined Commercial	18.94	3.8447	0.2272	0.0000	9.5250
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		26.9978	1.5955	0.0000	66.8859

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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

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	54.75	11.1138	0.6568	0.0000	27.5339
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.28	0.4628	0.0274	0.0000	1.1466
User Defined Commercial	9.47	1.9223	0.1136	0.0000	4.7625
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		13.4989	0.7978	0.0000	33.4430

9.0 Operational Offroad

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
Emergency Generator	2	0	60	2447	0.73	Diesel
Emergency Generator	1	0	12	2447	0.5	Diesel
Emergency Generator	1	0	60	1367	0.73	Diesel

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	0	20	7300	0.5	CNG

User Defined Equipment

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

10.1 Stationary Sources**Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Boiler - CNG (0 - 2 MMBTU)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Emergency Generator - Diesel (750 - 9999 HP)	0.3247	0.1592	0.8280	1.5600e-003		0.0159	0.0159		0.0159	0.0159	0.0000	150.7090	150.7090	0.0211	0.0000	151.2372
Total	0.3247	0.1592	0.8280	1.5600e-003		0.0159	0.0159		0.0159	0.0159	0.0000	150.7090	150.7090	0.0211	0.0000	151.2372

11.0 Vegetation

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco 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			
Unmitigated	-146,9400	0.0000	0.0000	-146,9400

11.1 Vegetation Land Change
Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Cropland	61.7 / 38	-146,9400	0.0000	0.0000	-146,9400
Total		-146,9400	0.0000	0.0000	-146,9400

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

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

Koi Nation Shiloh Resort and Casino - Alternative C
Sonoma-San Francisco County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	20.00	User Defined Unit	0.00	20,000.00	0
User Defined Industrial	18.90	User Defined Unit	0.00	18,900.00	0
Parking Lot	492.00	Space	0.00	145,800.00	0
Hotel	200.00	Room	0.00	161,400.00	0
Quality Restaurant	5.00	1000sqft	25.00	5,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	75
Climate Zone	4			Operational Year	2028
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - See input tables for assumptions.
- Construction Phase - See input tables for assumptions.
- Trips and VMT - See input tables
- Demolition -
- Grading - See input tables for assumptions.
- Vehicle Trips - See input tables for assumptions.
- Energy Use - See input tables for assumptions.

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

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

- Water And Wastewater - See input tables for assumptions.
- Solid Waste - See input tables for assumptions.
- Land Use Change - See input tables for assumptions.
- Construction Off-road Equipment Mitigation - See input tables for assumptions.
- Area Mitigation - See input tables for assumptions.
- Energy Mitigation -
- Water Mitigation -
- Waste Mitigation -
- Stationary Sources - Emergency Generators and Fire Pumps - See input tables for assumptions.
- Stationary Sources - Process Boilers - See input tables for assumptions.
- Stationary Sources - Emergency Generators and Fire Pumps EF - Tier 4 Generators

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
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
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	20.00	10.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	35.00	40.00
tblConstructionPhase	NumDays	370.00	335.00
tblConstructionPhase	NumDays	20.00	200.00
tblConstructionPhase	NumDays	20.00	90.00
tblEnergyUse	LightingElect	0.00	3.08
tblEnergyUse	NT24E	0.00	3.70
tblEnergyUse	NT24NG	4.75	0.00
tblEnergyUse	NT24NG	147.47	0.00
tblEnergyUse	T24E	0.00	1.32

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

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

tblEnergyUse	T24NG	39.16	0.00
tblEnergyUse	T24NG	59.80	0.00
tblLandUse	LandUseSquareFeet	0.00	20,000.00
tblLandUse	LandUseSquareFeet	0.00	18,900.00
tblLandUse	LandUseSquareFeet	196,800.00	145,800.00
tblLandUse	LandUseSquareFeet	290,400.00	161,400.00
tblLandUse	LotAcreage	4.43	0.00
tblLandUse	LotAcreage	6.67	0.00
tblLandUse	LotAcreage	0.11	25.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	0.00	18.94
tblStationaryBoilersUse	AnnualHeatInput	0.00	7,300.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	20.00
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,367.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

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

tblStationaryGeneratorsPumpsUse	Load_Factor	0.73	0.50
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	2.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	989.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TTP	0.00	10.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TTP	0.00	53.00
tblVehicleTrips	CW_TTP	0.00	37.00
tblVehicleTrips	PB_TP	0.00	20.00
tblVehicleTrips	PR_TP	0.00	80.00
tblVehicleTrips	ST_TR	90.04	208.60
tblVehicleTrips	ST_TR	0.00	1.15
tblVehicleTrips	SU_TR	71.97	208.60
tblVehicleTrips	SU_TR	0.00	1.15
tblVehicleTrips	WD_TR	8.36	7.99
tblVehicleTrips	WD_TR	83.84	80.00
tblVehicleTrips	WD_TR	0.00	4.50

2.0 Emissions Summary

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	4.6697	44.8698	38.1833	0.0808	20.6083	1.9437	22.5520	10.2835	1.7957	12.0792	0.0000	7,842.172 2	7,842.172 2	2.2514	0.2519	7,908.799 8
2027	14.0437	24.8256	37.2263	0.0748	1.9061	1.0173	2.9234	0.5135	0.9514	1.4649	0.0000	7,340.921 5	7,340.921 5	1.3826	0.1912	7,432.462 6
Maximum	14.0437	44.8698	38.1833	0.0808	20.6083	1.9437	22.5520	10.2835	1.7957	12.0792	0.0000	7,842.172 2	7,842.172 2	2.2514	0.2519	7,908.799 8

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	1.2648	6.6437	44.7881	0.0808	9.4504	0.1143	9.5647	4.6746	0.1140	4.7887	0.0000	7,842.172 2	7,842.172 2	2.2514	0.2519	7,908.799 8
2027	12.5454	7.5625	41.4744	0.0748	1.9061	0.1234	2.0295	0.5135	0.1223	0.6358	0.0000	7,340.921 5	7,340.921 5	1.3826	0.1912	7,432.462 6
Maximum	12.5454	7.5625	44.7881	0.0808	9.4504	0.1234	9.5647	4.6746	0.1223	4.7887	0.0000	7,842.172 2	7,842.172 2	2.2514	0.2519	7,908.799 8

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco 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	26.20	79.62	-14.39	0.00	49.56	91.97	54.49	51.95	91.40	59.95	0.00	0.00	0.00	0.00	0.00	0.00

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	5.0552	6.8000e-004	0.0749	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1611	0.1611	4.2000e-004		0.1715
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	14.7457	22.5740	169.7124	0.4095	47.7124	0.3218	48.0342	12.7375	0.3016	13.0390		41,687.7414	41,687.7414	1.9780	1.7525	42,259.4385
Stationary	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	19.8009	22.5747	169.7874	0.4095	47.7124	0.3221	48.0345	12.7375	0.3018	13.0393		41,687.9025	41,687.9025	1.9784	1.7525	42,259.6100

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco 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

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	5.0552	6.8000e-004	0.0749	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1611	0.1611	4.2000e-004		0.1715
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	14.7457	22.5740	169.7124	0.4095	47.7124	0.3218	48.0342	12.7375	0.3016	13.0390		41,687.7414	41,687.7414	1.9780	1.7525	42,259.4385
Stationary	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	19.8009	22.5747	169.7874	0.4095	47.7124	0.3221	48.0345	12.7375	0.3018	13.0393		41,687.9025	41,687.9025	1.9784	1.7525	42,259.6100

	ROG	NOx	CO	SO2	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	Demolition	Demolition	7/1/2026	7/14/2026	5	10	
2	Site Preparation	Site Preparation	7/1/2026	7/21/2026	5	15	
3	Grading	Grading	7/22/2026	9/15/2026	5	40	
4	Building Construction	Building Construction	9/16/2026	12/28/2027	5	335	

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

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

5	Architectural Coating	Architectural Coating	3/23/2027	12/27/2027	5	200
6	Paving	Paving	6/15/2027	10/18/2027	5	90

Acres of Grading (Site Preparation Phase): 22.5**Acres of Grading (Grading Phase): 120****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 307,950; Non-Residential Outdoor: 102,650; Striped Parking Area: 8,748 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

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

Paving	Rollers	2	8.00	80	0.38
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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
Demolition	6	15.00	0.00	29.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	989.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	145.00	58.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	29.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Use DPF for Construction Equipment
- Use Soil Stabilizer
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Demolition - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6300	0.0000	0.6300	0.0954	0.0000	0.0954			0.0000			0.0000
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920		3,747.5996	3,747.5996	1.0464		3,773.7606
Total	2.0926	19.1966	19.4184	0.0388	0.6300	0.8528	1.4828	0.0954	0.7920	0.8874		3,747.5996	3,747.5996	1.0464		3,773.7606

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	5.9000e-003	0.3886	0.0906	1.6900e-003	0.0502	2.8100e-003	0.0530	0.0137	2.6900e-003	0.0164		184.2031	184.2031	6.0900e-003	0.0292	193.0432
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
Worker	0.0448	0.0231	0.3466	9.9000e-004	0.1232	6.0000e-004	0.1238	0.0327	5.6000e-004	0.0332		100.5754	100.5754	2.6100e-003	2.5200e-003	101.3927
Total	0.0507	0.4117	0.4372	2.6800e-003	0.1734	3.4100e-003	0.1768	0.0464	3.2500e-003	0.0496		284.7785	284.7785	8.7000e-003	0.0317	294.4359

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Demolition - 2026****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					0.2835	0.0000	0.2835	0.0429	0.0000	0.0429			0.0000			0.0000
Off-Road	0.6948	4.0014	23.0661	0.0388		0.1008	0.1008		0.1008	0.1008	0.0000	3,747.599 6	3,747.599 6	1.0464		3,773.760 6
Total	0.6948	4.0014	23.0661	0.0388	0.2835	0.1008	0.3843	0.0429	0.1008	0.1437	0.0000	3,747.599 6	3,747.599 6	1.0464		3,773.760 6

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	5.9000e-003	0.3886	0.0906	1.6900e-003	0.0502	2.8100e-003	0.0530	0.0137	2.6900e-003	0.0164		184.2031	184.2031	6.0900e-003	0.0292	193.0432
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
Worker	0.0448	0.0231	0.3466	9.9000e-004	0.1232	6.0000e-004	0.1238	0.0327	5.6000e-004	0.0332		100.5754	100.5754	2.6100e-003	2.5200e-003	101.3927
Total	0.0507	0.4117	0.4372	2.6800e-003	0.1734	3.4100e-003	0.1768	0.0464	3.2500e-003	0.0496		284.7785	284.7785	8.7000e-003	0.0317	294.4359

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Site Preparation - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931		3,718.9320
Total	2.4727	25.2339	17.9118	0.0381	19.6570	1.0868	20.7438	10.1025	0.9999	11.1023		3,689.1037	3,689.1037	1.1931		3,718.9320

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	0.0000	0.0000	0.0000	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	0.0537	0.0277	0.4159	1.1900e-003	0.1479	7.3000e-004	0.1486	0.0392	6.7000e-004	0.0399		120.6904	120.6904	3.1300e-003	3.0300e-003	121.6713
Total	0.0537	0.0277	0.4159	1.1900e-003	0.1479	7.3000e-004	0.1486	0.0392	6.7000e-004	0.0399		120.6904	120.6904	3.1300e-003	3.0300e-003	121.6713

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Site Preparation - 2026****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					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0381		9.3100e-003	9.3100e-003		9.3100e-003	9.3100e-003	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
Total	0.4656	2.0175	20.8690	0.0381	8.8457	9.3100e-003	8.8550	4.5461	9.3100e-003	4.5554	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320

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	0.0000	0.0000	0.0000	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	0.0537	0.0277	0.4159	1.1900e-003	0.1479	7.3000e-004	0.1486	0.0392	6.7000e-004	0.0399		120.6904	120.6904	3.1300e-003	3.0300e-003	121.6713
Total	0.0537	0.0277	0.4159	1.1900e-003	0.1479	7.3000e-004	0.1486	0.0392	6.7000e-004	0.0399		120.6904	120.6904	3.1300e-003	3.0300e-003	121.6713

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Grading - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.281 4	6,008.281 4	1.9432		6,056.861 4
Total	2.9012	27.9429	26.3311	0.0621	9.2036	1.1309	10.3345	3.6538	1.0404	4.6942		6,008.281 4	6,008.281 4	1.9432		6,056.861 4

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	0.0503	3.3129	0.7725	0.0144	0.4279	0.0240	0.4518	0.1169	0.0229	0.1398		1,570.490 2	1,570.490 2	0.0519	0.2486	1,645.859 9
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
Worker	0.0597	0.0308	0.4621	1.3300e-003	0.1643	8.1000e-004	0.1651	0.0436	7.4000e-004	0.0443		134.1005	134.1005	3.4800e-003	3.3700e-003	135.1903
Total	0.1100	3.3437	1.2346	0.0158	0.5922	0.0248	0.6169	0.1605	0.0237	0.1841		1,704.590 7	1,704.590 7	0.0554	0.2519	1,781.050 2

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Grading - 2026****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					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621		0.0152	0.0152		0.0152	0.0152	0.0000	6,008.281 4	6,008.281 4	1.9432		6,056.861 4
Total	0.7616	3.3000	32.9991	0.0621	4.1416	0.0152	4.1568	1.6442	0.0152	1.6594	0.0000	6,008.281 4	6,008.281 4	1.9432		6,056.861 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0503	3.3129	0.7725	0.0144	0.4279	0.0240	0.4518	0.1169	0.0229	0.1398		1,570.490 2	1,570.490 2	0.0519	0.2486	1,645.859 9
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
Worker	0.0597	0.0308	0.4621	1.3300e-003	0.1643	8.1000e-004	0.1651	0.0436	7.4000e-004	0.0443		134.1005	134.1005	3.4800e-003	3.3700e-003	135.1903
Total	0.1100	3.3437	1.2346	0.0158	0.5922	0.0248	0.6169	0.1605	0.0237	0.1841		1,704.590 7	1,704.590 7	0.0554	0.2519	1,781.050 2

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 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	0.0542	2.3948	0.6769	0.0101	0.3535	0.0128	0.3663	0.1017	0.0123	0.1139		1,088.208 0	1,088.208 0	0.0224	0.1645	1,137.791 4
Worker	0.4327	0.2231	3.3502	9.6200e-003	1.1911	5.8400e-003	1.1970	0.3160	5.3800e-003	0.3213		972.2284	972.2284	0.0252	0.0244	980.1297
Total	0.4870	2.6180	4.0271	0.0198	1.5446	0.0187	1.5633	0.4176	0.0177	0.4353		2,060.436 4	2,060.436 4	0.0476	0.1889	2,117.921 1

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****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	0.5038	2.5728	17.6150	0.0270		0.0466	0.0466		0.0466	0.0466	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	0.5038	2.5728	17.6150	0.0270		0.0466	0.0466		0.0466	0.0466	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 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	0.0542	2.3948	0.6769	0.0101	0.3535	0.0128	0.3663	0.1017	0.0123	0.1139		1,088.208 0	1,088.208 0	0.0224	0.1645	1,137.791 4
Worker	0.4327	0.2231	3.3502	9.6200e-003	1.1911	5.8400e-003	1.1970	0.3160	5.3800e-003	0.3213		972.2284	972.2284	0.0252	0.0244	980.1297
Total	0.4870	2.6180	4.0271	0.0198	1.5446	0.0187	1.5633	0.4176	0.0177	0.4353		2,060.436 4	2,060.436 4	0.0476	0.1889	2,117.921 1

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 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	0.0526	2.3655	0.6652	9.9300e-003	0.3535	0.0126	0.3661	0.1016	0.0121	0.1137		1,066.649 2	1,066.649 2	0.0227	0.1612	1,115.262 3
Worker	0.4054	0.2020	3.1373	9.3300e-003	1.1911	5.4600e-003	1.1966	0.3160	5.0300e-003	0.3210		943.3476	943.3476	0.0229	0.0230	950.7723
Total	0.4580	2.5675	3.8025	0.0193	1.5446	0.0181	1.5627	0.4176	0.0171	0.4347		2,009.996 8	2,009.996 8	0.0457	0.1842	2,066.034 6

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****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	0.5038	2.5728	17.6150	0.0270		0.0466	0.0466		0.0466	0.0466	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	0.5038	2.5728	17.6150	0.0270		0.0466	0.0466		0.0466	0.0466	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 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	0.0526	2.3655	0.6652	9.9300e-003	0.3535	0.0126	0.3661	0.1016	0.0121	0.1137		1,066.649 2	1,066.649 2	0.0227	0.1612	1,115.262 3
Worker	0.4054	0.2020	3.1373	9.3300e-003	1.1911	5.4600e-003	1.1966	0.3160	5.0300e-003	0.3210		943.3476	943.3476	0.0229	0.0230	950.7723
Total	0.4580	2.5675	3.8025	0.0193	1.5446	0.0181	1.5627	0.4176	0.0171	0.4347		2,009.996 8	2,009.996 8	0.0457	0.1842	2,066.034 6

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.0092					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	11.1801	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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	0.0000	0.0000	0.0000	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	0.0811	0.0404	0.6275	1.8700e-003	0.2382	1.0900e-003	0.2393	0.0632	1.0100e-003	0.0642		188.6695	188.6695	4.5900e-003	4.6000e-003	190.1545
Total	0.0811	0.0404	0.6275	1.8700e-003	0.2382	1.0900e-003	0.2393	0.0632	1.0100e-003	0.0642		188.6695	188.6695	4.5900e-003	4.6000e-003	190.1545

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.0092					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	11.1801	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

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	0.0000	0.0000	0.0000	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	0.0811	0.0404	0.6275	1.8700e-003	0.2382	1.0900e-003	0.2393	0.0632	1.0100e-003	0.0642		188.6695	188.6695	4.5900e-003	4.6000e-003	190.1545
Total	0.0811	0.0404	0.6275	1.8700e-003	0.2382	1.0900e-003	0.2393	0.0632	1.0100e-003	0.0642		188.6695	188.6695	4.5900e-003	4.6000e-003	190.1545

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Paving - 2027****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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8

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	0.0000	0.0000	0.0000	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	0.0419	0.0209	0.3246	9.7000e-004	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		97.5877	97.5877	2.3700e-003	2.3800e-003	98.3558
Total	0.0419	0.0209	0.3246	9.7000e-004	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		97.5877	97.5877	2.3700e-003	2.3800e-003	98.3558

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Paving - 2027****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	0.2805	1.2154	17.2957	0.0228		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2805	1.2154	17.2957	0.0228		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

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	0.0000	0.0000	0.0000	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	0.0419	0.0209	0.3246	9.7000e-004	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		97.5877	97.5877	2.3700e-003	2.3800e-003	98.3558
Total	0.0419	0.0209	0.3246	9.7000e-004	0.1232	5.6000e-004	0.1238	0.0327	5.2000e-004	0.0332		97.5877	97.5877	2.3700e-003	2.3800e-003	98.3558

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco 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	14.7457	22.5740	169.7124	0.4095	47.7124	0.3218	48.0342	12.7375	0.3016	13.0390		41,687.7414	41,687.7414	1.9780	1.7525	42,259.4385
Unmitigated	14.7457	22.5740	169.7124	0.4095	47.7124	0.3218	48.0342	12.7375	0.3016	13.0390		41,687.7414	41,687.7414	1.9780	1.7525	42,259.4385

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,598.00	1,638.00	1190.00	14,671,200	14,671,200
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	400.00	1,043.00	1043.00	3,767,118	3,767,118
User Defined Commercial	90.00	23.00	23.00	235,718	235,718
User Defined Industrial	0.00	0.00	0.00		
Total	2,088.00	2,704.00	2,256.00	18,674,037	18,674,037

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
Hotel	14.70	55.00	10.00	19.40	61.60	19.00	58	38	4
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

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

	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
Quality Restaurant	14.70	55.00	10.00	12.00	69.00	19.00	38	18	44
User Defined Commercial	14.70	6.60	10.00	37.00	10.00	53.00	80	0	20
User Defined Industrial	14.70	6.60	6.60	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
Hotel	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
Parking Lot	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
Quality Restaurant	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
User Defined Commercial	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580
User Defined Industrial	0.566959	0.055323	0.166365	0.116893	0.030332	0.007883	0.015390	0.006635	0.001087	0.000281	0.027762	0.001510	0.003580

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco 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
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					
Hotel	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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	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
User Defined Commercial	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
User Defined Industrial	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

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco 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					
Hotel	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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	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
User Defined Commercial	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
User Defined Industrial	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

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

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco 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
Category	lb/day										lb/day					
Mitigated	5.0552	6.8000e-004	0.0749	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1611	0.1611	4.2000e-004		0.1715
Unmitigated	5.0552	6.8000e-004	0.0749	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1611	0.1611	4.2000e-004		0.1715

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	0.6032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.9000e-003	6.8000e-004	0.0749	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1611	0.1611	4.2000e-004		0.1715
Total	5.0552	6.8000e-004	0.0749	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1611	0.1611	4.2000e-004		0.1715

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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	lb/day										lb/day					
Architectural Coating	0.6032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.9000e-003	6.8000e-004	0.0749	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1611	0.1611	4.2000e-004		0.1715
Total	5.0552	6.8000e-004	0.0749	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1611	0.1611	4.2000e-004		0.1715

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	2	0	60	2447	0.73	Diesel
Emergency Generator	1	0	12	2447	0.5	Diesel
Emergency Generator	1	0	60	1367	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	0	20	7300	0.5	CNG

User Defined Equipment

Equipment Type	Number
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10.1 Stationary Sources**Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Emergency Generator - Diesel (750 - 9999 HP)	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

11.0 Vegetation

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Summer

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

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Annual

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

Koi Nation Shiloh Resort and Casino - Alternative C
Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	20.00	User Defined Unit	0.00	20,000.00	0
User Defined Industrial	18.90	User Defined Unit	0.00	18,900.00	0
Parking Lot	492.00	Space	0.00	145,800.00	0
Hotel	200.00	Room	0.00	161,400.00	0
Quality Restaurant	5.00	1000sqft	25.00	5,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	75
Climate Zone	4			Operational Year	2040
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - See input tables for assumptions.
- Construction Phase - See input tables for assumptions.
- Trips and VMT - See input tables
- Demolition -
- Grading - See input tables for assumptions.
- Vehicle Trips - See input tables for assumptions.
- Energy Use - See input tables for 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 And Wastewater - See input tables for assumptions.

Solid Waste - See input tables for assumptions.

Land Use Change - See input tables for assumptions.

Construction Off-road Equipment Mitigation - See input tables for assumptions.

Area Mitigation - See input tables for assumptions.

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - See input tables for assumptions.

Stationary Sources - Process Boilers - See input tables for assumptions.

Stationary Sources - Emergency Generators and Fire Pumps EF - Tier 4 Generators

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
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
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	20.00	10.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	35.00	40.00
tblConstructionPhase	NumDays	370.00	335.00
tblConstructionPhase	NumDays	20.00	200.00
tblConstructionPhase	NumDays	20.00	90.00
tblEnergyUse	LightingElect	0.00	3.08
tblEnergyUse	NT24E	0.00	3.70
tblEnergyUse	NT24NG	4.75	0.00
tblEnergyUse	NT24NG	147.47	0.00
tblEnergyUse	T24E	0.00	1.32

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

tblEnergyUse	T24NG	39.16	0.00
tblEnergyUse	T24NG	59.80	0.00
tblLandUse	LandUseSquareFeet	0.00	20,000.00
tblLandUse	LandUseSquareFeet	0.00	18,900.00
tblLandUse	LandUseSquareFeet	196,800.00	145,800.00
tblLandUse	LandUseSquareFeet	290,400.00	161,400.00
tblLandUse	LotAcreage	4.43	0.00
tblLandUse	LotAcreage	6.67	0.00
tblLandUse	LotAcreage	0.11	25.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	0.00	18.94
tblStationaryBoilersUse	AnnualHeatInput	0.00	7,300.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	20.00
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	0.50
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.05
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,367.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,447.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	60.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00

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

tblStationaryGeneratorsPumpsUse	Load_Factor	0.73	0.50
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	2.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	989.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TL	6.60	55.00
tblVehicleTrips	CC_TTP	0.00	10.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TL	6.60	10.00
tblVehicleTrips	CNW_TTP	0.00	53.00
tblVehicleTrips	CW_TTP	0.00	37.00
tblVehicleTrips	PB_TP	0.00	20.00
tblVehicleTrips	PR_TP	0.00	80.00
tblVehicleTrips	ST_TR	90.04	208.60
tblVehicleTrips	ST_TR	0.00	1.15
tblVehicleTrips	SU_TR	71.97	208.60
tblVehicleTrips	SU_TR	0.00	1.15
tblVehicleTrips	WD_TR	8.36	7.99
tblVehicleTrips	WD_TR	83.84	80.00
tblVehicleTrips	WD_TR	0.00	4.50

2.0 Emissions Summary

Koi Nation Shiloh Resort and Casino - Alternative C - Sonoma-San Francisco County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
2026	0.1605	1.5005	1.5547	3.8400e-003	0.4048	0.0566	0.4614	0.1684	0.0526	0.2209	0.0000	343.4023	343.4023	0.0719	0.0114	348.6022
2027	1.4022	2.4592	3.4544	7.4400e-003	0.2188	0.0945	0.3133	0.0592	0.0888	0.1481	0.0000	664.0989	664.0989	0.1069	0.0224	673.4325
Maximum	1.4022	2.4592	3.4544	7.4400e-003	0.4048	0.0945	0.4614	0.1684	0.0888	0.2209	0.0000	664.0989	664.0989	0.1069	0.0224	673.4325

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					
2026	0.0625	0.3766	1.7874	3.8400e-003	0.2208	3.9100e-003	0.2247	0.0862	3.8500e-003	0.0901	0.0000	343.4020	343.4020	0.0719	0.0114	348.6019
2027	1.2623	0.8511	3.7741	7.4400e-003	0.2188	0.0139	0.2327	0.0592	0.0137	0.0730	0.0000	664.0984	664.0984	0.1069	0.0224	673.4320
Maximum	1.2623	0.8511	3.7741	7.4400e-003	0.2208	0.0139	0.2327	0.0862	0.0137	0.0901	0.0000	664.0984	664.0984	0.1069	0.0224	673.4320

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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	15.23	69.00	-11.03	0.00	29.52	88.23	40.97	36.08	87.56	55.81	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	7-1-2026	9-30-2026	1.0939	0.2284
2	10-1-2026	12-31-2026	0.5633	0.2097
3	1-1-2027	3-31-2027	0.5883	0.2424
4	4-1-2027	6-30-2027	1.0072	0.6118
5	7-1-2027	9-30-2027	1.2771	0.6607
		Highest	1.2771	0.6607

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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****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	0.9219	6.0000e-005	6.7200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	144.2751	144.2751	0.0233	2.8300e-003	145.7017
Mobile	1.5393	2.2058	18.6754	0.0478	6.8491	0.0248	6.8739	1.8329	0.0232	1.8562	0.0000	4,415.5435	4,415.5435	0.2086	0.1909	4,477.6526
Stationary	0.3247	0.1592	0.8280	1.5600e-003		0.0159	0.0159		0.0159	0.0159	0.0000	150.7090	150.7090	0.0211	0.0000	151.2372
Waste						0.0000	0.0000		0.0000	0.0000	26.9978	0.0000	26.9978	1.5955	0.0000	66.8859
Water						0.0000	0.0000		0.0000	0.0000	2.0910	3.5137	5.6047	0.2153	5.1400e-003	12.5199
Total	2.7859	2.3651	19.5101	0.0494	6.8491	0.0407	6.8898	1.8329	0.0392	1.8721	29.0888	4,714.0545	4,743.1433	2.0639	0.1989	4,854.0113

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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	0.9219	6.0000e-005	6.7200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	136.6470	136.6470	0.0221	2.6800e-003	137.9982
Mobile	1.5393	2.2058	18.6754	0.0478	6.8491	0.0248	6.8739	1.8329	0.0232	1.8562	0.0000	4,415.5435	4,415.5435	0.2086	0.1909	4,477.6526
Stationary	0.3247	0.1592	0.8280	1.5600e-003		0.0159	0.0159		0.0159	0.0159	0.0000	150.7090	150.7090	0.0211	0.0000	151.2372
Waste						0.0000	0.0000		0.0000	0.0000	13.4989	0.0000	13.4989	0.7978	0.0000	33.4430
Water						0.0000	0.0000		0.0000	0.0000	1.8819	3.0981	4.9801	0.1938	4.6200e-003	11.2031
Total	2.7859	2.3651	19.5101	0.0494	6.8491	0.0407	6.8898	1.8329	0.0392	1.8721	15.3808	4,706.0108	4,721.3916	1.2434	0.1982	4,811.5480

	ROG	NOx	CO	SO2	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	47.12	0.17	0.46	39.76	0.34	0.87

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-146.9400
Total	-146.9400

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2026	7/14/2026	5	10	
2	Site Preparation	Site Preparation	7/1/2026	7/21/2026	5	15	
3	Grading	Grading	7/22/2026	9/15/2026	5	40	
4	Building Construction	Building Construction	9/16/2026	12/28/2027	5	335	
5	Architectural Coating	Architectural Coating	3/23/2027	12/27/2027	5	200	
6	Paving	Paving	6/15/2027	10/18/2027	5	90	

Acres of Grading (Site Preparation Phase): 22.5**Acres of Grading (Grading Phase): 120****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 307,950; Non-Residential Outdoor: 102,650; Striped Parking Area: 8,748 (Architectural Coating – sqft)**

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

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	29.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	989.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

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

Building Construction	9	145.00	58.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	29.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2026**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.1500e-003	0.0000	3.1500e-003	4.8000e-004	0.0000	4.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0105	0.0960	0.0971	1.9000e-004		4.2600e-003	4.2600e-003		3.9600e-003	3.9600e-003	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175
Total	0.0105	0.0960	0.0971	1.9000e-004	3.1500e-003	4.2600e-003	7.4100e-003	4.8000e-004	3.9600e-003	4.4400e-003	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175

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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 Demolition - 2026****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	3.0000e-005	2.0100e-003	4.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.8358	0.8358	3.0000e-005	1.3000e-004	0.8759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.3000e-004	1.6400e-003	0.0000	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4316	0.4316	1.0000e-005	1.0000e-005	0.4356
Total	2.5000e-004	2.1400e-003	2.0900e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.5000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	1.2674	1.2674	4.0000e-005	1.4000e-004	1.3115

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					1.4200e-003	0.0000	1.4200e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4700e-003	0.0200	0.1153	1.9000e-004		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175
Total	3.4700e-003	0.0200	0.1153	1.9000e-004	1.4200e-003	5.0000e-004	1.9200e-003	2.1000e-004	5.0000e-004	7.1000e-004	0.0000	16.9988	16.9988	4.7500e-003	0.0000	17.1175

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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 Demolition - 2026****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	3.0000e-005	2.0100e-003	4.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.8358	0.8358	3.0000e-005	1.3000e-004	0.8759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.3000e-004	1.6400e-003	0.0000	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4316	0.4316	1.0000e-005	1.0000e-005	0.4356
Total	2.5000e-004	2.1400e-003	2.0900e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.5000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	1.2674	1.2674	4.0000e-005	1.4000e-004	1.3115

3.3 Site Preparation - 2026**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1474	0.0000	0.1474	0.0758	0.0000	0.0758	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0186	0.1893	0.1343	2.9000e-004		8.1500e-003	8.1500e-003		7.5000e-003	7.5000e-003	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032
Total	0.0186	0.1893	0.1343	2.9000e-004	0.1474	8.1500e-003	0.1556	0.0758	7.5000e-003	0.0833	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032

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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 Site Preparation - 2026****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	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841
Total	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841

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					0.0663	0.0000	0.0663	0.0341	0.0000	0.0341	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4900e-003	0.0151	0.1565	2.9000e-004		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032
Total	3.4900e-003	0.0151	0.1565	2.9000e-004	0.0663	7.0000e-005	0.0664	0.0341	7.0000e-005	0.0342	0.0000	25.1002	25.1002	8.1200e-003	0.0000	25.3032

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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 Site Preparation - 2026****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	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841
Total	3.9000e-004	2.3000e-004	2.9400e-003	1.0000e-005	1.0600e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.7768	0.7768	2.0000e-005	2.0000e-005	0.7841

3.4 Grading - 2026**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1841	0.0000	0.1841	0.0731	0.0000	0.0731	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0580	0.5589	0.5266	1.2400e-003		0.0226	0.0226		0.0208	0.0208	0.0000	109.0124	109.0124	0.0353	0.0000	109.8939
Total	0.0580	0.5589	0.5266	1.2400e-003	0.1841	0.0226	0.2067	0.0731	0.0208	0.0939	0.0000	109.0124	109.0124	0.0353	0.0000	109.8939

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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 Grading - 2026****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	9.8000e-004	0.0685	0.0155	2.9000e-004	8.2200e-003	4.8000e-004	8.7000e-003	2.2500e-003	4.6000e-004	2.7100e-003	0.0000	28.5035	28.5035	9.4000e-004	4.5100e-003	29.8715
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	6.9000e-004	8.7200e-003	3.0000e-005	3.1400e-003	2.0000e-005	3.1600e-003	8.4000e-004	1.0000e-005	8.5000e-004	0.0000	2.3018	2.3018	7.0000e-005	7.0000e-005	2.3231
Total	2.1300e-003	0.0692	0.0242	3.2000e-004	0.0114	5.0000e-004	0.0119	3.0900e-003	4.7000e-004	3.5600e-003	0.0000	30.8052	30.8052	1.0100e-003	4.5800e-003	32.1946

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					0.0828	0.0000	0.0828	0.0329	0.0000	0.0329	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.0660	0.6600	1.2400e-003		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	109.0123	109.0123	0.0353	0.0000	109.8937
Total	0.0152	0.0660	0.6600	1.2400e-003	0.0828	3.0000e-004	0.0831	0.0329	3.0000e-004	0.0332	0.0000	109.0123	109.0123	0.0353	0.0000	109.8937

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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 Grading - 2026****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	9.8000e-004	0.0685	0.0155	2.9000e-004	8.2200e-003	4.8000e-004	8.7000e-003	2.2500e-003	4.6000e-004	2.7100e-003	0.0000	28.5035	28.5035	9.4000e-004	4.5100e-003	29.8715
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	6.9000e-004	8.7200e-003	3.0000e-005	3.1400e-003	2.0000e-005	3.1600e-003	8.4000e-004	1.0000e-005	8.5000e-004	0.0000	2.3018	2.3018	7.0000e-005	7.0000e-005	2.3231
Total	2.1300e-003	0.0692	0.0242	3.2000e-004	0.0114	5.0000e-004	0.0119	3.0900e-003	4.7000e-004	3.5600e-003	0.0000	30.8052	30.8052	1.0100e-003	4.5800e-003	32.1946

3.5 Building Construction - 2026**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0526	0.4801	0.6193	1.0400e-003		0.0203	0.0203		0.0191	0.0191	0.0000	89.2890	89.2890	0.0210	0.0000	89.8137
Total	0.0526	0.4801	0.6193	1.0400e-003		0.0203	0.0203		0.0191	0.0191	0.0000	89.2890	89.2890	0.0210	0.0000	89.8137

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****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	2.0500e-003	0.0952	0.0264	3.9000e-004	0.0131	5.0000e-004	0.0136	3.7900e-003	4.7000e-004	4.2600e-003	0.0000	38.0286	38.0286	7.8000e-004	5.7500e-003	39.7620
Worker	0.0160	9.6500e-003	0.1217	3.5000e-004	0.0438	2.2000e-004	0.0440	0.0117	2.1000e-004	0.0119	0.0000	32.1238	32.1238	9.4000e-004	9.2000e-004	32.4218
Total	0.0181	0.1048	0.1482	7.4000e-004	0.0569	7.2000e-004	0.0576	0.0155	6.8000e-004	0.0161	0.0000	70.1524	70.1524	1.7200e-003	6.6700e-003	72.1838

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	0.0194	0.0991	0.6782	1.0400e-003		1.7900e-003	1.7900e-003		1.7900e-003	1.7900e-003	0.0000	89.2889	89.2889	0.0210	0.0000	89.8136
Total	0.0194	0.0991	0.6782	1.0400e-003		1.7900e-003	1.7900e-003		1.7900e-003	1.7900e-003	0.0000	89.2889	89.2889	0.0210	0.0000	89.8136

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2026****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	2.0500e-003	0.0952	0.0264	3.9000e-004	0.0131	5.0000e-004	0.0136	3.7900e-003	4.7000e-004	4.2600e-003	0.0000	38.0286	38.0286	7.8000e-004	5.7500e-003	39.7620
Worker	0.0160	9.6500e-003	0.1217	3.5000e-004	0.0438	2.2000e-004	0.0440	0.0117	2.1000e-004	0.0119	0.0000	32.1238	32.1238	9.4000e-004	9.2000e-004	32.4218
Total	0.0181	0.1048	0.1482	7.4000e-004	0.0569	7.2000e-004	0.0576	0.0155	6.8000e-004	0.0161	0.0000	70.1524	70.1524	1.7200e-003	6.6700e-003	72.1838

3.5 Building Construction - 2027**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	0.1764	1.6086	2.0749	3.4800e-003		0.0681	0.0681		0.0640	0.0640	0.0000	299.1761	299.1761	0.0703	0.0000	300.9343
Total	0.1764	1.6086	2.0749	3.4800e-003		0.0681	0.0681		0.0640	0.0640	0.0000	299.1761	299.1761	0.0703	0.0000	300.9343

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.6600e-003	0.3151	0.0871	1.2800e-003	0.0439	1.6300e-003	0.0456	0.0127	1.5600e-003	0.0143	0.0000	124.8979	124.8979	2.6500e-003	0.0189	130.5924
Worker	0.0504	0.0293	0.3824	1.1400e-003	0.1468	7.0000e-004	0.1475	0.0391	6.5000e-004	0.0397	0.0000	104.4438	104.4438	2.8700e-003	2.9100e-003	105.3822
Total	0.0570	0.3443	0.4695	2.4200e-003	0.1907	2.3300e-003	0.1931	0.0518	2.2100e-003	0.0540	0.0000	229.3417	229.3417	5.5200e-003	0.0218	235.9746

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	0.0650	0.3319	2.2723	3.4800e-003		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	299.1757	299.1757	0.0703	0.0000	300.9339
Total	0.0650	0.3319	2.2723	3.4800e-003		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	299.1757	299.1757	0.0703	0.0000	300.9339

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2027****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	6.6600e-003	0.3151	0.0871	1.2800e-003	0.0439	1.6300e-003	0.0456	0.0127	1.5600e-003	0.0143	0.0000	124.8979	124.8979	2.6500e-003	0.0189	130.5924
Worker	0.0504	0.0293	0.3824	1.1400e-003	0.1468	7.0000e-004	0.1475	0.0391	6.5000e-004	0.0397	0.0000	104.4438	104.4438	2.8700e-003	2.9100e-003	105.3822
Total	0.0570	0.3443	0.4695	2.4200e-003	0.1907	2.3300e-003	0.1931	0.0518	2.2100e-003	0.0540	0.0000	229.3417	229.3417	5.5200e-003	0.0218	235.9746

3.6 Architectural Coating - 2027**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1009					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1146	0.1809	3.0000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	25.5325	25.5325	1.3900e-003	0.0000	25.5674
Total	1.1180	0.1146	0.1809	3.0000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	25.5325	25.5325	1.3900e-003	0.0000	25.5674

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****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	7.8100e-003	4.5400e-003	0.0593	1.8000e-004	0.0228	1.1000e-004	0.0229	6.0600e-003	1.0000e-004	6.1600e-003	0.0000	16.1928	16.1928	4.5000e-004	4.5000e-004	16.3383
Total	7.8100e-003	4.5400e-003	0.0593	1.8000e-004	0.0228	1.1000e-004	0.0229	6.0600e-003	1.0000e-004	6.1600e-003	0.0000	16.1928	16.1928	4.5000e-004	4.5000e-004	16.3383

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	1.1009					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1146	0.1809	3.0000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	25.5325	25.5325	1.3900e-003	0.0000	25.5673
Total	1.1180	0.1146	0.1809	3.0000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	25.5325	25.5325	1.3900e-003	0.0000	25.5673

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2027****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	7.8100e-003	4.5400e-003	0.0593	1.8000e-004	0.0228	1.1000e-004	0.0229	6.0600e-003	1.0000e-004	6.1600e-003	0.0000	16.1928	16.1928	4.5000e-004	4.5000e-004	16.3383
Total	7.8100e-003	4.5400e-003	0.0593	1.8000e-004	0.0228	1.1000e-004	0.0229	6.0600e-003	1.0000e-004	6.1600e-003	0.0000	16.1928	16.1928	4.5000e-004	4.5000e-004	16.3383

3.7 Paving - 2027**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	0.0412	0.3862	0.6560	1.0300e-003		0.0188	0.0188		0.0173	0.0173	0.0000	90.0867	90.0867	0.0291	0.0000	90.8150
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0412	0.3862	0.6560	1.0300e-003		0.0188	0.0188		0.0173	0.0173	0.0000	90.0867	90.0867	0.0291	0.0000	90.8150

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Paving - 2027****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029
Total	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029

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	0.0126	0.0547	0.7783	1.0300e-003		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	90.0865	90.0865	0.0291	0.0000	90.8149
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0126	0.0547	0.7783	1.0300e-003		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	90.0865	90.0865	0.0291	0.0000	90.8149

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

3.7 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029
Total	1.8200e-003	1.0600e-003	0.0138	4.0000e-005	5.3000e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.7690	3.7690	1.0000e-004	1.0000e-004	3.8029

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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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
Category	tons/yr										MT/yr					
Mitigated	1.5393	2.2058	18.6754	0.0478	6.8491	0.0248	6.8739	1.8329	0.0232	1.8562	0.0000	4,415,543 5	4,415,543 5	0.2086	0.1909	4,477.652 6
Unmitigated	1.5393	2.2058	18.6754	0.0478	6.8491	0.0248	6.8739	1.8329	0.0232	1.8562	0.0000	4,415,543 5	4,415,543 5	0.2086	0.1909	4,477.652 6

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,598.00	1,638.00	1190.00	14,671,200	14,671,200
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	400.00	1,043.00	1043.00	3,767,118	3,767,118
User Defined Commercial	90.00	23.00	23.00	235,718	235,718
User Defined Industrial	0.00	0.00	0.00		
Total	2,088.00	2,704.00	2,256.00	18,674,037	18,674,037

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
Hotel	14.70	55.00	10.00	19.40	61.60	19.00	58	38	4
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Quality Restaurant	14.70	55.00	10.00	12.00	69.00	19.00	38	18	44
User Defined Commercial	14.70	6.60	10.00	37.00	10.00	53.00	80	0	20
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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
Hotel	0.607923	0.051236	0.156689	0.105527	0.021293	0.006087	0.015426	0.006394	0.001025	0.000244	0.024437	0.001187	0.002533
Parking Lot	0.607923	0.051236	0.156689	0.105527	0.021293	0.006087	0.015426	0.006394	0.001025	0.000244	0.024437	0.001187	0.002533
Quality Restaurant	0.607923	0.051236	0.156689	0.105527	0.021293	0.006087	0.015426	0.006394	0.001025	0.000244	0.024437	0.001187	0.002533
User Defined Commercial	0.607923	0.051236	0.156689	0.105527	0.021293	0.006087	0.015426	0.006394	0.001025	0.000244	0.024437	0.001187	0.002533
User Defined Industrial	0.607923	0.051236	0.156689	0.105527	0.021293	0.006087	0.015426	0.006394	0.001025	0.000244	0.024437	0.001187	0.002533

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

[illegible]

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

Unmitigated

[illegible]

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

Mitigated

[illegible]

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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			
Hotel	1.19436e+006	110.5067	0.0179	2.1700e-003	111.5994
Parking Lot	51030	4.7215	7.6000e-004	9.0000e-005	4.7682
Quality Restaurant	160850	14.8825	2.4100e-003	2.9000e-004	15.0296
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	153090	14.1645	2.2900e-003	2.8000e-004	14.3045
Total		144.2751	0.0233	2.8300e-003	145.7017

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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

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.13367e+006	104.8918	0.0170	2.0600e-003	105.9290
Parking Lot	42865.2	3.9661	6.4000e-004	8.0000e-005	4.0053
Quality Restaurant	156570	14.4865	2.3400e-003	2.8000e-004	14.6297
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	143776	13.3027	2.1500e-003	2.6000e-004	13.4343
Total		136.6470	0.0221	2.6800e-003	137.9982

6.0 Area Detail

6.1 Mitigation Measures Area

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

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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
Category	tons/yr										MT/yr					
Mitigated	0.9219	6.0000e-005	6.7200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140
Unmitigated	0.9219	6.0000e-005	6.7200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8112					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.1000e-004	6.0000e-005	6.7200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140
Total	0.9219	6.0000e-005	6.7200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140

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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	0.1101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8112					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.1000e-004	6.0000e-005	6.7200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140
Total	0.9219	6.0000e-005	6.7200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0132	0.0132	3.0000e-005	0.0000	0.0140

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed 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	4.9801	0.1938	4.6200e-003	11.2031
Unmitigated	5.6047	0.2153	5.1400e-003	12.5199

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	5.07335 / 0.563706	4.3320	0.1658	3.9600e-003	9.6551
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.51767 / 0.0968725	1.2727	0.0496	1.1800e-003	2.8648
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		5.6047	0.2153	5.1400e-003	12.5199

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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			
Hotel	4.56602 / 0.338224	3.8441	0.1492	3.5600e-003	8.6343
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.3659 / 0.0581235	1.1360	0.0446	1.0600e-003	2.5688
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		4.9801	0.1938	4.6200e-003	11.2031

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	13.4989	0.7978	0.0000	33.4430
Unmitigated	26.9978	1.5955	0.0000	66.8859

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	109.5	22.2275	1.3136	0.0000	55.0677
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	4.56	0.9256	0.0547	0.0000	2.2932
User Defined Commercial	18.94	3.8447	0.2272	0.0000	9.5250
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		26.9978	1.5955	0.0000	66.8859

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	54.75	11.1138	0.6568	0.0000	27.5339
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.28	0.4628	0.0274	0.0000	1.1466
User Defined Commercial	9.47	1.9223	0.1136	0.0000	4.7625
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		13.4989	0.7978	0.0000	33.4430

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
Emergency Generator	2	0	60	2447	0.73	Diesel
Emergency Generator	1	0	12	2447	0.5	Diesel
Emergency Generator	1	0	60	1367	0.73	Diesel

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	0	20	7300	0.5	CNG

User Defined Equipment

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

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Boiler - CNG (0 - 2 MMBTU)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Emergency Generator - Diesel (750 - 9999 HP)	0.3247	0.1592	0.8280	1.5600e-003		0.0159	0.0159		0.0159	0.0159	0.0000	150.7090	150.7090	0.0211	0.0000	151.2372
Total	0.3247	0.1592	0.8280	1.5600e-003		0.0159	0.0159		0.0159	0.0159	0.0000	150.7090	150.7090	0.0211	0.0000	151.2372

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

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-146,9400	0.0000	0.0000	-146,9400

11.1 Vegetation Land Change
Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Cropland	61.7 / 38	-146,9400	0.0000	0.0000	-146,9400
Total		-146,9400	0.0000	0.0000	-146,9400

Social Cost of Greenhouse Gas Emissions - 3% Discount Rate

GHG/Cost per metric ton		Alternative A		Alternative B		Alternative C	
		Tons	Cost	Tons	Cost	Tons	Cost
Construction							
CO ₂	\$59	3,183.1	\$187,803	2,554.70	\$150,727	1,007.50	\$59,443
CH ₄	\$1,850	0.3	\$555	0.2	\$370	0.2	\$370
N ₂ O	\$21,500	0.2	\$4,300	0.2	\$4,300	0.0	\$0
Total Cost			\$192,658		\$155,397		\$59,813
Operation (2028)							
CO ₂	\$60	60,633.0	\$3,637,980	50,372.2	\$3,022,332	5,752.4	\$345,144
CH ₄	\$1,900	28.2	\$53,580	11.3	\$21,470	1.3	\$2,470
N ₂ O	\$22,000	2.6	\$57,200	2.1	\$46,200	0.3	\$6,600
Total Cost			\$3,748,760		\$3,090,002		\$354,214
Operation (2040)							
CO ₂	\$73	49,402.2	\$3,606,361	41,225.4	\$3,009,454	4,721.4	\$344,662
CH ₄	\$2,500	16	\$40,000	10.8	\$27,000	1.2	\$3,000
N ₂ O	\$28,000	2.0	\$56,000	1.7	\$47,600	0.2	\$5,600
Total Cost			\$3,702,361		\$3,084,054		\$353,262
Lifetime							
CO ₂		1,485,249.1	\$108,378,621	1,239,316.7	\$90,434,353	142,649.5	\$10,399,309
CH ₄		480.3	\$1,200,555	324.2	\$810,370	36.2	\$90,370
N ₂ O		60.2	\$1,684,300	51.2	\$1,432,300	6.0	\$168,000
Total Cost			\$111,263,476		\$92,677,023		\$10,657,679

Costs from IWG, 2021 (3% discount rate); Linear interpolation for 2027 and 2028

Social Cost of Greenhouse Gas Emissions - 2.5% Discount Rate

GHG/Cost per metric ton		Alternative A		Alternative B		Alternative C	
		Tons	Cost	Tons	Cost	Tons	Cost
Construction							
CO ₂	\$81	3,183.1	\$257,831	2,554.70	\$206,931	1,007.50	\$81,608
CH ₄	\$2,320	0.3	\$696	0.2	\$464	0.2	\$464
N ₂ O	\$57,400	0.2	\$11,480	0.2	\$11,480	0.0	\$0
Total Cost			\$270,007		\$218,875		\$82,072
Operation (2028)							
CO ₂	\$84	60,633.0	\$5,093,172	50,372.20	\$4,231,265	5,752.4	\$483,202
CH ₄	\$2,380	28.2	\$67,116	11.3	\$26,894	1.3	\$3,094
N ₂ O	\$57,600	2.6	\$149,760	2.1	\$120,960	0.3	\$17,280
Total Cost			\$5,310,048		\$4,379,119		\$503,576
Operation (2040)							
CO ₂	\$103	49,402.2	\$5,088,427	41,225.4	\$4,246,216	4,721.4	\$486,304
CH ₄	\$3,100	16	\$49,600	10.8	\$33,480	1.2	\$3,720
N ₂ O	\$39,000	2.0	\$78,000	1.7	\$66,300	0.2	\$7,800
Total Cost			\$5,216,027		\$4,345,996		\$497,824
Lifetime							
CO ₂		1,485,249.10	\$152,910,629	1,239,316.70	\$127,593,417	142,649.50	\$14,670,734
CH ₄		480.30	\$1,488,696	324.20	\$1,004,864	36.20	\$112,064
N ₂ O		60.20	\$2,351,480	51.20	\$2,000,480	6.00	\$234,000
Total Cost			\$156,750,805		\$130,598,761		\$15,016,798

Costs from IWG, 2021 (2.5% discount rate); Linear interpolation for 2027 and 2028

Social Cost of Greenhouse Gas Emissions - 5% Discount Rate

GHG/Cost per metric ton		Alternative A		Alternative B		Alternative C	
		Tons	Cost	Tons	Cost	Tons	Cost
Construction							
CO ₂	\$18	3,183.1	\$57,296	2,554.70	\$45,985	1,007.50	\$18,135
CH ₄	\$856	0.3	\$257	0.2	\$171	0.2	\$171
N ₂ O	\$7,200	0.2	\$1,440	0.2	\$1,440	0.0	\$0
Total Cost			\$58,993		\$47,596		\$18,306
Operation (2028)							
CO ₂	\$18	60,633.0	\$1,091,394	50,372.20	\$906,700	5,752.4	\$103,543
CH ₄	\$884	28.2	\$24,929	11.3	\$9,989	1.3	\$1,149
N ₂ O	\$7,400	2.6	\$19,240	2.1	\$15,540	0.3	\$2,220
Total Cost			\$1,135,563		\$932,229		\$106,912
Operation (2040)							
CO ₂	\$25	49,402.2	\$1,235,055	41,225.4	\$1,030,635	4,721.4	\$118,035
CH ₄	\$1,300	16	\$20,800	10.8	\$14,040	1.2	\$1,560
N ₂ O	\$10,000	2.0	\$20,000	1.7	\$17,000	0.2	\$2,000
Total Cost			\$1,275,855		\$1,061,675		\$121,595
Lifetime							
CO ₂		1,485,249.10	\$37,108,946	1,239,316.70	\$30,965,035	142,649.50	\$3,559,185
CH ₄		480.30	\$624,257	324.20	\$421,371	36.20	\$46,971
N ₂ O		60.20	\$601,440	51.20	\$511,440	6.00	\$60,000
Total Cost			\$38,334,643		\$31,897,846		\$3,666,156

Costs from IWG, 2021 (5% discount rate); Linear interpolation for 2027 and 2028

Social Cost of Greenhouse Gas Emissions - 95th Percentile Estimated Costs, 3% Discount Rate

GHG/Cost per metric ton		Alternative A		Alternative B		Alternative C	
		Tons	Cost	Tons	Cost	Tons	Cost
Construction							
CO ₂	\$176	3,183.1	\$560,226	2,554.70	\$449,627	1,007.50	\$177,320
CH ₄	\$4,780	0.3	\$1,434	0.2	\$956	0.2	\$956
N ₂ O	\$56,400	0.2	\$11,280	0.2	\$11,280	0.0	\$0
Total Cost			\$572,940		\$461,863		\$178,276
Operation (2028)							
CO ₂	\$180	60,633.0	\$10,913,940	50,372.20	\$9,066,996	5,752.4	\$1,035,432
CH ₄	\$4,920	28.2	\$138,744	11.3	\$55,596	1.3	\$6,396
N ₂ O	\$57,600	2.6	\$149,760	2.1	\$120,960	0.3	\$17,280
Total Cost			\$11,202,444		\$9,243,552		\$1,059,108
Operation (2040)							
CO ₂	\$225	49,402.2	\$11,115,495	41,225.4	\$9,275,715	4,721.4	\$1,062,315
CH ₄	\$6,700	16	\$107,200	10.8	\$72,360	1.2	\$8,040
N ₂ O	\$74,000	2.0	\$148,000	1.7	\$125,800	0.2	\$14,800
Total Cost			\$11,370,695		\$9,473,875		\$1,085,155
Lifetime							
CO ₂		1,485,249.10	\$334,025,076	1,239,316.70	\$278,721,077	142,649.50	\$32,046,770
CH ₄		480.30	\$3,217,434	324.20	\$2,171,756	36.20	\$242,156
N ₂ O		60.20	\$4,451,280	51.20	\$3,785,280	6.00	\$444,000
Total Cost			\$341,693,790		\$284,678,113		\$32,732,926

Costs from IWG, 2021 (95th percentile at 3% discount rate); Linear interpolation for 2027 and 2028

Appendix F-2
Draft General Conformity Determination

Draft General Conformity Determination

Koi Nation Fee-to-Trust and Shiloh Resort and Casino Project

March 2024

Lead Agency:

Bureau of Indian Affairs
Pacific Region
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Appendix A – AERSCREEN output files

Koi Nation Fee-to-Trust and Shiloh Resort and Casino Project

Draft General Conformity Determination

1. Introduction

The Koi Nation of Northern California's (Koi Nation; Tribe) has submitted a fee-to-trust application to the Bureau of Indian Affairs (BIA), requesting that the U.S. Department of Interior take a 68.6-acre property (project site) in Sonoma County, California into federal trust status. The BIA is the federal agency charged with reviewing and approving tribal applications to take land into federal trust status (Federal Action).

The project site is located in an unincorporated portion of the County adjacent to the Town of Windsor. Regional access to the project site is provided by Highway 101, which runs in a general north-south direction and is located approximately 0.5 miles west of the project site. Local access to the project site is provided by Shiloh Road and Old Redwood Highway.

Following the acquisition of the project site into federal trust, the Tribe proposes to develop a resort facility that includes a casino, hotel, ballroom/meeting space, event center, spa, and associated parking and infrastructure on the project site (Proposed Project). The Proposed Project is referred to as the Shiloh Resort and Casino Project

An Environmental Assessment (EA) was prepared pursuant to the National Environmental Policy Act (NEPA) to assess the environmental impacts resulting from the Proposed Project. The EA addresses three build alternatives:

Alternative A – Proposed Project

Alternative B – Reduced Intensity Alternative

Alternative C – Non-Gaming Alternative

A draft general conformity determination¹ was prepared for Alternative A, which proposes the largest development and potential to effect air quality. A notice of availability (NOA) for the EA and the draft general conformity determination was published in The Press Democrat newspaper on September 12, 2023. The EA and draft general conformity determination were originally made available for public comment for a 45-day period, from September 12, 2023 to October 27, 2023. However, the BIA extended the public comment period for an additional 15-day period that concluded on November 13, 2023, resulting in a total comment period of 60 days. No comments were received on the draft general conformity determination.

The BIA published a Notice of Intent (NOI) in the Federal Register on March 8, 2024, announcing the intent to prepare an Environmental Impact Statement (EIS) for the proposed Federal Action. The EIS reviews the same three build alternatives analyzed in the EA. No changes to the build alternatives have been identified. This revised draft conformity determination addresses Alternative A of the proposed

¹ The original draft general conformity determination was dated November 2022.

Federal Action as presented in the EA and EIS. Alternative A proposes the largest development and has the largest potential to affect air quality. This revised draft conformity determination is being released with the Draft EIS to allow concurrent review. No changes have been made to the analysis contained in the November 2022 draft conformity determination.

2. General Conformity Regulatory Background

The Clean Air Act (CAA) requires the United States Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants that are common in outdoor air, considered harmful to public health and the environment, and that come from numerous and diverse sources. NAAQS have been developed for carbon monoxide (CO), lead (Pb), coarse and fine particulate matter (PM₁₀ or PM_{2.5}, respectively), sulfur oxides (SO_x), and nitrogen dioxide (NO₂), ozone (O₃) and its precursors, oxides of nitrogen (NO_x) and reactive organic gasses (ROGs).

2.1 General Conformity Requirements

Areas of the country that do not meet the NAAQS for any pollutant are designated by the EPA as “nonattainment areas.” Areas that were once designated nonattainment, but are now achieving the NAAQS are termed “maintenance areas.” Areas which have air pollution levels below the NAAQS are termed “attainment areas.” In nonattainment areas, states must develop State Implementation Plans (SIPs) to reduce emissions and bring the area back into attainment of the NAAQS.

The EPA promulgated the General Conformity Rule on November 30, 1993, to implement the conformity provision of Title I, Section 176(c)(1) of the federal Clean Air Act (CAA), which requires that the federal government not engage, support or provide financial assistance for licensing or permitting, or approving any activity not conforming to an approved CAA implementation plan for compliance with the NAAQS. The General Conformity Rule ensures that the actions taken by federal agencies in nonattainment and maintenance areas do not interfere with a state’s plans to meet national standards for air quality. CAA conformity is an issue that may be addressed during the NEPA process, and EPA recommends that the conformity process be coupled with NEPA analysis.

Implementation of the existing General Conformity Regulations falls into three phases: applicability analysis, conformity determination, and review process. Only actions which cause emissions in designated nonattainment and maintenance areas are subject to the regulations. In addition, the regulations recognize that the vast majority of federal actions do not result in a significant increase in emissions and, therefore, include a number of exemptions, the most predominantly implemented of which is the de minimis emission levels based on the type and severity of the nonattainment problem. If the action will cause emissions above the de minimis levels in any nonattainment or maintenance area and the action is not otherwise exempt, “presumed to conform,” or included in the existing emissions budget of the SIP, the agency must conduct a conformity determination before it takes the action.

40 CFR Sections 93.158 and 93.159 provide the criteria and procedures, respectively, for determining conformity of general Federal actions. For CO, total direct and indirect emissions from the action must be shown by air quality modeling to not cause or contribute to any new violation of any standard or increase the frequency or severity of any existing violation of any standard. The total direct and indirect emissions from the action must be in compliance with all relevant requirements in the applicable SIP.

The applicable SIP is the California State Implementation Plan for Carbon Monoxide, which was most recently updated in 2004². The California Air Resources Control Board (CARB) is the state agency responsible for achieving compliance with the NAAQS. CARB's emission control programs, including strict motor vehicle emission standards and the clean fuels program, have reduced CO emissions dramatically. Ten of the eleven areas of the state originally listed by the EPA in 1991 as non-attainment area have been in attainment with the National CO standards since the mid-1990s, including the San Francisco-Oakland-San Jose Area, which includes the project site. While vehicle miles traveled (VMT) have increased, CO emissions have fallen sharply as the result of CARB's mobile source, clean fuel and stationary source regulations.

As public bodies, federal agencies must make their conformity determinations through a public process. The General Conformity Regulations require federal agencies to provide notice of the draft determination to the applicable EPA Regional Office, the state and local air quality agencies, the local MPO and, where applicable, the Federal Land Manager. In addition, the regulations require federal agencies to provide at least a 30-day comment period on the draft determination and make the final determination public.

2.2 General Conformity Applicability

For the Proposed Action, on-road vehicle trips within the BAAQMD jurisdiction would be subject to the following federal General Conformity Rule de minimis thresholds:

100 tons per year VOC or ROG

100 tons per year NO_x

100 tons per year CO

100 tons per year PM_{2.5}

100 tons per year PM₁₀

As detailed in the EIS for the Project Alternatives, associated emissions of ROG, NO_x, PM₁₀, and PM_{2.5} within the BAAQMD jurisdiction would be below the respective General Conformity Rule de minimis thresholds. However, for Alternatives A and B, CO was determined to exceed the 100 ton per year de minimis threshold in the BAAQMD jurisdiction, and as such, is analyzed in greater detail below.

3. Assessment of Conformity Emissions

When the EPA upgraded the CO status of the 10 California areas from moderate non-attainment to maintenance, a revision to the SIP was needed. In 2004, CARB submitted to the EPA a revision to the SIP, and included a Maintenance Plan, in the *Revision to the California State Implementation Plan for Carbon Monoxide, Updated Maintenance Plan for Ten Federal Planning Areas* (CARB, 2004). The Maintenance Plan outlines how the SFBAAB will continue to comply with the NAAQS. CO emission sources resulting from the Proposed Action in the BAAQMD jurisdiction would be primarily indirect emissions from on-road vehicles – patrons, employees, delivery trucks, and buses.

² The California Air Resources Control Board issued a proposed 2023 Revision to the California State Implementation Plan for Carbon Monoxide on February 9, 2024 (CARB, 2024). At the time of writing, the 2023 Revision has not been approved.

As described in Section 2.1 above, conformity can be shown by conducting air quality modeling that demonstrates that the emissions will not cause or contribute to new violations of the standards or increase the frequency or severity of any existing violations of the standards. Air modeling analysis was performed concurrently for the EA and the general conformity determination. The results of this analysis are summarized below with model outputs included in **Appendix A**.

4. CO General Conformity Determination

Air quality modeling was performed for the EA and the general conformity determination concurrently. The results of this analysis can be found in the EA, in Section 3.4 as well as Section 3.4 of the EIS. The air quality modeling estimated that Alternative A would generate approximately 263 tons/year of CO, of which 255 tons/year are associated with mobile emissions. By comparison, Alternative B would generate approximately 213 tons/year of CO, of which 207 tons/year are associated with mobile emissions. CO emissions of Alternative C were modeled to fall below the de minimis threshold of 100 tons per year.

Because CO emissions would exceed the de minimis levels, CO concentrations were modeled to determine whether increased traffic associated with the Proposed Project would result in CO emissions that could exceed the NAAQS. CO concentrations at one representative intersection were modeled using AERSCREEN, the screening version of AERMOD. AERSCREEN is the EPA's recommended screening model for most applications, including addressing compliance with CO NAAQS. Likewise, AERMOD is EPA's preferred near-field dispersion modeling system (EPA, 2017).

Mobile emissions rates were sourced from CARB's EMFAC project-level web tool, and reflect 2028 emission rates (proposed opening year) (CARB, 2022). Fleet mix estimates were sourced from the EPA-approved 2020 California Emissions Estimator Model, Version 2020.4.0 (CalEEMod). Intersection level of service (LOS), peak-hour vehicle volumes and queuing lengths were sourced from the Traffic Impact Study (TIS) prepared by TJKM and included the EIS. The 2040 condition traffic scenario was used to provide the most conservative estimate of traffic volumes. The intersection of Shiloh Road and the US 101 north-bound off-ramp was chosen to provide a conservative estimate of potential CO concentrations. Of the intersections analyzed in the TIS, this intersection has relatively high traffic volumes, low LOS, and long queue lengths. This intersection is also near US 101, an adjacent source of CO emissions. CO emissions from US 101 were also modeled to provide a conservative estimate of potential maximum CO emissions. Project trips were added to project 2040 US 101 peak hour volumes. An estimate of background CO levels in the area is based on monitoring data from Sebastopol and provided through EPA's AirData Air Quality Monitors website (EPA, 2022). The representative background level selected is 1.2 ppm (1 hour average) from January 2019. This data point was selected as it represents peak CO emissions during winter when mobile CO emissions are higher. Higher CO emissions have been recorded in summer and fall months but are influenced by wildfires. The 2019 data also captures higher pre-COVID19 pandemic traffic volumes than other more recent data. A persistence factor of 0.7 is used to convert 1-hour concentrations to 8-hour concentrations, consistent with EPA guidelines (EPA, 1992).

Table 1 summarizes the results of the AERSCREEN dispersion modeling conducted for Alternative A of the Proposed Action. Alternative B of the Proposed Action would generate less traffic and mobile emissions

and was not modeled. Alternative A represents the maximum potential emissions from the Proposed Action.

Table 1: Estimated Maximum Carbon Monoxide Concentrations – Proposed Action Alternative A

Averaging Time (hours)	Concentrations (ppm)						
	Shiloh Road/US 101 NB Off-Ramp Intersection No Action	Shiloh Road/US 101 NB Off-Ramp Intersection with Alternative A	Project Contribution	Background	US 101 Contribution	Maximum Concentration	NAAQS
1	0.6	0.8	0.2	1.2	3.9	5.9	35
8	0.4	0.6	0.2	0.9	2.7	4.2	9

Notes: Modeled location is the intersection of Shiloh Road and northbound US 101 off-ramp based on 2040 traffic volumes and 2028 EMFAC emission factors. Highest concentrations for intersection and US 101 are combined to provide maximum concentrations.

The Proposed Action would not cause or contribute to violations of the NAAQS as discussed above; therefore, the Proposed Action conforms to the Maintenance Plan and SIP and is consistent with conformity determination criteria.

5. Conclusion

Based on the information and analysis presented above, approval of the Proposed Action would conform to the SIP and CO Maintenance Plan implemented pursuant to the CAA. Modeling of CO shows that the Proposed Action would not cause or contribute to new violations of the standards, or increase the frequency or severity of any existing violations of the standards. 40 CFR 93.158(a)(4)(i), (b) and (c).

This Draft Conformity Determination will be submitted to EPA, CARB, BAAQMD and other applicable agencies per 40 CFR 93.155 (a). After the 30-day comment period for this Draft Conformity Determination, the BIA will make a Final Conformity Determination before taking action on the proposed fee-to-trust application per 40 CFR 93.150 (b).

6. References

California Air Resources Board (CARB), 2004. *Revision to the California State Implementation Plan for Carbon Monoxide, Updated Maintenance Plan for Ten Federal Planning Areas*. Adopted by CARB July 22, 2004.

CARB, 2022. EMFAC project-level web tool. Available at: <https://arb.ca.gov/emfac/project-analysis>

CARB, 2024. 2023 Revision to the California State Implementation Plan for Carbon Monoxide. February 9, 2024. Available at: <https://ww2.arb.ca.gov/resources/documents/2023-carbon-monoxide-sip-revision>

United States Environmental Protection Agency (EPA), 1992. Guideline for Modeling Carbon Monoxide from Roadway Intersections.

EPA, 2017. Revisions to the Guideline on Air Quality Models: Enhancements to the AERMOD Dispersion Modeling System and Incorporation of Approaches to Address Ozone and Fine Particulate Matter. Federal Register, Vol. 82, No. 10, January 17, 2017.

EPA, 2022. EPA AirData Air Quality Monitors application. Available at:
<https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=5f239fd3e72f424f98ef3d5def547eb5&extent=-146.2334,13.1913,-46.3896,56.5319>

Appendix A

Start date and time 11/10/22 23:13:12
AERSCREEN 21112

Koi_Int_2040_NP

Koi_Int_2040_NP

```
----- DATA ENTRY VALIDATION -----
              METRIC              ENGLISH
** AREADATA ** -----
Emission Rate:      0.6500 g/s          5.159 lb/hr
Area Height:        0.50 meters         1.64 feet
Area Source Length: 200.00 meters       656.17 feet
Area Source Width:  200.00 meters       656.17 feet
Vertical Dimension:  4.00 meters        13.12 feet
Model Mode:         URBAN
Population:          26039
Dist to Ambient Air:      3.0 meters      10. feet
```

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations
Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 1000. meters 3281. feet

No flagpole receptors

No discrete receptors used

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 270.0 / 316.0 K 26.3 / 109.1 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity (u*): not adjusted

DEBUG OPTION ON

AERSCREEN output file:
Koi_Int_2040_NP.out

*** AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season	Albedo	Bo	zo
Winter	0.35	1.50	1.000
Spring	0.14	1.00	1.000
Summer	0.16	2.00	1.000
Autumn	0.18	2.00	1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR started 11/10/22 23:16:31

Running AERMOD
Processing Winter

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 0

```

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 5

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 15

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 20

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 25

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 30

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 8

```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 35

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 9
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 40

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 10
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 45

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 11
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 50

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Running AERMOD
Processing Spring
```

Processing surface roughness sector 1

```
*****
Processing wind flow sector 1
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 2
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 5

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 3
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 4
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 5
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 20

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 6
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 7
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 30

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 8
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 35

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 9
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 40

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
```

Processing wind flow sector 10

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 45

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 11

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 50

```
***** WARNING MESSAGES *****
*** NONE ***
```

Running AERMOD
Processing Summer

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 0

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 5

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 10

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 15

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 20

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 25

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 30

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 35

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 40

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 10

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 45

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 11

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 50

```
***** WARNING MESSAGES *****
*** NONE ***
```

Running AERMOD
Processing Autumn

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 5

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 15

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 20

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 25

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 30

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 35

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 40

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 10

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 45

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 11

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 50

***** WARNING MESSAGES *****
*** NONE ***

FLOWSECTOR ended 11/10/22 23:16:45

REFINE started 11/10/22 23:16:45

AERMOD Finishes Successfully for REFINE stage 3 Winter sector 0

***** WARNING MESSAGES *****
*** NONE ***

REFINE ended 11/10/22 23:16:46

AERSCREEN Finished Successfully

With no errors or warnings
Check log file for details

Ending date and time 11/10/22 23:16:47

Koi_Int_2040_No Project

Concentration	Distance	Elevation	Diag	Season/Month	Zo sector	Date	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	HT	REF TA	HT
5.10E+02	3	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
5.45E+02	25	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
5.81E+02	50.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
6.13E+02	75	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
6.43E+02	100	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
6.71E+02	125	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
* 0.69477E+03	141	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
6.06E+02	150.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.65E+02	174.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.91E+02	200	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.43E+02	225	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.07E+02	250	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.80E+02	274.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.57E+02	300	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.38E+02	325	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.22E+02	350	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.08E+02	375.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.96E+02	400	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.84E+02	425	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.74E+02	450	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.65E+02	475.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.57E+02	500	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.50E+02	525	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.43E+02	550	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.37E+02	575.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.31E+02	599.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.26E+02	625	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.21E+02	650	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.17E+02	675	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.13E+02	699.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.09E+02	725	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.05E+02	750	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.02E+02	775	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
9.85E+01	800.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
9.54E+01	825	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
9.25E+01	850	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.97E+01	875	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.71E+01	900.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.47E+01	924.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.23E+01	950	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.00E+01	975	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
7.79E+01	1000	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2

Start date and time 11/10/22 22:53:29
AERSCREEN 21112

Koi_Int_2040_A

Koi_Int_2040_A

```
----- DATA ENTRY VALIDATION -----  
METRIC                                ENGLISH  
** AREADATA ** -----  
  
Emission Rate:      0.8700 g/s          6.905 lb/hr  
Area Height:        0.50 meters         1.64 feet  
Area Source Length: 200.00 meters       656.17 feet  
Area Source Width:  200.00 meters       656.17 feet  
Vertical Dimension: 4.00 meters         13.12 feet  
Model Mode:         URBAN  
Population:         26039  
Dist to Ambient Air:      3.0 meters      10. feet
```

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations
Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 1000. meters 3281. feet

No flagpole receptors

No discrete receptors used

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 270.0 / 316.0 K 26.3 / 109.1 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity (u*): not adjusted

DEBUG OPTION ON

AERSCREEN output file:
Koi_Int_2040_A.out

*** AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season	Albedo	Bo	zo
Winter	0.35	1.50	1.000
Spring	0.14	1.00	1.000
Summer	0.16	2.00	1.000
Autumn	0.18	2.00	1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR started 11/10/22 22:58:37

Running AERMOD
Processing Winter

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 0

```

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 5

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 15

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 20

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 25

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 30

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 8

```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 35

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 9
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 40

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 10
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 45

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 11
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 50

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Running AERMOD
Processing Spring
```

Processing surface roughness sector 1

```
*****
Processing wind flow sector 1
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 2
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 5

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 3
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 4
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 5
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 20

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 6
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 7
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 30

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 8
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 35

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 9
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 40

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
```

Processing wind flow sector 10

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 45

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 11

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 50

```
***** WARNING MESSAGES *****
*** NONE ***
```

Running AERMOD
Processing Summer

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 0

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 5

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 10

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 15

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 20

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 25

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 30

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 35

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 40

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 10

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 45

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 11

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 50

```
***** WARNING MESSAGES *****
*** NONE ***
```

Running AERMOD
Processing Autumn

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 5

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 15

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 20

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 25

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 30

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 35

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 40

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 10

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 45

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 11

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 50

***** WARNING MESSAGES *****
*** NONE ***

FLOWSECTOR ended 11/10/22 22:58:50

REFINE started 11/10/22 22:58:50

AERMOD Finishes Successfully for REFINE stage 3 Winter sector 0

***** WARNING MESSAGES *****
*** NONE ***

REFINE ended 11/10/22 22:58:52

AERSCREEN Finished Successfully

With no errors or warnings
Check log file for details

Ending date and time 11/10/22 22:58:52

Koi_Int_2040_A

Concentration	Distance	Elevation	Diag	Season/Month	Zo sector	Date	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	HT	REF TA	HT
6.83E+02	3	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
7.30E+02	25	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
7.77E+02	50.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.21E+02	75	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.61E+02	100	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.98E+02	125	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
* 0.92992E+03	141	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.11E+02	150.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
6.22E+02	174.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
5.24E+02	200	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.59E+02	225	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.11E+02	250	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.74E+02	274.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.44E+02	300	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.19E+02	325	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.97E+02	350	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.79E+02	375.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.62E+02	400	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.46E+02	425	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.33E+02	450	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.21E+02	475.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.10E+02	500	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.00E+02	525	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.92E+02	550	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.83E+02	575.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.76E+02	599.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.69E+02	625	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.63E+02	650	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.57E+02	675	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.51E+02	699.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.46E+02	725	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.41E+02	750	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.36E+02	775	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.32E+02	800.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.28E+02	825	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.24E+02	850	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.20E+02	875	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.17E+02	900.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.13E+02	924.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.10E+02	950	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.07E+02	975	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.04E+02	1000	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2

Start date and time 11/11/22 05:34:50
AERSCREEN 21112

KOI_101_2040

```
----- DATA ENTRY VALIDATION -----
              METRIC                      ENGLISH
** AREADATA ** -----
Emission Rate:      1.6100 g/s              12.778 lb/hr
Area Height:        0.50 meters              1.64 feet
Area Source Length: 400.00 meters            1312.34 feet
Area Source Width:  36.00 meters             118.11 feet
Vertical Dimension: 4.00 meters              13.12 feet
Model Mode:         URBAN
Population:          26039
Dist to Ambient Air:      3.0 meters          10. feet
```

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 1000. meters 3281. feet

No flagpole receptors

No discrete receptors used

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 270.0 / 316.0 K 26.3 / 109.1 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity (u*): not adjusted

DEBUG OPTION ON

AERSCREEN output file:
KOI_101_2040.OUT

*** AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season	Albedo	Bo	zo
Winter	0.35	1.50	1.000
Spring	0.14	1.00	1.000
Summer	0.16	2.00	1.000
Autumn	0.18	2.00	1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR started 11/11/22 05:35:38

Running AERMOD

Processing Winter

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 0

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 5

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

***** WARNING MESSAGES *****
*** NONE ***

Running AERMOD
Processing Spring

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 5

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

***** WARNING MESSAGES *****
*** NONE ***

Running AERMOD
Processing Summer

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 0

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 5

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 10

```
***** WARNING MESSAGES *****
*** NONE ***
```

Running AERMOD
Processing Autumn

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 5

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

```
***** WARNING MESSAGES *****
*** NONE ***
```

FLOWSECTOR ended 11/11/22 05:35:45

REFINE started 11/11/22 05:35:45

AERMOD Finishes Successfully for REFINE stage 3 Winter sector 0

***** WARNING MESSAGES *****
 *** NONE ***

REFINE ended 11/11/22 05:35:47

AERSCREEN Finished Successfully
With no errors or warnings
Check log file for details

Ending date and time 11/11/22 05:35:48

Koi_101_2040

Concentration	Distance	Elevation	Diag	Season/Month	Zo sector	Date	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	ZO	BOWEN	ALBEDO	REF WS	HT	REF TA	HT
3.79E+03	3	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.90E+03	25	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.01E+03	50	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.10E+03	75	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.17E+03	100	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.25E+03	125	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.32E+03	150	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.38E+03	175	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.43E+03	200	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
* 0.44346E+04	201	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.11E+03	225	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.40E+03	250	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.95E+03	275	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.57E+03	300	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.37E+03	325	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.21E+03	350	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.08E+03	375	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
9.75E+02	400	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.86E+02	425	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.11E+02	450	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
7.46E+02	475	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
6.91E+02	500	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
6.42E+02	525	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
5.99E+02	550	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
5.61E+02	575	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
5.27E+02	600	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.97E+02	625	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.69E+02	650	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.44E+02	675	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.21E+02	700	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.00E+02	725	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.81E+02	750	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.64E+02	775	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.48E+02	800	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.33E+02	825	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.19E+02	850	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.07E+02	875	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.95E+02	900	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.83E+02	925	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.73E+02	950	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.63E+02	975	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.54E+02	1000	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2

Appendix F-3

Health Risk Assessment

HEALTH RISK ASSESSMENT REPORT

Shiloh Resort & Casino Project

Acorn Environmental / Sonoma County, CA

TRINITY CONSULTANTS
1939 Harrison Street, Suite 618
Oakland, CA 94612
(510) 285-6351

October 2024



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1. EXECUTIVE SUMMARY

The Koi Nation of Northern California is proposing to develop the Shiloh Resort and Casino Project in unincorporated Sonoma County (the Project) which is subject to the review requirements of the National Environmental Policy Act (NEPA). The Project's operational phase has the potential to emit toxic air contaminants (TACs) due to the proposed stationary diesel-fired emergency generators and mobile emissions from additional traffic activity.

Acorn Environmental, on behalf of the NEPA Lead Agency, retained Trinity Consultants (Trinity) to perform a Health Risk Assessment (HRA) and determine the potential health risks from the operational phase of the Project. Trinity has prepared the HRA according to the Bay Area Air Quality Management District's (BAAQMD's) *Health Risk Assessment Modeling Protocol (December 2020)*. The analysis used the Hotspots Analysis and Reporting Program (HARP) Air Dispersion Risk Modeling Tool (ADMRT) with inputs from US EPA's AERMOD modeling program to perform the exposure/risk assessment. The HRA results were compared to the health risk standards established in BAAQMD's California Environmental Quality Act (CEQA) Guidelines for purposes of assessing whether the Project's health risk impacts may be considered significant.

Trinity has concluded that the Project's operational phase will not cause a significant health risk impact at the individual or cumulative Project levels. The HRA results are summarized in Table 2-1 and Table 2-2 and reproduced below.

Table 1-1. Project-Level HRA Results and Comparison to Significance Thresholds

Receptor Type	Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Maximum Acute HI	Maximum Chronic HI	Maximum Cancer Risk (per 1 million)
Acute PMI	321	519398.6	4263931.5	0.012	--	--
MEIR	555	519558.6	4264191.5	--	0.0027	9.17
MEIW	5843	518107.79	4264547.78	--	0.0032	0.75
Project-Level Maximum Impacts				0.012	0.0032	9.17
Project-Level Threshold of Significance				1.0	1.0	10.0
Exceeds Threshold?				No	No	No

Table 1-2. Cumulative Health Risk Impacts

Source	Maximum Cancer Risk (in 1 million)		Maximum Chronic Hazard Index	
	MEIR	MEIW	MEIR	MEIW
Stationary Sources within 1,000 ft	0	0	0	0
Roadways	4.25	27.33	0.0113	0.0759
Railways ^a	N/A	N/A	N/A	N/A
Total Cumulative Off-site Sources	4.25	27.33	0.0113	0.0759
Project Operation	9.17	0.75	0.0027	0.0032
Total Cumulative Off-site Sources + Project Operation	13.41	28.08	0.014	0.079
Cumulative Significance Threshold	100		10.0	
Exceeds Threshold?	No		No	

a. The CEQA Rail Screening Tool data set does not have data available for the MEIR and MEIW coordinates.

2. HEALTH RISK ASSESSMENT

This section presents the evaluation of potential health risks from the Project's operational TACs to local receptors. The Project has the potential to emit TACs which have cancer, chronic, and acute health impacts.

To assess the local risk and hazard impacts of the Project, an HRA was performed to determine whether the Project exceeds the BAAQMD's CEQA Thresholds of Significance as follows:

- ▶ Project-level cancer risk of 10.0 in one million
- ▶ Project-level chronic hazard index (HI) of 1.0
- ▶ Project-level acute HI of 1.0
- ▶ Cumulative-level cancer risk of 100 in one million
- ▶ Cumulative-level chronic HI of 10.0

2.1 Project Information

2.1.1 Stationary Emission Sources

The Project's casino and event center building will be supported by five identical diesel-fired Tier 4F-compliant emergency generators, with each generator's engine rated at 2,447 brake horsepower (BHP). All five will operate for routine maintenance and testing, however, only four would operate during emergency events. A sixth diesel-fired Tier 4F-compliant emergency generator will support the on-site wastewater treatment facility to the southeast and is rated at 1,367 BHP. All six engines are certified to EPA Tier 2 standards and will meet Tier 4F emission standards using add-on abatement from diesel particulate filters (DPFs) and selective catalytic reduction systems (SCRs).

2.1.2 Mobile Emission Sources (Traffic)

As discussed in Appendix I of the Shiloh Resort and Casino DEIS, the Project will generate additional vehicle trips on the roadways surrounding the Project from customers, employees, and contractors traveling to and from the Project. The emissions resulting from the Project's vehicle trips generated have been modeled for the following roadways:

- ▶ Highway 101 from Airport Boulevard to Windsor River Road/Old Redwood Highway
- ▶ Shiloh Road from Conde Lane to Faught Road
- ▶ Old Redwood Highway from Airport Boulevard to Pleasant Avenue

2.2 TAC Emission Calculations

2.2.1 Stationary Emission Sources

The diesel-fired stationary emergency generators will have the potential to emit diesel particulate matter (DPM) and ammonia. DPM is treated as a surrogate for all diesel combustion TAC emissions. The ammonia emissions are due to the ammonia slip from the use of an SCR to ensure the emergency generators meet Tier 4F standards. DPM emissions for each generator are calculated as the product of the following:

- ▶ The engine's maximum rated horsepower
- ▶ The Tier 4F particulate matter (PM) emission standard of 0.02 grams per brake horsepower-hour per EPA Off-Road Engine Tier standards
- ▶ Estimated annual average hours of emergency and non-emergency operation

Ammonia emissions for each generator are calculated as the product of the following:

- ▶ A default emission factor of 1.4 lbs of ammonia per 1,000 gallons of diesel burned for equipment abated by an SCR per South Coast Air Quality Management District's *Combustion Emission Factors* for Annual Emission Reporting
- ▶ The generator's maximum hourly fuel consumption
- ▶ Estimated annual average hours of emergency and non-emergency operation

2.2.2 Mobile Emission Sources (Traffic)

The traffic tailpipe TAC emissions are calculated to represent potential health impacts from the trips generated along the three modeled roadways. The TAC emissions from each road are calculated as the product of the following:

- ▶ Project hourly or annual trips generated
- ▶ The roadway-specific distribution of travel per Appendix I of the Shiloh Resort DEIS
- ▶ The summed product of the following vehicle category-specific information:
 - Project-specific fleet mix percentage
 - California Air Resources Board (CARB) On-Road Running Exhaust Emission Rate of PM₁₀, reactive organic gas (ROG), or ammonia per EMFAC 2021 v1.0.2 for the road-specific speed limit and representative fuel type
- ▶ For ROG-based combustion TACs from gasoline-fired vehicles, a TAC-specific weight fraction is applied to the EMFAC ROG emission factor per South Coast Air Quality Management District's *Combustion Emission Factors* for portable internal combustion engines. It is assumed all on-road engines are equipped with catalysts.
- ▶ Roadway distance

Detailed emission calculations of the Project's TAC emissions are provided in Appendix A.

2.3 Air Dispersion Model

The air quality analysis was conducted according to U.S. Environmental Protection Agency (EPA) guidelines. The AERMOD model (version 23112) was used with Trinity's BREEZE™ AERMOD Suite software to calculate ground-level concentrations with the regulatory default parameters.

2.4 Coordinate System

The location of emission sources, structures, and receptors have been represented in the Universal Transverse Mercator (UTM) coordinate system using the World Geodetic System (WGS84) projection. The UTM grid divides the world into coordinates that are measured in north meters (measured from the equator) and east meters (measured from the central meridian of a particular zone, which is set at 500 km).

2.5 Terrain Elevations

The terrain elevation for each receptor, emission source, and building were determined using United States Geological Survey (USGS) 1/3 arc-second National Elevation Dataset (NED). The data, obtained from the USGS, had terrain elevations at 10-meter intervals. The terrain height for each individual modeled receptor, emission source, and building was determined by assigning the interpolated height from the digital terrain elevations surrounding each modeled receptor, emission source, or building. Buildings were assumed to have an equal elevation-dependent on a single corner of the building.

In addition, the AERMOD terrain preprocessor, AERMAP (version 18081), was used to compute the hill height scales for each receptor. AERMAP searches all NED data points for the terrain height and location that has the greatest influence on each receptor to determine the hill height scale for that receptor. AERMOD then uses the hill height scale in order to select the correct critical dividing streamline and concentration algorithm for each receptor.

2.6 Meteorological Data

Meteorological data was provided by BAAQMD for the calendar years 2013 through 2017. Surface data are from the Sonoma County Airport (Station ID 23213; elevation 34.7 meters). Upper air data are from Oakland International Airport (Station ID 23230).

2.7 Building Downwash

The emission sources at the Facility have been evaluated in terms of their proximity to nearby structures. The purpose of this evaluation is to determine if stack discharges may become caught in the turbulent wake of a building or structure. The downwash of the plume can result in elevated ground-level concentrations.

The Building Profile Input Program (BPIP) with Plume Rise Model Enhancements (PRIME) (version 04274) was used to determine the building downwash characteristics for each stack in 10-degree directional intervals. The PRIME version of BPIP features enhanced plume dispersion coefficients due to turbulent wake and reduced plume rise caused by a combination of the descending streamlines in the lee of the building and the increased entrainment in the wake.

2.8 Receptors

According to EPA regulations, "ambient air" is defined as the portion of the atmosphere external to the source. The dispersion modeling concentrations were determined for ambient air locations (i.e., receptors). The Project's fence line is the ambient air boundary for all modeling demonstrations. The following receptors are used to ensure ambient air is protected:

- ▶ Boundary receptors with 20-meter spacing;
- ▶ A variable density receptor grid with 20-meter intervals from the facility boundary centroid to 500 meters, 50-meter intervals to 1,000 meters, 100-meter intervals to 2,000 meters, 200-meter intervals to 5,000 meters, and 500-meter intervals to 10,000 meters.
- ▶ All receptors are set to a flagpole height of 1.5 meters to conservatively represent an average human's breathing height as recommended by BAAQMD's Health Risk Assessment Modeling Protocol (December 2020).

The MEIR and MEIW are selected from the receptor grid points that best align with a residence or workplace, respectively, where the highest impacts occur. Sensitive receptors, including schools, are included in the MEIR category. For acute risk, the PMI is selected as the highest risk receptor regardless of location.

2.9 Emission Sources

AERMOD represents emission units as point, volume, area, or open pit sources. The stationary emergency generators have defined exhaust stacks and are therefore modeled as point sources. The roads leading to and surrounding the Project (Old Redwood Highway, Shiloh Road, and Highway 101) are modeled as EPA line sources per BAAQMD's *CEQA Guidelines Appendix E: Recommended Methods for Screening and Modeling Local Risks and Hazards*.¹ The point source and EPA line input parameters are provided in Appendix B. An aerial view of the modeled emission sources, buildings, and receptor grid is provided in Appendix C.

2.10 Emission Rates

AERMOD estimates ambient air concentrations for each averaging period (i.e., 1-hour and period average) based on source parameters and a normalized emission rate (1 gram/second) from each source group. Each emergency generator was modeled as an individual source group. Each roadway was modeled as its own source group consisting of multiple EPA Line sources. For each EPA Line source, the emission rate was converted into g/s-m² by taking 1 g/s and dividing by each roadway's total area. The "Other" pollutant option was used. The calculated equivalent unit emission rates are summarized in Appendix B. The AERMOD output provides a theoretical concentration based on this normalized emission rate at each receptor location from each source. This normalized emission rate for each source was used to generate plot files that contain the contribution of each source to the total air concentration in units of micrograms per cubic meter (µg/m³) at each receptor. The dispersion concentration plot files were scaled by the hourly and annual emissions calculated in Appendix A for input into the HARP ADMRT (version 22118).

2.11 HARP ADMRT Risk Analysis Settings

The AERMOD model output files were used as an input file to the HARP ADMRT model, which combined the source-specific concentration contributions with actual source emission rates to estimate the chemical-specific air concentrations at each receptor location. HARP ADMRT sums up the contribution from each source at a given receptor in order to estimate the total pollutant concentration for each emitted chemical. HARP ADMRT also contains updated toxicity information (cancer potency, RELs, etc.) for listed regulated substances, which are applied to estimate cancer and noncancer health hazard impacts for relevant exposure pathways and applicable target organs.

Exposure pathways are generally classified as primary pathways and secondary pathways. Inhalation is the primary exposure pathway for all modeled sources and substances. For multi-pathway substances, non-inhalation exposure pathways are also evaluated.

¹ Per BAAQMD pg. 85/122 of CEQA Air Quality Guidelines Appendix E: Recommended Methods For Screening and Modeling Local Risks and Hazards. Accessed September 2024: https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-e-recommended-methods-for-screening-and-modeling-local-risks-and-hazards_final-pdf.pdf?rev=b8917a27345a4a629fc18fc8650951e4&sc_lang=en

The residential scenario was evaluated using the Risk Management Policy (RMP) derived method in accordance with BAAQMD's *Health Risk Assessment Modeling Protocol (December 2020)* for a 30-year exposure duration for the following default pathways: inhalation, dermal absorption, soil ingestion (conservatively reflecting a 0.05 m/s deposition rate), and mother's milk. HARP ADMRT default parameters were used for the numerical pathway inputs.

The worker scenario was evaluated using the OEHHA Derived Method for a 25-year exposure duration for the following default pathways: inhalation, dermal absorption, and soil ingestion (conservatively reflecting a 0.05 m/s deposition rate). An 8-hour breathing rate with moderate intensity was applied to the inhalation pathway. A worker adjustment factor (WAF) of 4.20 was conservatively applied to account for the emergency generators' maintenance and testing to occur during typical business hours. HARP ADMRT default parameters were used for all other the numerical pathway inputs.

2.12 Project-Level HRA Results

The dispersion modeling results were such that the highest annual average concentrations occurred primarily to the north of the Project across from Shiloh Road, or on or along Old Redwood Highway and Highway 101. The maximum one-hour concentration occurs on Old Redwood Highway to the west of the Project. The MEIR was the same receptor for both cancer risk and chronic HI, as was for the MEIW. The potential health risk impacts for the Project-level operational phase are summarized in Table 2-1.

Table 2-1. Project-Level HRA Results and Comparison to Significance Thresholds

Receptor Type	Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Maximum Acute HI	Maximum Chronic HI	Maximum Cancer Risk (per 1 million)
Acute PMI	321	519398.6	4263931.5	0.012	--	--
MEIR	555	519558.6	4264191.5	--	0.0027	9.17
MEIW	5843	518107.79	4264547.78	--	0.0032	0.75
Project-Level Maximum Impacts				0.012	0.0032	9.17
Project-Level Threshold of Significance				1.0	1.0	10.0
Exceeds Threshold?				No	No	No

The Project-level health risks for the MEIR, MEIW, and acute PMI receptors are below the Project-level BAAQMD significance thresholds. Thus, the Project-level health risks are less than significant.

2.13 Cumulative HRA Results

In addition to the Project-level HRA, an assessment of the Project's impacts summed with the impacts of stationary sources within 1,000 feet of the MEIR and MEIW and existing mobile sources (roadways and railways) was conducted and compared to the BAAQMD CEQA cumulative thresholds of significance. The BAAQMD's stationary source geographic information systems (GIS) map tool indicates there are no permitted stationary sources located within 1,000 feet of the MEIR and MEIW. The cancer risk and chronic HI from roadway and railway impacts at the MEIs are determined using the raster maps available from BAAQMD's mobile source GIS map tool. Table 2-2 summarizes the impacts from cumulative sources in comparison to the BAAQMD threshold of significance for cumulative risk and hazards.

Table 2-2. Cumulative Health Risk Impacts

Source	Maximum Cancer Risk (in 1 million)		Maximum Chronic Hazard Index	
	MEIR	MEIW	MEIR	MEIW
Stationary Sources within 1,000 ft	0	0	0	0
Roadways	4.25	27.33	0.0113	0.0759
Railways ^a	N/A	N/A	N/A	N/A
Total Cumulative Off-site Sources	4.25	27.33	0.0113	0.0759
Project Operation	9.17	0.75	0.0027	0.0032
Total Cumulative Off-site Sources + Project Operation	13.41	28.08	0.014	0.079
Cumulative Significance Threshold	100		10.0	
Exceeds Threshold?	No		No	

b. The CEQA Rail Screening Tool data set does not have data available for the MEIR and MEIW coordinates.

The cumulative health risks for both the MEIR and MEIW receptors are below the cumulative-level BAAQMD significance thresholds for cancer risk and chronic HI. Thus, the cumulative health risks are less than significant.

APPENDIX A. TAC EMISSION CALCULATIONS

Table A-1: Stationary Source Input Parameters

Parameter	Emergency Generators				Notes
	GEN1-4	GEN5	GEN6	Units	
Equipment Rating	2,447	2,447	1,367	HP	1
Fuel Type	Diesel				1
Quantity	4	1	1	-	1
Annual Hours	60	12	60	hr/yr	1,2
Fuel Consumption	133.6	133.6	64.7	gal/hr	3

1. GEN1-5 equipment rating per pg. 66/624 of Shiloh EIS Appendix F. Accessed September 2024: https://www.shilohresortenvironmental.com/wp-content/uploads/2024/07/4_Koi-Nation-Shiloh-Casino-DEIS-App-F-H.pdf

GEN6 represents the generator supporting the on-site wastewater treatment facility.

2. Assumes each generator will operate for 12 hr/yr for non-emergency purposes and conservatively assumes up to 48 hrs/year for emergency purposes. GEN5 is a redundant generator that will only be used in an emergency if any of GEN1-4 fail.

3. GEN1-5 per CAT® 3516C Diesel Generator Set Specification Sheet. Accessed September 2024: <https://s7d2.scene7.com/is/content/Caterpillar/CM20180713-19204-34655>

GEN6 per Kohler KD900 Industrial Diesel Generator Set Specification Sheet.

Table A-2: Stationary Source TAC Emission Factors

TAC	CAS ID	Emergency Generators		Notes
		Value	Units	
DPM	9901	0.02	g/bhp-hr	1
Ammonia	7664417	1.4	lb/1,000 gal	2

1. For emergency ICE with 1,000 BHP rating or greater, BAAQMD's Best Available Control Technology (BACT). Accessed on September 2024:

https://www.baaqmd.gov/~media/files/engineering/bact-tbact-workshop/combustion/96-1-5.pdf?rev=1f89f9faaa434df5bf31ac10b5888bd2&sc_lang=en

2. Diesel emission factors from SCAQMD for stationary sources. Accessed September 2024: <https://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/combustion-emission-factors-2021.pdf>

Table A-3: Project Stationary Source TAC Emissions by Equipment Type

AERMOD Source	TAC	CAS ID	Emission Rate per Unit	
			Maximum Hourly	Annual
			(lb/hr) ¹	(lb/yr) ²
GEN1	DPM	9901	0.108	6.474
GEN1	Ammonia	7664417	0.187	11.222
GEN2	DPM	9901	0.108	6.474
GEN2	Ammonia	7664417	0.187	11.222
GEN3	DPM	9901	0.108	6.474
GEN3	Ammonia	7664417	0.187	11.222
GEN4	DPM	9901	0.108	6.474
GEN4	Ammonia	7664417	0.187	11.222
GEN5	DPM	9901	0.108	1.295
GEN5	Ammonia	7664417	0.187	2.244
GEN6	DPM	9901	0.060	3.616
GEN6	Ammonia	7664417	0.091	5.435

1. GEN DPM Maximum Hourly Emissions (lb/hr) = [DPM Emission Factor (g/bhp-hr)] x [Engine Rating (HP)] converted to lbs

GEN Ammonia Maximum Hourly Emissions (lb/hr) = [Ammonia Emission Factor (lb/1,000 gal)] x [Hourly Fuel Consumption (gal/hr) / 1,000]

2. Maximum Annual Emissions (lb/yr) = [Hourly Emissions (lb/hr)] x [Annual Hours of Operation (hr/yr)]

Table A-4: Project Traffic Input Parameters

Trip Generations	Units	Alternative A			Notes
Saturday PM Peak Hour	trips/hour	1,340			1
Weekend Daily	trips/day	15,779			1
Weekday Daily	trips/day	11,213			1
Annual	trips/year	4,556,396			2
Road Section	Units	Hwy 101	Old Redwood Highway	Shiloh Road	Notes
Parameter					
AERMOD Model ID	-	HWY101	ORHWY	SHILOH	3
Road Section Distance	miles	3.30	2.58	1.78	4
Distribution of Travel	%	70%	20%	10%	5
Peak Hour Vehicle Trips	trips/hour	938	268	134	6
Annual Vehicle Trips	trips/year	3,189,477	911,279	455,640	6

1. Peak number of trips found on pg. 41/1175 of Koi Nation Shiloh Resort DEIS, Appendix I. Accessed online September 2024: <https://www.shilohresortenvironmental.com/wp-content/uploads/2023/10/Appendix-I-Traffic-Impact-Study-v2.pdf>

2. Annual trip generations are calculated as follows:

$$\text{Estimated Trips Per Year (trips/year)} = [(\text{Weekday Daily Trips}) \times (5 \text{ days/week}) \times (52 \text{ weeks/year})] + [(\text{Weekend Daily Trips}) \times (2 \text{ days/week}) \times (52 \text{ weeks/year})]$$

3. Model ID represents AERMOD source group to represent each road with increased traffic impacts.

4. Represents the total distance of each road's EPA LINE model input.

5. Traffic distribution percentage assumptions found on pg. 41/180 of Koi Nation Shiloh Resort DEIS, Appendix I. Accessed online September 2024: https://www.shilohresortenvironmental.com/wp-content/uploads/2024/07/5_Koi-Nation-Shiloh-Casino-DEIS-App-I-Part-1.pdf

6. Road Section Vehicle Trips (trips/hour or trips/year) = Alternative A Total Trip Generations (trips/hour or trips/year) * Distribution of Travel (%)

Table A-5: Project Traffic Vehicle Types and EMFAC Emission Factors

Vehicle Type	EMFAC Vehicle Category ¹	Percentage of Total Trips ²	Assumed Fuel Type ³	Speed Class (mph) ^{4,5}	EMFAC Running Exhaust Emission Factors (g/mile) ⁶		
					PM ₁₀	ROG	NH ₃
Light-Duty Auto	LDA	56.70%	Gasoline	35	1.32E-03	1.10E-02	3.43E-02
Light-Duty Truck Type 2	LDT2	16.64%	Gasoline	35	1.40E-03	1.37E-02	3.56E-02
Medium Duty Vehicles	MDV	11.69%	Gasoline	35	1.43E-03	2.02E-02	3.50E-02
Light-Duty Truck Type 1	LDT1	5.53%	Gasoline	35	2.34E-03	4.22E-02	3.71E-02
Light-Heavy Duty Truck	LHD1	3.03%	Gasoline	35	1.20E-03	3.57E-02	4.49E-02
Motorcycle	MCY	2.78%	Gasoline	35	1.91E-03	1.32E+00	8.52E-03
Medium Heavy Duty Truck	T6 Class 5	1.54%	Diesel	35	1.12E-02	2.93E-02	2.20E-01
Light-Heavy Duty Truck	LHD2	0.79%	Diesel	35	3.13E-02	1.45E-01	1.71E-01
Heavy-Heavy Duty Truck	T7 Class 8	0.66%	Diesel	35	3.98E-02	6.94E-02	2.20E-01
Motor Home	MH	0.36%	Gasoline	35	1.40E-03	6.06E-02	4.48E-02
School Bus	SBUS	0.15%	Diesel	35	1.63E-02	5.19E-02	1.43E-01
Other Bus	OBUS	0.11%	Gasoline	35	8.88E-04	6.30E-02	4.50E-02
Urban Bus	UBUS	0.03%	Gasoline	35	9.27E-04	6.92E-03	4.50E-02
Light-Duty Auto	LDA	56.70%	Gasoline	65	1.25E-03	1.03E-02	3.43E-02
Light-Duty Truck Type 2	LDT2	16.64%	Gasoline	65	1.32E-03	1.26E-02	3.56E-02
Medium Duty Vehicles	MDV	11.69%	Gasoline	65	1.34E-03	1.87E-02	3.50E-02
Light-Duty Truck Type 1	LDT1	5.53%	Gasoline	65	2.13E-03	3.76E-02	3.71E-02
Light-Heavy Duty Truck	LHD1	3.03%	Gasoline	55	1.08E-03	3.01E-02	4.49E-02
Motorcycle	MCY	2.78%	Gasoline	65	1.94E-03	1.39E+00	8.52E-03
Medium Heavy Duty Truck	T6 Class 5	1.54%	Diesel	65	1.91E-02	2.15E-02	2.20E-01
Light-Heavy Duty Truck	LHD2	0.79%	Diesel	55	2.07E-02	8.56E-02	1.71E-01
Heavy-Heavy Duty Truck	T7 Class 8	0.66%	Diesel	65	4.59E-02	4.82E-02	2.20E-01
Motor Home	MH	0.36%	Gasoline	65	1.37E-03	6.26E-02	4.48E-02
School Bus	SBUS	0.15%	Diesel	65	2.31E-02	2.98E-02	1.43E-01
Other Bus	OBUS	0.11%	Gasoline	65	8.51E-04	6.13E-02	4.50E-02
Urban Bus	UBUS	0.03%	Gasoline	65	9.30E-04	9.58E-03	4.50E-02

1. Vehicle nomenclature per EMFAC Onroad Emission Factor inventory. If there are multiples, the maximum emission factor of the highest populated vehicle class rating was chosen.

2. Table 4.4 Fleet Mix from Alternative A CalEEMod Output found on pg. 56/624 of Koi Nation Shiloh Resort DEIS Appendix F-H. Accessed online September 2024: https://www.shilohresortenvironmental.com/wp-content/uploads/2024/07/4_Koi-Nation-Shiloh-Casino-DEIS-App-F-H.pdf

3. Fuel type represents the majority of the vehicle type's population based on EMFAC Fleet Database for Sonoma County from calendar year 2022. Accessed online September 2024: <https://arb.ca.gov/emfac/fleet-db/9b3e26c8b6f774fcc2766b214cd81bb1db0a60fb>

4. Per City of Windsor Ordinances Title IV, Chapter 5, Article 7 "Speed Limits" of the Code of the Town of Windsor Setting Radar-Enforceable Speed Limits for Designated Town Streets (2024). Accessed September 2024: <https://www.townofwindsor.ca.gov/DocumentCenter/View/29802/2024-389-Speed-Limits>

5. Lowest possible speed limits for vehicles traveling across roads surrounding the project site were chosen to acquire emission factors as lower speeds present higher emission factors to conservatively represent the highest possible emissions.

6. Running exhaust emission factors from EMFAC Onroad Emission Rate for Sonoma County for calendar year 2024. Accessed online September 2024: <https://arb.ca.gov/emfac/emissions-inventory/6391d1afe446b50bbaf0c8448067e55b8f5b7a5e>

Table A-6: Gasoline-Fired Engine TAC Emission Factors

TAC	CAS ID	Emission Factor	
		(lb/1,000 gal) ¹	(wt% of ROG) ²
Benzene	71432	1.5726	0.763%
1,3-Butadiene	106990	0.324	0.157%
Formaldehyde	50000	1.0131	0.492%
Nickel	7440020	0.0033	0.002%
PAHs	1151	0.0295	0.014%

1. Gasoline emission factors from SCAQMD for portable internal combustion engines and assumes catalysts are inherent to all vehicles. Accessed September 2024: <https://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/combustion-emission-factors-2021.pdf>

2. $\text{wt\%}_{\text{ROG}} = (\text{EF}_{\text{TAC}}) / (\text{EF}_{\text{Exhaust}}) \times 100\%$. Emission factor for constituent and exhaust organic gases acquired from SCAQMD. Accessed September 2024: <https://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/combustion-emission-factors-2021.pdf>

$\text{wt\%}_{\text{ROG}}$ = Weight % of Reactive Organic Gas

EF_{TAC} = Emission Factor for Toxic Air Contaminant [lbs./1000 gallon]

EF_{bulk} = Emission Factor for Exhaust Organic Gases [206 lbs./1000 gallons]

Table A-7: Project Traffic TAC Emissions by Road Section

AERMOD Road Section	TAC	CAS ID	Emission Factor	Emission Rate	
				Maximum Hourly	Annual
			(lb/vehicle-mile) ¹	(lb/hr) ²	(lb/yr) ³
HWY101	DPM	9901	4.61E-06	1.42E-02	48.429
HWY101	Ammonia	7664417	8.76E-05	2.71E-01	921.284
HWY101	Benzene	71432	8.96E-07	2.77E-03	9.424
HWY101	1,3-Butadiene	106990	1.85E-07	5.71E-04	1.942
HWY101	Formaldehyde	50000	5.77E-07	1.79E-03	6.071
HWY101	Nickel	7440020	1.88E-09	5.82E-06	0.020
HWY101	PAHs	1151	1.68E-08	5.20E-05	0.177
ORWHWY	DPM	9901	4.58E-06	3.17E-03	10.771
ORWHWY	Ammonia	7664417	8.76E-05	6.06E-02	205.903
ORWHWY	Benzene	71432	8.97E-07	6.20E-04	2.107
ORWHWY	1,3-Butadiene	106990	1.85E-07	1.28E-04	0.434
ORWHWY	Formaldehyde	50000	5.78E-07	3.99E-04	1.357
ORWHWY	Nickel	7440020	1.88E-09	1.30E-06	0.004
ORWHWY	PAHs	1151	1.68E-08	1.16E-05	0.040
SHILOH	DPM	9901	4.58E-06	1.09E-03	3.719
SHILOH	Ammonia	7664417	8.76E-05	2.09E-02	71.094
SHILOH	Benzene	71432	8.97E-07	2.14E-04	0.728
SHILOH	1,3-Butadiene	106990	1.85E-07	4.41E-05	0.150
SHILOH	Formaldehyde	50000	5.78E-07	1.38E-04	0.469
SHILOH	Nickel	7440020	1.88E-09	4.49E-07	0.002
SHILOH	PAHs	1151	1.68E-08	4.01E-06	0.014

1. Emission Factor [lb/vehicle-mile] = [EMFAC Emission Factor [g/mile]] x (wt% of ROG) converted to lbs

2. Maximum Hourly Emissions at Road Section (lb/hr) = [Emission Factor (lb/vehicle-mile)] x [Peak Hour Vehicle Trips (trips/hr)] x [Road Section Distance (miles)]

3. Maximum Annual Emissions at Road Section (lb/yr) = [Emission Factor (lb/vehicle-mile) x [Peak Annual Vehicle Trips (trips/yr)] x [Road Section Distance (miles)]

APPENDIX B. MODELING INPUTS

Table B-1. Modeling Parameters - Point Source Inputs

Model ID	Description	X Coordinate	Y Coordinate	Elevation	Emission Rate	Stack Height	Stack Temperature	Stack Velocity	Stack Diameter	Notes
		m	m	m	(g/s)	m	K	m/s	m	
GEN1	Casino Emergency Generator 1	519635.5	4263923.6	43	1	7.6	723.15	15.24	0.1524	1,2
GEN2	Casino Emergency Generator 2	519642.6	4263920.4	42.97	1	7.6	723.15	15.24	0.1524	1,2
GEN3	Casino Emergency Generator 3	519648.8	4263917.3	42.94	1	7.6	723.15	15.24	0.1524	1,2
GEN4	Casino Emergency Generator 4	519655.7	4263914.1	43.06	1	7.6	723.15	15.24	0.1524	1,2
GEN5	Redundant Emergency Generator 5	519661.9	4263910.6	43.18	1	7.6	723.15	15.24	0.1524	1,2
GEN6	WWTP Emergency Generator	520005.22	4263938.55	45.25	1	4.2	767.04	173	0.1524	3

1. Stack temperature, flowrate, and diameter per information provided by Acorn Environmental on 2024-0826.

2. Stack heights estimated based on similar generators

3. Stack parameters provided by Acorn Environmental on 2024-0925 and the Kohler KD900 Generator specification sheets.

Table B-2. Modeling Parameters - EPA Line Inputs

Route	Description	X coord	Y coord	Elevation	Emission Rate	Vehicle Height	Release Height	End Point X coordinate	End Point Y coordinate	Road Width	Road Length	Total Area	Init Vert dim	Notes
		(m)	(m)	(m)	(g/s-m²)	(m)	(m)	(m)	(m)	(m)	(m)	(m²)	(m)	
ORWHWY1	Old Redwood Highway	520599	4262570.3	46.59	4.02E-05	2.52	2.14	520105.50	4263061.00	6	695.94	24,898.70	1.99	1,2
ORWHWY2	Old Redwood Highway	520105.9	4263059.9	42.61	4.02E-05	2.52	2.14	519991.80	4263184.00	6	168.58		1.99	1,2
ORWHWY3	Old Redwood Highway	519991.5	4263183.9	42.04	4.02E-05	2.52	2.14	519862.50	4263337.00	6	200.20		1.99	1,2
ORWHWY4	Old Redwood Highway	519862.9	4263336.1	41.37	4.02E-05	2.52	2.14	519751.60	4263452.00	6	160.69		1.99	1,2
ORWHWY5	Old Redwood Highway	519751.3	4263451.9	40.8	4.02E-05	2.52	2.14	519291.00	4264073.00	6	773.07		1.99	1,2
ORWHWY6	Old Redwood Highway	519290.7	4264071.2	42.16	4.02E-05	2.52	2.14	518977.30	4264659.00	6	666.13		1.99	1,2
ORWHWY7	Old Redwood Highway	518978.2	4264658.1	40.91	4.02E-05	2.52	2.14	518777.50	4264899.00	6	313.55		1.99	1,2
ORWHWY8	Old Redwood Highway	518778.4	4264898.3	39.75	4.02E-05	2.52	2.14	518503.10	4265189.00	6	400.37		1.99	1,2
ORWHWY9	Old Redwood Highway	518502.5	4265186.1	40.69	4.02E-05	2.52	2.14	518046.40	4265718.00	6	700.67		1.99	1,2
ORWHWY10	Old Redwood Highway	518046.1	4265717.9	40.8	4.02E-05	2.52	2.14	517995.40	4265767.00	6	70.58		1.99	1,2
SHILOH1	Shiloh Road	517657.3	4264178.1	33.35	6.46E-05	2.52	2.14	520478.00	4264168.00	5.4	2820.72	15,474.58	1.99	1,2
SHILOH2	Shiloh Road	520478.1	4264167.9	60.82	6.46E-05	2.52	2.14	520518.30	4264188.00	5.4	44.94		1.99	1,2
HWY101_1	HWY 101	516485.5	4266572	35.99	8.73E-06	2.52	2.14	516618.70	4266568.00	21.6	133.26	114,591.18	1.99	1,2
HWY101_2	HWY 101	516618.6	4266567.5	36.25	8.73E-06	2.52	2.14	516857.6	4266251	21.6	396.60		1.99	1,2
HWY101_3	HWY 101	516857.6	4266250	36.7	8.73E-06	2.52	2.14	517014	4265957	21.6	332.13		1.99	1,2
HWY101_4	HWY 101	517013.4	4265956.4	36.32	8.73E-06	2.52	2.14	519199.5	4262941	21.6	3724.47		1.99	1,2
HWY101_5	HWY 101	519199.5	4262941.3	39.13	8.73E-06	2.52	2.14	519402.7	4262733	21.6	291.00		1.99	1,2
HWY101_6	HWY 101	519402.6	4262732.8	40.67	8.73E-06	2.52	2.14	519549.5	4262677	21.6	157.14		1.99	1,2
HWY101_7	HWY 101	519549.8	4262676.5	39.48	8.73E-06	2.52	2.14	519712.3	4262672	21.6	162.56		1.99	1,2
HWY101_8	HWY 101	519712.6	4262671.5	42.82	8.73E-06	2.52	2.14	519757.1	4262637	21.6	56.31		1.99	1,2
HWY101_9	HWY 101	519756.8	4262636.9	44.93	8.73E-06	2.52	2.14	519776.2	4262589	21.6	51.68		1.99	1,2

1. Vehicle height, release height, and initial vertical dimension is a weighted average based on the fleet population and heights for non-trucks and trucks pulled from the CEQA Air Quality Guidelines Appendix E (see Table B-3): Recommended Methods for Screening and Modeling Local Risks and Hazards (Page 91). Accessed in September 2024: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-e-recommended-methods-for-screening-and-modeling-local-risks-and-hazards_final-pdf.pdf?rev=b8917a27345a4a629fc18fc8650951e4&sc_lang=en

2. Total width is based on the CEQA Air Quality Guidelines (Page 85) as follows:

Route	Road Type	Road Width per Lane (m)	Number of Lanes	Total Road Width (m)
Old Redwood Highway	Arterial	3	2	6
Shiloh Road	Local	2.7	2	5.4
HWY 101	Freeway	3.6	6	21.6

Table B-3 - Model Parameters - Vehicle Dimensions

Vehicle Type	EMFAC Vehicle Category	Percentage of Total Trips ¹	Truck or Non-Trucks?	Height	Initial Vertical Dimension	Release Height	Weighted Height	Weighted Initial Vertical Dimension	Weighted Release Height	Notes
				(m)	(m)	m	(m)	(m)	(m)	
Light-Duty Auto	LDA	56.70%	Non-Truck	1.53	1.21	1.3	8.67E-01	6.86E-01	7.37E-01	1,2
Light-Duty Truck Type 2	LDT2	16.64%	Truck	4	3.16	3.4	6.65E-01	5.26E-01	5.66E-01	1,2
Medium Duty Vehicles	MDV	11.69%	Truck	4	3.16	3.4	4.68E-01	3.69E-01	3.97E-01	1,2
Light-Duty Truck Type 1	LDT1	5.53%	Truck	4	3.16	3.4	2.21E-01	1.75E-01	1.88E-01	1,2
Light-Heavy Duty Truck	LHD1	3.03%	Truck	4	3.16	3.4	1.21E-01	9.58E-02	1.03E-01	1,2
Motorcycle	MCY	2.78%	Non-Truck	1.53	1.21	1.3	4.25E-02	3.36E-02	3.61E-02	1,2
Medium Heavy Duty Truck	T6 Public Class	1.54%	Truck	4	3.16	3.4	6.16E-02	4.86E-02	5.23E-02	1,2
Light-Heavy Duty Truck	LHD2	0.79%	Truck	4	3.16	3.4	3.15E-02	2.49E-02	2.68E-02	1,2
Heavy-Heavy Duty Truck	T7 Public Class	0.66%	Truck	4	3.16	3.4	2.65E-02	2.10E-02	2.26E-02	1,2
Motor Home	MH	0.36%	Non-Truck	1.53	1.21	1.3	5.48E-03	4.33E-03	4.65E-03	1,2
School Bus	SBUS	0.15%	Non-Truck	1.53	1.21	1.3	2.31E-03	1.83E-03	1.96E-03	1,2
Other Bus	OBUS	0.11%	Non-Truck	1.53	1.21	1.3	1.66E-03	1.32E-03	1.41E-03	1,2
Urban Bus	UBUS	0.03%	Non-Truck	1.53	1.21	1.3	4.30E-04	3.40E-04	3.65E-04	1,2
Weighted Average:							2.52	1.99	2.14	

1. Percentage of total trips per Table 4.4 Fleet Mix from Alternative A CalEEMod Output found on pg. 56/624 of Koi Nation Shiloh Resort DEIS Appendix F-H. Accessed online September 2024: https://www.shilohresortenvironmental.com/wp-content/uploads/2024/07/4_Koi-Nation-Shiloh-Casino-DEIS-App-F-H.pdf

2. Vehicle height, release height and initial vertical dimension for non-trucks and trucks pulled from the CEQA Air Quality Guidelines Appendix E: Recommended Methods for Screening and Modeling Local Risks and Hazards (Page 91 and 92). Accessed in September 2024: https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-e-recommended-methods-for-screening-and-modeling-local-risks-and-hazards_final-pdf.pdf?rev=b8917a27345a4a629fc18fc8650951e4&sc_lang=en

Vehicle Type	Height (m)	Initial Vertical Dimension (m)	Release Height (m)
Non-Truck	1.53	1.21	1.3
Truck	4	3.16	3.4

Table B-4. Model Parameters - Building Inputs

Model ID	Description	X Coordinate	Y Coordinate	Elevation	Height	X Length	Y Length
		m	m	m	m	(m)	(m)
B1	Main Building	519581.1	4264093.4	44.37	19.81	--	--
B2	Lobby Area	519739.1	4264024.5	44.9	19.81	--	--
B3	Parking Garage	519962.6	4263928.5	44.54	18.29	--	--
B4	Packaged Wastewater Treatment System	519998.32	4263931.98	44.97	6.00	28	34
B5	Water Treatment and Operations Building	520011.89	4263958.8	45.83	6.00	18	23
POD1	Pod for GEN1	519634.3	4263925.7	43.03	4.14	13.6	3.6
POD2	Pod for GEN2	519641.3	4263922.4	42.99	4.14	13.6	3.6
POD3	Pod for GEN3	519647.5	4263919.3	42.97	4.14	13.6	3.6
POD4	Pod for GEN4	519654.4	4263916	43.04	4.14	13.6	3.6
POD5	Pod for GEN5	519660.6	4263912.5	43.17	4.14	13.6	3.6
POD6	Pod for GEN6	520003.9	4263937.4	45.2	3.35	2.616	6.35
B7	1.0 MG Potable Water Tank	520028.56	4264003.96	46.48	9.75	11.4	11.4
B8	7.5 MG Recycled Water Tank	520013.21	4263862.95	43.94	9.75	23	23
B9	7.5 MG Recycled Water Tank	519968.82	4263831.72	43.48	9.75	23	23

APPENDIX C. FIGURES

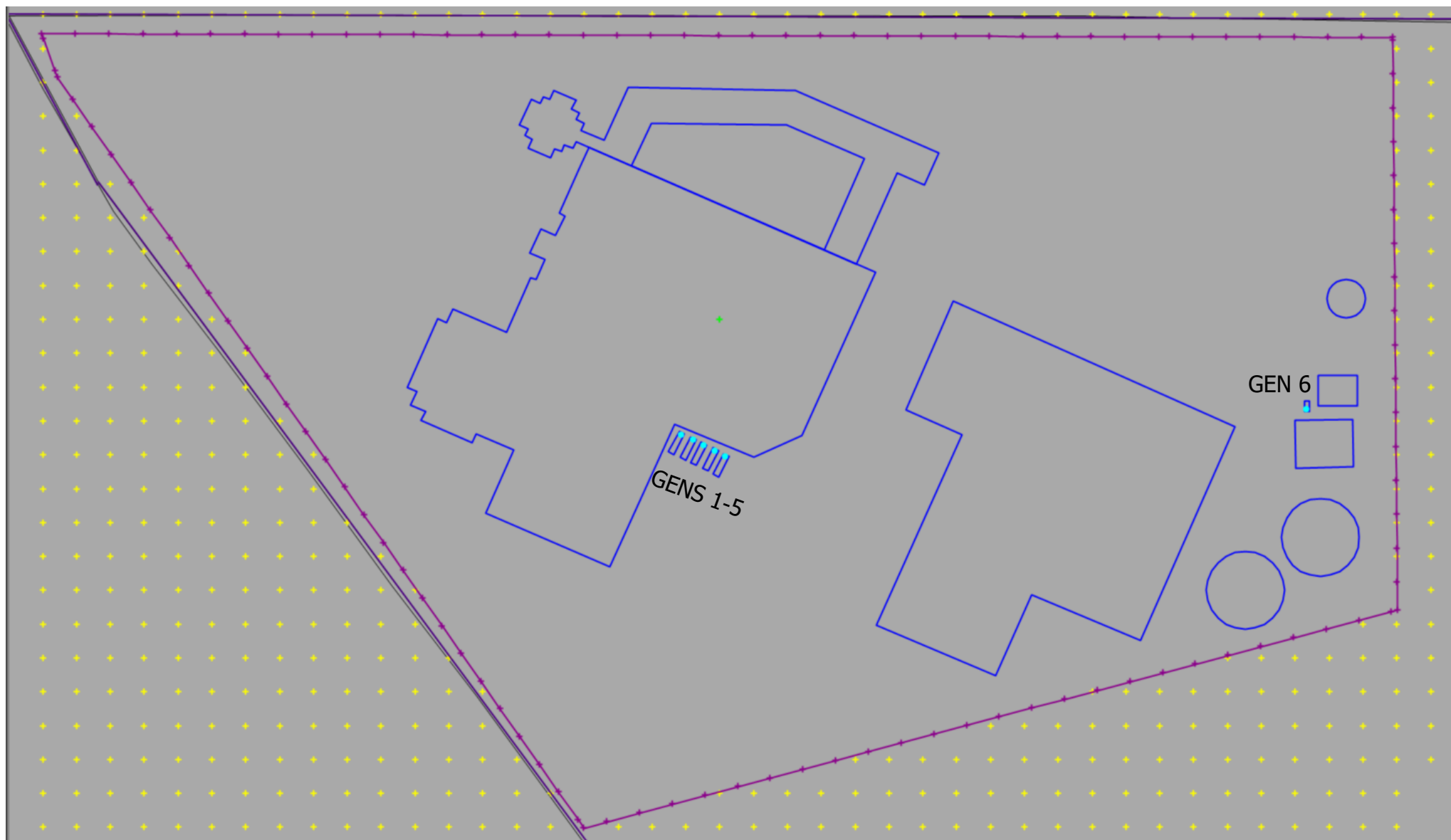


Figure C-1. AERMOD: Stationary Sources and On-site Buildings



Figure C-2. AERMOD: Mobile Sources

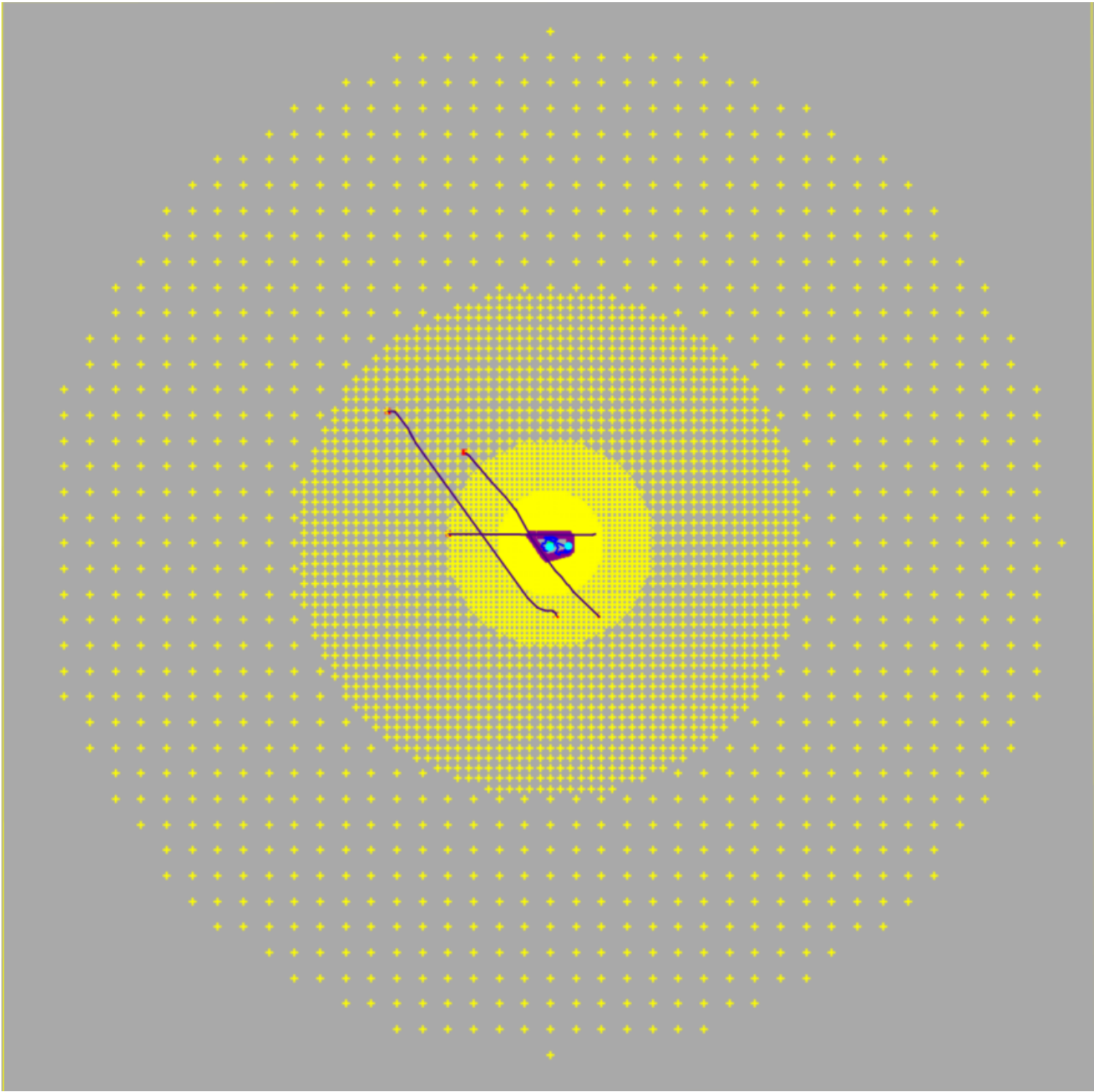


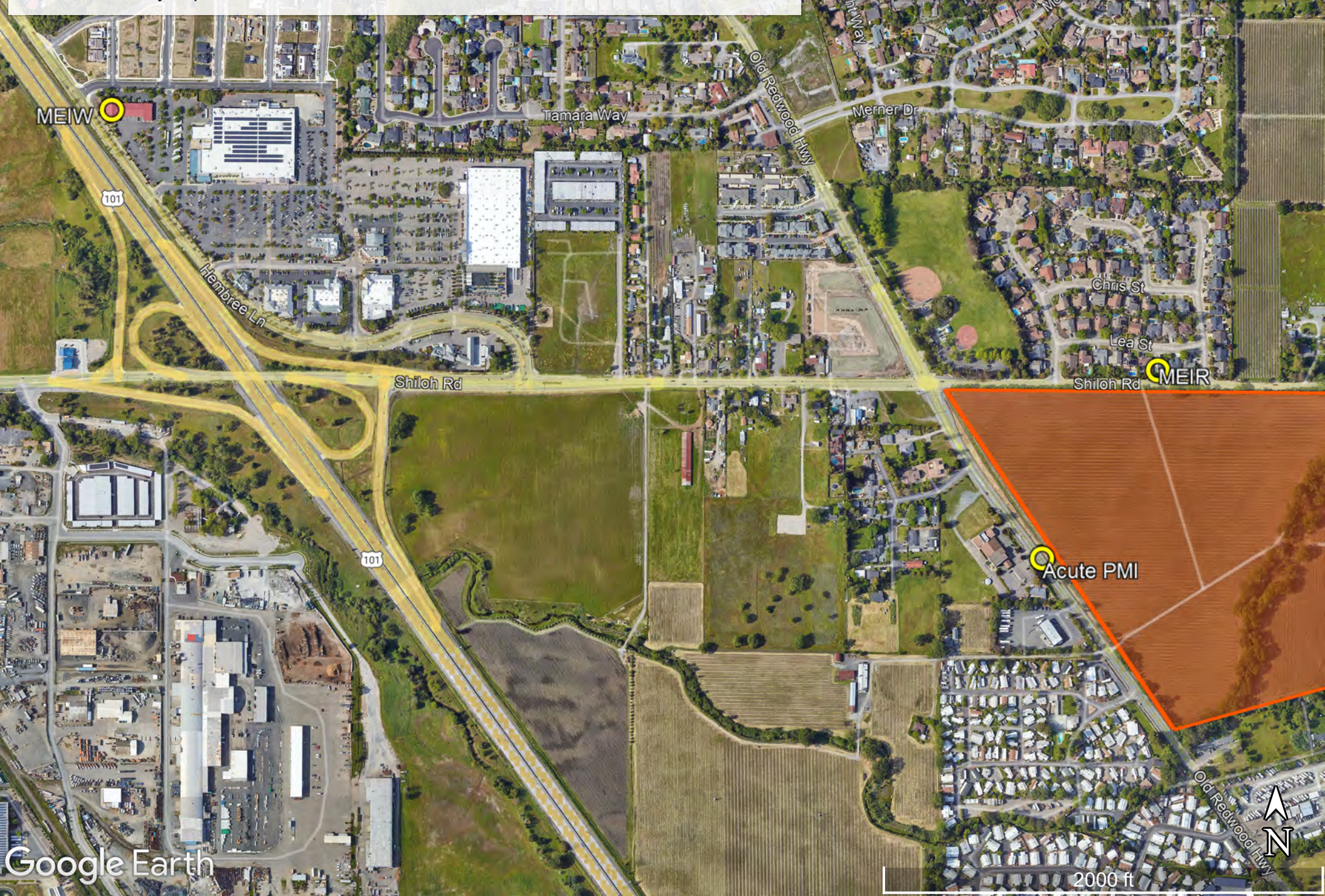
Figure C-3. AERMOD: Receptor Grid

Figure F-3.1: Maximally-Exposed Receptor Locations

Acute PMI - Acute Point of Maximum Impact
MEIR - Maximally-Exposed Individual Resident
MEIW - Maximally-Exposed Individual Worker

Legend

- Koi Nation Shiloh Resort and Casino Project Site
- Maximally-Exposed Receptors



Appendix F-4
Final General Conformity Determination

Final General Conformity Determination

Koi Nation Fee-to-Trust and Shiloh Resort and Casino Project

October 2024

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Appendix A – AERSCREEN output files

Koi Nation Fee-to-Trust and Shiloh Resort and Casino Project

Final General Conformity Determination

1. Introduction

The Koi Nation of Northern California's (Koi Nation; Tribe) has submitted a fee-to-trust application to the Bureau of Indian Affairs (BIA), requesting that the U.S. Department of Interior take a 68.6-acre property (project site) in Sonoma County, California into federal trust status. The BIA is the federal agency charged with reviewing and approving tribal applications to take land into federal trust status (Federal Action).

The project site is located in an unincorporated portion of the County adjacent to the Town of Windsor. Regional access to the project site is provided by Highway 101, which runs in a general north-south direction and is located approximately 0.5 miles west of the project site. Local access to the project site is provided by Shiloh Road and Old Redwood Highway.

Following the acquisition of the project site into federal trust, the Tribe proposes to develop a resort facility that includes a casino, hotel, ballroom/meeting space, event center, spa, and associated parking and infrastructure on the project site (Proposed Project). The Proposed Project is referred to as the Shiloh Resort and Casino Project

An Environmental Assessment (EA) has been prepared pursuant to the National Environmental Policy Act (NEPA) to assess the environmental impacts resulting from the Proposed Project. The EA addresses three build alternatives:

Alternative A – Proposed Project

Alternative B – Reduced Intensity Alternative

Alternative C – Non-Gaming Alternative

A draft general conformity determination was prepared for Alternative A, which proposes the largest development and potential to effect air quality. A notice of availability (NOA) for the EA and the draft general conformity determination was published in The Press Democrat newspaper on September 12, 2023. The EA and draft general conformity determination were originally made available for public comment for a 45-day period, from September 12, 2023 to October 27, 2023. However, the BIA extended the public comment period for an additional 15-day period that concluded on November 13, 2023, resulting in a total comment period of 60 days. No comments were received on the draft general conformity determination.

The BIA reissued the draft general conformity in March 2024 to coincide with the publication of an Environmental Impact Statement (EIS) prepared for the proposed Federal Action. The BIA published a Notice of Intent (NOI) in the Federal Register on March 8, 2024, announcing the intent to prepare an EIS for the proposed Federal Action. The BIA then published a Notice of Availability (NOA) of the Draft EIS and the reissued draft conformity determination on July 8, 2024. The NOA provided a 45-day comment period on the EIS and draft conformity determination. Again, no comments were received on the draft

general conformity determination. It should be noted that the EIS reviewed the same three build alternatives analyzed in the EA. No changes to the build alternatives were identified. This final conformity determination addresses Alternative A of the proposed Federal Action as presented in the EA and EIS. This alternative proposes the largest development and has the greatest potential to affect air quality.

2. General Conformity Regulatory Background

The Clean Air Act (CAA) requires the United States Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants that are common in outdoor air, considered harmful to public health and the environment, and that come from numerous and diverse sources. NAAQS have been developed for carbon monoxide (CO), lead (Pb), coarse and fine particulate matter (PM10 or PM2.5, respectively), sulfur oxides (SOx), and nitrogen dioxide (NO2), ozone (O3) and its precursors, oxides of nitrogen (NOx) and reactive organic gasses (ROGs).

2.1. General Conformity Requirements

Areas of the country that do not meet the NAAQS for any pollutant are designated by the EPA as “nonattainment areas.” Areas that were once designated nonattainment, but are now achieving the NAAQS are termed “maintenance areas.” Areas which have air pollution levels below the NAAQS are termed “attainment areas.” In nonattainment areas, states must develop State Implementation Plans (SIPs) to reduce emissions and bring the area back into attainment of the NAAQS.

The EPA promulgated the General Conformity Rule on November 30, 1993, to implement the conformity provision of Title I, Section 176(c)(1) of the federal Clean Air Act (CAA), which requires that the federal government not engage, support or provide financial assistance for licensing or permitting, or approving any activity not conforming to an approved CAA implementation plan for compliance with the NAAQS. The General Conformity Rule ensures that the actions taken by federal agencies in nonattainment and maintenance areas do not interfere with a state’s plans to meet national standards for air quality. CAA conformity is an issue that may be addressed during the NEPA process, and EPA recommends that the conformity process be coupled with NEPA analysis.

Implementation of the existing General Conformity Regulations falls into three phases: applicability analysis, conformity determination, and review process. Only actions which cause emissions in designated nonattainment and maintenance areas are subject to the regulations. In addition, the regulations recognize that the vast majority of federal actions do not result in a significant increase in emissions and, therefore, include a number of exemptions, the most predominantly implemented of which is the de minimis emission levels based on the type and severity of the nonattainment problem. If the action will cause emissions above the de minimis levels in any nonattainment or maintenance area and the action is not otherwise exempt, “presumed to conform,” or included in the existing emissions budget of the SIP, the agency must conduct a conformity determination before it takes the action.

40 CFR Sections 93.158 and 93.159 provide the criteria and procedures, respectively, for determining conformity of general Federal actions. For CO, total direct and indirect emissions from the action must be shown by air quality modeling to not cause or contribute to any new violation of any standard or increase the frequency or severity of any existing violation of any standard. The total direct and indirect emissions from the action must be in compliance with all relevant requirements in the applicable SIP.

The applicable SIP is the California State Implementation Plan for Carbon Monoxide, which was most recently updated in 2004. The California Air Resources Control Board (CARB) is the state agency responsible for achieving compliance with the NAAQS. CARB's emission control programs, including strict motor vehicle emission standards and the clean fuels program, have reduced CO emissions dramatically. Ten of the eleven areas of the state originally listed by the EPA in 1991 as non-attainment area have been in attainment with the National CO standards since the mid-1990s, including the San Francisco-Oakland-San Jose Area, which includes the project site. While vehicle miles traveled (VMT) have increased, CO emissions have fallen sharply as the result of CARB's mobile source, clean fuel and stationary source regulations.

As public bodies, federal agencies must make their conformity determinations through a public process. The General Conformity Regulations require federal agencies to provide notice of the draft determination to the applicable EPA Regional Office, the state and local air quality agencies, the local MPO and, where applicable, the Federal Land Manager. In addition, the regulations require federal agencies to provide at least a 30-day comment period on the draft determination and make the final determination public.

2.2. General Conformity Applicability

For the Proposed Action, on-road vehicle trips within the BAAQMD jurisdiction would be subject to the following federal General Conformity Rule de minimis thresholds:

- 100 tons per year VOC or ROG

- 100 tons per year NO_x

- 100 tons per year CO

- 100 tons per year PM_{2.5}

- 100 tons per year PM₁₀

As detailed in the EA for the Project Alternatives, associated emissions of ROG, NO_x, PM₁₀, and PM_{2.5} within the BAAQMD jurisdiction would be below the respective General Conformity Rule de minimis thresholds. However, for Alternatives A and B, CO was determined to exceed the 100 ton per year de minimis threshold in the BAAQMD jurisdiction, and as such, is analyzed in greater detail below.

3. Assessment of Conformity Emissions

When the EPA upgraded the CO status of the 10 California areas from moderate non-attainment to maintenance, a revision to the SIP was needed. In 2004, CARB submitted to the EPA a revision to the SIP, and included a Maintenance Plan, in the *Revision to the California State Implementation Plan for Carbon Monoxide, Updated Maintenance Plan for Ten Federal Planning Areas* (CARB, 2004). The Maintenance Plan outlines how the SFBAAB will continue to comply with the NAAQS. CO emission sources resulting from the Proposed Action in the BAAQMD jurisdiction would be primarily indirect emissions from on-road vehicles – patrons, employees, delivery trucks, and buses.

As described in Section 2.1 above, conformity can be shown by conducting air quality modeling that demonstrates that the emissions will not cause or contribute to new violations of the standards or increase the frequency or severity of any existing violations of the standards. Air modeling analysis was

performed concurrently for the EA and this general conformity determination. The results of this analysis are summarized below with model outputs included in **Appendix A**.

4. CO General Conformity Determination

Air quality modeling was performed for the EA and the general conformity determination concurrently. The results of this analysis can be found in the EA, in Section 3.4. The air quality modeling estimated that Alternative A would generate approximately 263 tons/year of CO, of which 255 tons/year are associated with mobile emissions. By comparison, Alternative B would generate approximately 213 tons/year of CO, of which 207 tons/year are associated with mobile emissions. CO emissions of Alternative C were modeled to fall below the de minimis threshold of 100 tons per year.

Because CO emissions would exceed the de minimis levels, CO concentrations were modeled to determine whether increased traffic associated with the Proposed Project would result in CO emissions that could exceed the NAAQS. CO concentrations at one representative intersection were modeled using AERSCREEN, the screening version of AERMOD. AERSCREEN is the EPA's recommended screening model for most applications, including addressing compliance with CO NAAQS. Likewise, AERMOD is EPA's preferred near-field dispersion modeling system (EPA, 2017).

Mobile emissions rates were sourced from CARB's EMFAC project-level web tool, and reflect 2028 emission rates (proposed opening year) (CARB, 2022). Fleet mix estimates were sourced from the EPA-approved 2020 California Emissions Estimator Model, Version 2020.4.0 (CalEEMod). Intersection level of service (LOS), peak-hour vehicle volumes and queuing lengths were sourced from the Traffic Impact Study (TIS) prepared by TJKM and included the EA. The 2040 condition traffic scenario was used to provide the most conservative estimate of traffic volumes. The intersection of Shiloh Road and the US 101 north-bound off-ramp was chosen to provide a conservative estimate of potential CO concentrations. Of the intersections analyzed in the TIS, this intersection has relatively high traffic volumes, low LOS, and long queue lengths. This intersection is also near US 101, an adjacent source of CO emissions. CO emissions from US 101 were also modeled to provide a conservative estimate of potential maximum CO emissions. Project trips were added to project 2040 US 101 peak hour volumes. An estimate of background CO levels in the area is based on monitoring data from Sebastopol and provided through EPA's AirData Air Quality Monitors website (EPA, 2022). The representative background level selected is 1.2 ppm (1 hour average) from January 2019. This data point was selected as it represents peak CO emissions during winter when mobile CO emissions are higher. Higher CO emissions have been recorded in summer and fall months but are influenced by wildfires. The 2019 data also captures higher pre-COVID19 pandemic traffic volumes than other more recent data. A persistence factor of 0.7 is used to convert 1-hour concentrations to 8-hour concentrations, consistent with EPA guidelines (EPA, 1992).

Table 1 summarizes the results of the AERSCREEN dispersion modeling conducted for Alternative A of the Proposed Action. Alternative B of the Proposed Action would generate less traffic and mobile emissions and was not modeled. Alternative A represents the maximum potential emissions from the Proposed Action.

Table 1: Estimated Maximum Carbon Monoxide Concentrations – Proposed Action Alternative A

	Concentrations (ppm)						
Averaging Time (hours)	Shiloh Road/US 101 NB Off-Ramp Intersection No Action	Shiloh Road/US 101 NB Off-Ramp Intersection with Alternative A	Project Contribution	Background	US 101 Contribution	Maximum Concentration	NAAQS
1	0.6	0.8	0.2	1.2	3.9	5.9	35
8	0.4	0.6	0.2	0.9	2.7	4.2	9

Notes: Modeled location is the intersection of Shiloh Road and northbound US 101 off-ramp based on 2040 traffic volumes and 2028 EMFAC emission factors. Highest concentrations for intersection and US 101 are combined to provide maximum concentrations.

The Proposed Action would not cause or contribute to violations of the NAAQS as discussed above; therefore, the Proposed Action conforms to the Maintenance Plan and SIP and is consistent with conformity determination criteria.

5. Conclusion

Based on the information and analysis presented above, approval of the Proposed Action would conform to the SIP and CO Maintenance Plan implemented pursuant to the CAA. Modeling of CO shows that the Proposed Action would not cause or contribute to new violations of the standards, or increase the frequency or severity of any existing violations of the standards. 40 CFR 93.158(a)(4)(i), (b) and (c).

6. References

California Air Resources Board (CARB), 2004. *Revision to the California State Implementation Plan for Carbon Monoxide, Updated Maintenance Plan for Ten Federal Planning Areas*. Adopted by CARB July 22, 2004.

CARB, 2022. EMFAC project-level web tool. Available at: <https://arb.ca.gov/emfac/project-analysis>

United States Environmental Protection Agency (EPA), 1992. Guideline for Modeling Carbon Monoxide from Roadway Intersections.

EPA, 2017. Revisions to the Guideline on Air Quality Models: Enhancements to the AERMOD Dispersion Modeling System and Incorporation of Approaches to Address Ozone and Fine Particulate Matter. Federal Register, Vol. 82, No. 10, January 17, 2017.

EPA, 2022. EPA AirData Air Quality Monitors application. Available at: <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=5f239fd3e72f424f98ef3d5def547eb5&extent=-146.2334,13.1913,-46.3896,56.5319>

Start date and time 11/10/22 23:13:12
AERSCREEN 21112

Koi_Int_2040_NP

Koi_Int_2040_NP

```
----- DATA ENTRY VALIDATION -----  
METRIC                                ENGLISH  
** AREADATA ** -----  
  
Emission Rate:      0.6500 g/s          5.159 lb/hr  
Area Height:        0.50 meters         1.64 feet  
Area Source Length: 200.00 meters       656.17 feet  
Area Source Width:  200.00 meters       656.17 feet  
Vertical Dimension: 4.00 meters         13.12 feet  
Model Mode:         URBAN  
Population:         26039  
Dist to Ambient Air:      3.0 meters     10. feet
```

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations
Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 1000. meters 3281. feet

No flagpole receptors

No discrete receptors used

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 270.0 / 316.0 K 26.3 / 109.1 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity (u*): not adjusted

DEBUG OPTION ON

AERSCREEN output file:
Koi_Int_2040_NP.out

*** AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season	Albedo	Bo	zo
Winter	0.35	1.50	1.000
Spring	0.14	1.00	1.000
Summer	0.16	2.00	1.000
Autumn	0.18	2.00	1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR started 11/10/22 23:16:31

Running AERMOD
Processing Winter

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 0

```
***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 5

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 15

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 20

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 25

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 30

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 8
```


AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 35

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 9
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 40

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 10
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 45

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 11
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 50

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Running AERMOD
Processing Spring
```

Processing surface roughness sector 1

```
*****
Processing wind flow sector 1
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 2
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 5

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 3
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 4
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 5
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 20

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 6
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 7
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 30

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 8
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 35

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 9
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 40

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
```

Processing wind flow sector 10

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 45

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 11

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 50

```
***** WARNING MESSAGES *****
*** NONE ***
```

Running AERMOD
Processing Summer

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 0

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 5

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 10

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 15

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 20

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 25

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 30

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 35

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 40

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 10

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 45

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 11

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 50

```
***** WARNING MESSAGES *****
*** NONE ***
```

Running AERMOD
Processing Autumn

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 5

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 15

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 20

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 25

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 30

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 35

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 40

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 10

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 45

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 11

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 50

***** WARNING MESSAGES *****
*** NONE ***

FLOWSECTOR ended 11/10/22 23:16:45

REFINE started 11/10/22 23:16:45

AERMOD Finishes Successfully for REFINE stage 3 Winter sector 0

***** WARNING MESSAGES *****
*** NONE ***

REFINE ended 11/10/22 23:16:46

AERSCREEN Finished Successfully

With no errors or warnings
Check log file for details

Ending date and time 11/10/22 23:16:47

Koi_Int_2040_No Project

Concentration	Distance	Elevation	Diag	Season/Month	Zo sector	Date	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	HT	REF TA	HT
5.10E+02	3	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
5.45E+02	25	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
5.81E+02	50.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
6.13E+02	75	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
6.43E+02	100	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
6.71E+02	125	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
* 0.69477E+03	141	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
6.06E+02	150.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.65E+02	174.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.91E+02	200	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.43E+02	225	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.07E+02	250	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.80E+02	274.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.57E+02	300	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.38E+02	325	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.22E+02	350	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.08E+02	375.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.96E+02	400	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.84E+02	425	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.74E+02	450	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.65E+02	475.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.57E+02	500	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.50E+02	525	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.43E+02	550	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.37E+02	575.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.31E+02	599.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.26E+02	625	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.21E+02	650	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.17E+02	675	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.13E+02	699.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.09E+02	725	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.05E+02	750	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.02E+02	775	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
9.85E+01	800.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
9.54E+01	825	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
9.25E+01	850	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.97E+01	875	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.71E+01	900.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.47E+01	924.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.23E+01	950	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.00E+01	975	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
7.79E+01	1000	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2

Start date and time 11/10/22 22:53:29
AERSCREEN 21112

Koi_Int_2040_A

Koi_Int_2040_A

```
----- DATA ENTRY VALIDATION -----  
METRIC                                ENGLISH  
** AREADATA ** -----  
  
Emission Rate:      0.8700 g/s          6.905 lb/hr  
Area Height:        0.50 meters         1.64 feet  
Area Source Length: 200.00 meters       656.17 feet  
Area Source Width:  200.00 meters       656.17 feet  
Vertical Dimension: 4.00 meters         13.12 feet  
Model Mode:         URBAN  
Population:         26039  
Dist to Ambient Air:      3.0 meters     10. feet
```

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations
Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 1000. meters 3281. feet

No flagpole receptors

No discrete receptors used

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 270.0 / 316.0 K 26.3 / 109.1 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity (u*): not adjusted

DEBUG OPTION ON

AERSCREEN output file:
Koi_Int_2040_A.out

*** AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season	Albedo	Bo	zo
Winter	0.35	1.50	1.000
Spring	0.14	1.00	1.000
Summer	0.16	2.00	1.000
Autumn	0.18	2.00	1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR started 11/10/22 22:58:37

Running AERMOD
Processing Winter

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 0

```

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 5

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 15

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 20

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 25

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 30

***** WARNING MESSAGES *****
*** NONE ***

*****
Processing wind flow sector 8

```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 35

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 9
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 40

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 10
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 45

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 11
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 50

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Running AERMOD
Processing Spring
```

Processing surface roughness sector 1

```
*****
Processing wind flow sector 1
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 2
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 5

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 3
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 4
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 5
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 20

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 6
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 7
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 30

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 8
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 35

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
Processing wind flow sector 9
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 40

```
***** WARNING MESSAGES *****
*** NONE ***
```

```
*****
```

Processing wind flow sector 10

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 45

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 11

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 50

```
***** WARNING MESSAGES *****
*** NONE ***
```

Running AERMOD
Processing Summer

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 0

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 5

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 10

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 15

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 20

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 25

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 30

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 35

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 40

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 10

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 45

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 11

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 50

```
***** WARNING MESSAGES *****
*** NONE ***
```

Running AERMOD
Processing Autumn

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 5

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 15

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 20

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 25

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 30

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 35

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 40

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 10

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 45

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 11

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 50

***** WARNING MESSAGES *****
*** NONE ***

FLOWSECTOR ended 11/10/22 22:58:50

REFINE started 11/10/22 22:58:50

AERMOD Finishes Successfully for REFINE stage 3 Winter sector 0

***** WARNING MESSAGES *****
*** NONE ***

REFINE ended 11/10/22 22:58:52

AERSCREEN Finished Successfully

With no errors or warnings
Check log file for details

Ending date and time 11/10/22 22:58:52

Koi_Int_2040_A

Concentration	Distance	Elevation	Diag	Season/Month	So sector	Date	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	HT	REF TA	HT
6.83E+02	3	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
7.30E+02	25	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
7.77E+02	50.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.21E+02	75	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.61E+02	100	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.98E+02	125	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
* 0.92992E+03	141	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.11E+02	150.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
6.22E+02	174.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
5.24E+02	200	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.59E+02	225	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.11E+02	250	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.74E+02	274.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.44E+02	300	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.19E+02	325	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.97E+02	350	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.79E+02	375.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.62E+02	400	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.46E+02	425	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.33E+02	450	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.21E+02	475.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.10E+02	500	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.00E+02	525	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.92E+02	550	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.83E+02	575.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.76E+02	599.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.69E+02	625	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.63E+02	650	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.57E+02	675	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.51E+02	699.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.46E+02	725	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.41E+02	750	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.36E+02	775	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.32E+02	800.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.28E+02	825	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.24E+02	850	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.20E+02	875	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.17E+02	900.01	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.13E+02	924.99	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.10E+02	950	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.07E+02	975	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.04E+02	1000	0	45	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2

Start date and time 11/11/22 05:34:50
AERSCREEN 21112

KOI_101_2040

```
----- DATA ENTRY VALIDATION -----
              METRIC              ENGLISH
** AREADATA ** -----
Emission Rate:      1.6100 g/s          12.778 lb/hr
Area Height:        0.50 meters         1.64 feet
Area Source Length: 400.00 meters       1312.34 feet
Area Source Width:  36.00 meters        118.11 feet
Vertical Dimension: 4.00 meters         13.12 feet
Model Mode:         URBAN
Population:          26039
Dist to Ambient Air:      3.0 meters      10. feet
```

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations
Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 1000. meters 3281. feet

No flagpole receptors

No discrete receptors used

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 270.0 / 316.0 K 26.3 / 109.1 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity (u*): not adjusted

DEBUG OPTION ON

AERSCREEN output file:
KOI_101_2040.OUT

*** AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

SURFACE CHARACTERISTICS & MAKEMET
Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season	Albedo	Bo	zo
Winter	0.35	1.50	1.000
Spring	0.14	1.00	1.000
Summer	0.16	2.00	1.000
Autumn	0.18	2.00	1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR started 11/11/22 05:35:38

Running AERMOD
Processing Winter

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 0

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 5

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

***** WARNING MESSAGES *****
*** NONE ***

Running AERMOD
Processing Spring

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 5

***** WARNING MESSAGES *****
*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

***** WARNING MESSAGES *****
*** NONE ***

Running AERMOD
Processing Summer

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 0

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 5

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 10

```
***** WARNING MESSAGES *****
*** NONE ***
```

Running AERMOD
Processing Autumn

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 5

```
***** WARNING MESSAGES *****
*** NONE ***
```

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

```
***** WARNING MESSAGES *****
*** NONE ***
```

FLOWSECTOR ended 11/11/22 05:35:45

REFINE started 11/11/22 05:35:45

AERMOD Finishes Successfully for REFINE stage 3 Winter sector 0

***** WARNING MESSAGES *****
 *** NONE ***

REFINE ended 11/11/22 05:35:47

AERSCREEN Finished Successfully
With no errors or warnings
Check log file for details

Ending date and time 11/11/22 05:35:48

Koi_101_2040

Concentration	Distance	Elevation	Diag	Season/Month	Zo sector	Date	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	ZO	BOWEN	ALBEDO	REF WS	HT	REF TA	HT
3.79E+03	3	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.90E+03	25	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.01E+03	50	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.10E+03	75	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.17E+03	100	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.25E+03	125	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.32E+03	150	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.38E+03	175	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.43E+03	200	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
* 0.44346E+04	201	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.11E+03	225	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.40E+03	250	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.95E+03	275	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.57E+03	300	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.37E+03	325	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.21E+03	350	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
1.08E+03	375	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
9.75E+02	400	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.86E+02	425	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
8.11E+02	450	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
7.46E+02	475	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
6.91E+02	500	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
6.42E+02	525	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
5.99E+02	550	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
5.61E+02	575	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
5.27E+02	600	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.97E+02	625	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.69E+02	650	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.44E+02	675	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.21E+02	700	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
4.00E+02	725	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.81E+02	750	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.64E+02	775	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.48E+02	800	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.33E+02	825	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.19E+02	850	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
3.07E+02	875	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.95E+02	900	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.83E+02	925	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.73E+02	950	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.63E+02	975	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2
2.54E+02	1000	0	0	Winter	0-360	10011001	-1.31	0.043	-9	0.02	-999	21	6.1	1	1.5	0.35	0.5	10	316	2