Maverik Manteca - San Joaquin County, Annual

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

Maverik Manteca

San Joaquin County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Convenience Market with Gas Pumps	6.10	1000sqft	0.14	6,100.00	0
Fast Food Restaurant with Drive Thru	8.95	1000sqft	0.21	8,950.00	0
Supermarket	55.00	1000sqft	1.26	55,000.00	0
Automobile Care Center	2.00	1000sqft	0.05	2,000.00	0
Hotel	125.00	Room	4.17	181,500.00	0
Regional Shopping Center	32.70	1000sqft	0.75	32,700.00	0
Parking Lot	664.00	Space	5.98	265,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	51
Climate Zone	2			**Operational Year**	2023
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 -

Construction Phase - Per construction timeline

Off-road Equipment - Anticipated Construction equipment

Grading -

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Maverik Manteca - San Joaquin County, Annual

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

Demolition -

Vehicle Trips - Per Trip Generation table

Construction Off-road Equipment Mitigation - Per SJVAPCD regulations

Water Mitigation -

Waste Mitigation - Per AB 939

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	85.00
tblConstructionPhase	NumDays	300.00	280.00
tblConstructionPhase	PhaseEndDate	2/9/2024	12/29/2023
tblConstructionPhase	PhaseEndDate	12/15/2023	11/17/2023
tblConstructionPhase	PhaseEndDate	1/12/2024	12/15/2023
tblConstructionPhase	PhaseStartDate	1/13/2024	9/4/2023
tblConstructionPhase	PhaseStartDate	12/16/2023	11/20/2023
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblVehicleTrips	ST_TR	23.72	62.55
tblVehicleTrips	ST_TR	624.20	288.74
tblVehicleTrips	ST_TR	616.12	213.49
tblVehicleTrips	ST_TR	8.19	7.20
tblVehicleTrips	ST_TR	46.12	49.02
tblVehicleTrips	ST_TR	177.62	84.45
tblVehicleTrips	SU_TR	11.88	62.55
tblVehicleTrips	SU_TR	624.20	588.74
tblVehicleTrips	SU_TR	472.58	213.49
tblVehicleTrips	SU_TR	5.95	7.20

Maverik Manteca - San Joaquin County, Annual

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

tblVehicleTrips	SU_TR	21.10	49.02
tblVehicleTrips	SU_TR	166.47	84.45
tblVehicleTrips	WD_TR	23.72	62.55
tblVehicleTrips	WD_TR	624.20	288.74
tblVehicleTrips	WD_TR	470.95	213.49
tblVehicleTrips	WD_TR	8.36	7.20
tblVehicleTrips	WD_TR	37.75	49.02
tblVehicleTrips	WD_TR	106.78	84.45

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1697	1.6129	1.3621	3.1900e-003	0.3092	0.0694	0.3786	0.1237	0.0644	0.1881	0.0000	284.4451	284.4451	0.0597	8.0700e-003	288.3447
2023	2.3437	2.3224	2.8540	7.4100e-003	0.2878	0.0926	0.3804	0.0781	0.0872	0.1653	0.0000	671.4668	671.4668	0.0768	0.0351	683.8452
Maximum	**2.3437**	**2.3224**	**2.8540**	**7.4100e-003**	**0.3092**	**0.0926**	**0.3804**	**0.1237**	**0.0872**	**0.1881**	**0.0000**	**671.4668**	**671.4668**	**0.0768**	**0.0351**	**683.8452**

Mitigated Construction

Maverik Manteca - San Joaquin County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1697	1.6129	1.3621	3.1900e-003	0.1656	0.0694	0.2349	0.0620	0.0644	0.1264	0.0000	284.4448	284.4448	0.0597	8.0700e-003	288.3445
2023	2.3437	2.3224	2.8540	7.4100e-003	0.2736	0.0926	0.3662	0.0746	0.0872	0.1618	0.0000	671.4664	671.4664	0.0768	0.0351	683.8448
Maximum	**2.3437**	**2.3224**	**2.8540**	**7.4100e-003**	**0.2736**	**0.0926**	**0.3662**	**0.0746**	**0.0872**	**0.1618**	**0.0000**	**671.4664**	**671.4664**	**0.0768**	**0.0351**	**683.8448**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**26.45**	**0.00**	**20.81**	**32.29**	**0.00**	**18.44**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2022	10-31-2022	1.2558	1.2558
2	11-1-2022	1-31-2023	0.7551	0.7551
3	2-1-2023	4-30-2023	0.6730	0.6730
4	5-1-2023	7-31-2023	0.6893	0.6893
5	8-1-2023	9-30-2023	0.9377	0.9377
		Highest	1.2558	1.2558

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					

Maverik Manteca - San Joaquin County, Annual

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Area	1.3404	7.0000e-005	8.2100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0160	0.0160	4.0000e-005	0.0000	0.0170
Energy	0.0452	0.4112	0.3454	2.4700e-003		0.0313	0.0313		0.0313	0.0313	0.0000	833.4926	833.4926	0.0710	0.0158	839.9681
Mobile	4.1306	4.6806	28.5458	0.0509	4.7720	0.0454	4.8174	1.2761	0.0425	1.3186	0.0000	4,749.9324	4,749.9324	0.4090	0.3146	4,853.8978
Waste						0.0000	0.0000		0.0000	0.0000	110.0292	0.0000	110.0292	6.5025	0.0000	272.5927
Water						0.0000	0.0000		0.0000	0.0000	4.9902	8.7208	13.7110	0.5140	0.0123	30.2173
Total	**5.5163**	**5.0918**	**28.8994**	**0.0534**	**4.7720**	**0.0767**	**4.8487**	**1.2761**	**0.0738**	**1.3499**	**115.0194**	**5,592.1617**	**5,707.1811**	**7.4966**	**0.3426**	**5,996.6930**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.3404	7.0000e-005	8.2100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0160	0.0160	4.0000e-005	0.0000	0.0170
Energy	0.0452	0.4112	0.3454	2.4700e-003		0.0313	0.0313		0.0313	0.0313	0.0000	833.4926	833.4926	0.0710	0.0158	839.9681
Mobile	4.1306	4.6806	28.5458	0.0509	4.7720	0.0454	4.8174	1.2761	0.0425	1.3186	0.0000	4,749.9324	4,749.9324	0.4090	0.3146	4,853.8978
Waste						0.0000	0.0000		0.0000	0.0000	55.0146	0.0000	55.0146	3.2513	0.0000	136.2964
Water						0.0000	0.0000		0.0000	0.0000	3.9922	7.0942	11.0864	0.4112	9.8200e-003	24.2926
Total	**5.5163**	**5.0918**	**28.8994**	**0.0534**	**4.7720**	**0.0767**	**4.8487**	**1.2761**	**0.0738**	**1.3499**	**59.0068**	**5,590.5351**	**5,649.5419**	**4.1425**	**0.3402**	**5,854.4719**

Maverik Manteca - San Joaquin County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.70	0.03	1.01	44.74	0.72	2.37

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	8/1/2022	8/26/2022	5	20	
2	Site Preparation	Site Preparation	8/27/2022	9/9/2022	5	10	
3	Grading	Grading	9/10/2022	10/21/2022	5	30	
4	Building Construction	Building Construction	10/22/2022	11/17/2023	5	280	
5	Paving	Paving	11/20/2023	12/15/2023	5	20	
6	Architectural Coating	Architectural Coating	9/4/2023	12/29/2023	5	85	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 105

Acres of Paving: 5.98

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 429,375; Non-Residential Outdoor: 143,125; Striped Parking Area: 15,936

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

Maverik Manteca - San Joaquin County, Annual

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

Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	2	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
Demolition	6	15.00	0.00	10.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	222.00	90.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	44.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Maverik Manteca - San Joaquin County, Annual

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

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1000e-003	0.0000	1.1000e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2572	0.2059	3.9000e-004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
Total	**0.0264**	**0.2572**	**0.2059**	**3.9000e-004**	**1.1000e-003**	**0.0124**	**0.0135**	**1.7000e-004**	**0.0116**	**0.0117**	**0.0000**	**33.9902**	**33.9902**	**9.5500e-003**	**0.0000**	**34.2289**

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	2.0000e-005	7.7000e-004	1.5000e-004	0.0000	9.0000e-005	1.0000e-005	9.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.2958	0.2958	0.0000	5.0000e-005	0.3097
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

Maverik Manteca - San Joaquin County, Annual

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

Worker	4.7000e-004	3.3000e-004	3.7400e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9764	0.9764	3.0000e-005	3.0000e-005	0.9860
Total	**4.9000e-004**	**1.1000e-003**	**3.8900e-003**	**1.0000e-005**	**1.2800e-003**	**2.0000e-005**	**1.2900e-003**	**3.4000e-004**	**2.0000e-005**	**3.5000e-004**	**0.0000**	**1.2722**	**1.2722**	**3.0000e-005**	**8.0000e-005**	**1.2957**

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					4.7000e-004	0.0000	4.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2572	0.2059	3.9000e-004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
Total	**0.0264**	**0.2572**	**0.2059**	**3.9000e-004**	**4.7000e-004**	**0.0124**	**0.0129**	**7.0000e-005**	**0.0116**	**0.0116**	**0.0000**	**33.9902**	**33.9902**	**9.5500e-003**	**0.0000**	**34.2289**

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	2.0000e-005	7.7000e-004	1.5000e-004	0.0000	8.0000e-005	1.0000e-005	9.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.2958	0.2958	0.0000	5.0000e-005	0.3097
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

Maverik Manteca - San Joaquin County, Annual

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

Worker	4.7000e-004	3.3000e-004	3.7400e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1400e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.9764	0.9764	3.0000e-005	3.0000e-005	0.9860
Total	**4.9000e-004**	**1.1000e-003**	**3.8900e-003**	**1.0000e-005**	**1.2100e-003**	**2.0000e-005**	**1.2300e-003**	**3.2000e-004**	**2.0000e-005**	**3.4000e-004**	**0.0000**	**1.2722**	**1.2722**	**3.0000e-005**	**8.0000e-005**	**1.2957**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e-004		8.0600e-003	8.0600e-003		7.4200e-003	7.4200e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	**0.0159**	**0.1654**	**0.0985**	**1.9000e-004**	**0.0983**	**8.0600e-003**	**0.1064**	**0.0505**	**7.4200e-003**	**0.0579**	**0.0000**	**16.7197**	**16.7197**	**5.4100e-003**	**0.0000**	**16.8549**

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

Maverik Manteca - San Joaquin County, Annual

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

Worker	2.8000e-004	2.0000e-004	2.2400e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5859	0.5859	2.0000e-005	2.0000e-005	0.5916
Total	**2.8000e-004**	**2.0000e-004**	**2.2400e-003**	**1.0000e-005**	**7.2000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5859**	**0.5859**	**2.0000e-005**	**2.0000e-005**	**0.5916**

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					0.0420	0.0000	0.0420	0.0216	0.0000	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e-004		8.0600e-003	8.0600e-003		7.4200e-003	7.4200e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	**0.0159**	**0.1654**	**0.0985**	**1.9000e-004**	**0.0420**	**8.0600e-003**	**0.0501**	**0.0216**	**7.4200e-003**	**0.0290**	**0.0000**	**16.7197**	**16.7197**	**5.4100e-003**	**0.0000**	**16.8549**

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

Maverik Manteca - San Joaquin County, Annual

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

Worker	2.8000e-004	2.0000e-004	2.2400e-003	1.0000e-005	6.8000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5859	0.5859	2.0000e-005	2.0000e-005	0.5916
Total	**2.8000e-004**	**2.0000e-004**	**2.2400e-003**	**1.0000e-005**	**6.8000e-004**	**0.0000**	**6.8000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.5859**	**0.5859**	**2.0000e-005**	**2.0000e-005**	**0.5916**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1460	0.0000	0.1460	0.0557	0.0000	0.0557	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0606	0.6615	0.4615	1.0300e-003		0.0270	0.0270		0.0249	0.0249	0.0000	90.5283	90.5283	0.0293	0.0000	91.2602
Total	**0.0606**	**0.6615**	**0.4615**	**1.0300e-003**	**0.1460**	**0.0270**	**0.1730**	**0.0557**	**0.0249**	**0.0805**	**0.0000**	**90.5283**	**90.5283**	**0.0293**	**0.0000**	**91.2602**

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

Maverik Manteca - San Joaquin County, Annual

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

Worker	1.0900e-003	7.6000e-004	8.5900e-003	2.0000e-005	2.7500e-003	1.0000e-005	2.7600e-003	7.3000e-004	1.0000e-005	7.4000e-004	0.0000	2.2458	2.2458	7.0000e-005	7.0000e-005	2.2678
Total	**1.0900e-003**	**7.6000e-004**	**8.5900e-003**	**2.0000e-005**	**2.7500e-003**	**1.0000e-005**	**2.7600e-003**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**0.0000**	**2.2458**	**2.2458**	**7.0000e-005**	**7.0000e-005**	**2.2678**

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					0.0624	0.0000	0.0624	0.0238	0.0000	0.0238	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0606	0.6615	0.4615	1.0300e-003		0.0270	0.0270		0.0249	0.0249	0.0000	90.5282	90.5282	0.0293	0.0000	91.2601
Total	**0.0606**	**0.6615**	**0.4615**	**1.0300e-003**	**0.0624**	**0.0270**	**0.0895**	**0.0238**	**0.0249**	**0.0487**	**0.0000**	**90.5282**	**90.5282**	**0.0293**	**0.0000**	**91.2601**

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

Maverik Manteca - San Joaquin County, Annual

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

Worker	1.0900e-003	7.6000e-004	8.5900e-003	2.0000e-005	2.6100e-003	1.0000e-005	2.6200e-003	7.0000e-004	1.0000e-005	7.1000e-004	0.0000	2.2458	2.2458	7.0000e-005	7.0000e-005	2.2678
Total	**1.0900e-003**	**7.6000e-004**	**8.5900e-003**	**2.0000e-005**	**2.6100e-003**	**1.0000e-005**	**2.6200e-003**	**7.0000e-004**	**1.0000e-005**	**7.1000e-004**	**0.0000**	**2.2458**	**2.2458**	**7.0000e-005**	**7.0000e-005**	**2.2678**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0427	0.3904	0.4091	6.7000e-004		0.0202	0.0202		0.0190	0.0190	0.0000	57.9313	57.9313	0.0139	0.0000	58.2783
Total	**0.0427**	**0.3904**	**0.4091**	**6.7000e-004**		**0.0202**	**0.0202**		**0.0190**	**0.0190**	**0.0000**	**57.9313**	**57.9313**	**0.0139**	**0.0000**	**58.2783**

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	4.7400e-003	0.1241	0.0342	4.7000e-004	0.0149	1.3600e-003	0.0162	4.3000e-003	1.3000e-003	5.6000e-003	0.0000	45.0435	45.0435	3.2000e-004	6.8300e-003	47.0857
Worker	0.0176	0.0122	0.1383	3.9000e-004	0.0442	2.3000e-004	0.0444	0.0118	2.1000e-004	0.0120	0.0000	36.1282	36.1282	1.1800e-003	1.0900e-003	36.4816

Maverik Manteca - San Joaquin County, Annual

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

Total	**0.0223**	**0.1363**	**0.1725**	**8.6000e-004**	**0.0591**	**1.5900e-003**	**0.0607**	**0.0161**	**1.5100e-003**	**0.0176**	**0.0000**	**81.1717**	**81.1717**	**1.5000e-003**	**7.9200e-003**	**83.5674**

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	0.0427	0.3904	0.4091	6.7000e-004		0.0202	0.0202		0.0190	0.0190	0.0000	57.9312	57.9312	0.0139	0.0000	58.2782
Total	**0.0427**	**0.3904**	**0.4091**	**6.7000e-004**		**0.0202**	**0.0202**		**0.0190**	**0.0190**	**0.0000**	**57.9312**	**57.9312**	**0.0139**	**0.0000**	**58.2782**

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	4.7400e-003	0.1241	0.0342	4.7000e-004	0.0142	1.3600e-003	0.0156	4.1400e-003	1.3000e-003	5.4500e-003	0.0000	45.0435	45.0435	3.2000e-004	6.8300e-003	47.0857
Worker	0.0176	0.0122	0.1383	3.9000e-004	0.0419	2.3000e-004	0.0422	0.0112	2.1000e-004	0.0114	0.0000	36.1282	36.1282	1.1800e-003	1.0900e-003	36.4816

Maverik Manteca - San Joaquin County, Annual

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

Total	**0.0223**	**0.1363**	**0.1725**	**8.6000e-004**	**0.0562**	**1.5900e-003**	**0.0578**	**0.0153**	**1.5100e-003**	**0.0169**	**0.0000**	**81.1717**	**81.1717**	**1.5000e-003**	**7.9200e-003**	**83.5674**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1809	1.6543	1.8681	3.1000e-003		0.0805	0.0805		0.0757	0.0757	0.0000	266.5755	266.5755	0.0634	0.0000	268.1608
Total	**0.1809**	**1.6543**	**1.8681**	**3.1000e-003**		**0.0805**	**0.0805**		**0.0757**	**0.0757**	**0.0000**	**266.5755**	**266.5755**	**0.0634**	**0.0000**	**268.1608**

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	0.0109	0.4579	0.1348	2.0800e-003	0.0684	2.9300e-003	0.0713	0.0198	2.8000e-003	0.0226	0.0000	199.4130	199.4130	9.8000e-004	0.0302	208.4215
Worker	0.0742	0.0491	0.5823	1.7400e-003	0.2034	1.0100e-003	0.2044	0.0541	9.3000e-004	0.0550	0.0000	161.7982	161.7982	4.8600e-003	4.5900e-003	163.2868

Maverik Manteca - San Joaquin County, Annual

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

Total	**0.0851**	**0.5070**	**0.7171**	**3.8200e-003**	**0.2718**	**3.9400e-003**	**0.2757**	**0.0738**	**3.7300e-003**	**0.0776**	**0.0000**	**361.2112**	**361.2112**	**5.8400e-003**	**0.0347**	**371.7083**

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	0.1809	1.6543	1.8681	3.1000e-003		0.0805	0.0805		0.0757	0.0757	0.0000	266.5751	266.5751	0.0634	0.0000	268.1605
Total	**0.1809**	**1.6543**	**1.8681**	**3.1000e-003**		**0.0805**	**0.0805**		**0.0757**	**0.0757**	**0.0000**	**266.5751**	**266.5751**	**0.0634**	**0.0000**	**268.1605**

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	0.0109	0.4579	0.1348	2.0800e-003	0.0655	2.9300e-003	0.0684	0.0191	2.8000e-003	0.0219	0.0000	199.4130	199.4130	9.8000e-004	0.0302	208.4215
Worker	0.0742	0.0491	0.5823	1.7400e-003	0.1928	1.0100e-003	0.1938	0.0515	9.3000e-004	0.0524	0.0000	161.7982	161.7982	4.8600e-003	4.5900e-003	163.2868

Maverik Manteca - San Joaquin County, Annual

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

Total	**0.0851**	**0.5070**	**0.7171**	**3.8200e-003**	**0.2583**	**3.9400e-003**	**0.2622**	**0.0705**	**3.7300e-003**	**0.0743**	**0.0000**	**361.2112**	**361.2112**	**5.8400e-003**	**0.0347**	**371.7083**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	7.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0182**	**0.1019**	**0.1458**	**2.3000e-004**		**5.1000e-003**	**5.1000e-003**		**4.6900e-003**	**4.6900e-003**	**0.0000**	**20.0269**	**20.0269**	**6.4800e-003**	**0.0000**	**20.1888**

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	4.4000e-004	2.9000e-004	3.4200e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9506	0.9506	3.0000e-005	3.0000e-005	0.9594

Maverik Manteca - San Joaquin County, Annual

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

Total	**4.4000e-004**	**2.9000e-004**	**3.4200e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9506**	**0.9506**	**3.0000e-005**	**3.0000e-005**	**0.9594**

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	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	7.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0182**	**0.1019**	**0.1458**	**2.3000e-004**		**5.1000e-003**	**5.1000e-003**		**4.6900e-003**	**4.6900e-003**	**0.0000**	**20.0268**	**20.0268**	**6.4800e-003**	**0.0000**	**20.1888**

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	4.4000e-004	2.9000e-004	3.4200e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1400e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.9506	0.9506	3.0000e-005	3.0000e-005	0.9594

Maverik Manteca - San Joaquin County, Annual

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

Total	**4.4000e-004**	**2.9000e-004**	**3.4200e-003**	**1.0000e-005**	**1.1300e-003**	**1.0000e-005**	**1.1400e-003**	**3.0000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**0.9506**	**0.9506**	**3.0000e-005**	**3.0000e-005**	**0.9594**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.0456					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.1500e-003	0.0554	0.0770	1.3000e-004		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	10.8513	10.8513	6.5000e-004	0.0000	10.8676
Total	**2.0537**	**0.0554**	**0.0770**	**1.3000e-004**		**3.0100e-003**	**3.0100e-003**		**3.0100e-003**	**3.0100e-003**	**0.0000**	**10.8513**	**10.8513**	**6.5000e-004**	**0.0000**	**10.8676**

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	5.4300e-003	3.6000e-003	0.0427	1.3000e-004	0.0149	7.0000e-005	0.0150	3.9600e-003	7.0000e-005	4.0300e-003	0.0000	11.8513	11.8513	3.6000e-004	3.4000e-004	11.9603

Maverik Manteca - San Joaquin County, Annual

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

Total	**5.4300e-003**	**3.6000e-003**	**0.0427**	**1.3000e-004**	**0.0149**	**7.0000e-005**	**0.0150**	**3.9600e-003**	**7.0000e-005**	**4.0300e-003**	**0.0000**	**11.8513**	**11.8513**	**3.6000e-004**	**3.4000e-004**	**11.9603**

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	2.0456					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.1500e-003	0.0554	0.0770	1.3000e-004		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	10.8513	10.8513	6.5000e-004	0.0000	10.8676
Total	**2.0537**	**0.0554**	**0.0770**	**1.3000e-004**		**3.0100e-003**	**3.0100e-003**		**3.0100e-003**	**3.0100e-003**	**0.0000**	**10.8513**	**10.8513**	**6.5000e-004**	**0.0000**	**10.8676**

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	5.4300e-003	3.6000e-003	0.0427	1.3000e-004	0.0141	7.0000e-005	0.0142	3.7700e-003	7.0000e-005	3.8400e-003	0.0000	11.8513	11.8513	3.6000e-004	3.4000e-004	11.9603

Maverik Manteca - San Joaquin County, Annual

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

Total	**5.4300e-003**	**3.6000e-003**	**0.0427**	**1.3000e-004**	**0.0141**	**7.0000e-005**	**0.0142**	**3.7700e-003**	**7.0000e-005**	**3.8400e-003**	**0.0000**	**11.8513**	**11.8513**	**3.6000e-004**	**3.4000e-004**	**11.9603**

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	4.1306	4.6806	28.5458	0.0509	4.7720	0.0454	4.8174	1.2761	0.0425	1.3186	0.0000	4,749.9324	4,749.9324	0.4090	0.3146	4,853.8978
Unmitigated	4.1306	4.6806	28.5458	0.0509	4.7720	0.0454	4.8174	1.2761	0.0425	1.3186	0.0000	4,749.9324	4,749.9324	0.4090	0.3146	4,853.8978

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	125.10	125.10	125.10	124,623	124,623
Convenience Market with Gas Pumps	1,761.31	1,761.31	3591.31	1,085,008	1,085,008
Fast Food Restaurant with Drive Thru	1,910.74	1,910.74	1910.74	1,785,248	1,785,248
Hotel	900.00	900.00	900.00	1,709,938	1,709,938
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	1,602.95	1,602.95	1602.95	2,810,467	2,810,467
Supermarket	4,644.75	4,644.75	4644.75	5,283,141	5,283,141

Maverik Manteca - San Joaquin County, Annual

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

Total	10,944.85	10,944.85	12,774.85	12,798,424	12,798,424

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
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00	21	51	28
Convenience Market with Gas P	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive T	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.531667	0.052263	0.168651	0.155495	0.027235	0.006385	0.012362	0.016685	0.000479	0.000329	0.023608	0.001135	0.003707
Convenience Market with Gas Pumps	0.531667	0.052263	0.168651	0.155495	0.027235	0.006385	0.012362	0.016685	0.000479	0.000329	0.023608	0.001135	0.003707
Fast Food Restaurant with Drive Thru	0.531667	0.052263	0.168651	0.155495	0.027235	0.006385	0.012362	0.016685	0.000479	0.000329	0.023608	0.001135	0.003707
Hotel	0.531667	0.052263	0.168651	0.155495	0.027235	0.006385	0.012362	0.016685	0.000479	0.000329	0.023608	0.001135	0.003707
Parking Lot	0.531667	0.052263	0.168651	0.155495	0.027235	0.006385	0.012362	0.016685	0.000479	0.000329	0.023608	0.001135	0.003707
Regional Shopping Center	0.531667	0.052263	0.168651	0.155495	0.027235	0.006385	0.012362	0.016685	0.000479	0.000329	0.023608	0.001135	0.003707
Supermarket	0.531667	0.052263	0.168651	0.155495	0.027235	0.006385	0.012362	0.016685	0.000479	0.000329	0.023608	0.001135	0.003707

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Maverik Manteca - San Joaquin County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	385.8538	385.8538	0.0624	7.5700e-003	389.6692
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	385.8538	385.8538	0.0624	7.5700e-003	389.6692
NaturalGas Mitigated	0.0452	0.4112	0.3454	2.4700e-003		0.0313	0.0313		0.0313	0.0313	0.0000	447.6388	447.6388	8.5800e-003	8.2100e-003	450.2989
NaturalGas Unmitigated	0.0452	0.4112	0.3454	2.4700e-003		0.0313	0.0313		0.0313	0.0313	0.0000	447.6388	447.6388	8.5800e-003	8.2100e-003	450.2989

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	36900	2.0000e-004	1.8100e-003	1.5200e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9691	1.9691	4.0000e-005	4.0000e-005	1.9808
Convenience Market with Gas Pumps	70638	3.8000e-004	3.4600e-003	2.9100e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7695	3.7695	7.0000e-005	7.0000e-005	3.7919
Fast Food Restaurant with Drive Thru	975639	5.2600e-003	0.0478	0.0402	2.9000e-004		3.6300e-003	3.6300e-003		3.6300e-003	3.6300e-003	0.0000	52.0638	52.0638	1.0000e-003	9.5000e-004	52.3732
Hotel	4.80249e+006	0.0259	0.2354	0.1978	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	256.2792	256.2792	4.9100e-003	4.7000e-003	257.8021
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	378666	2.0400e-003	0.0186	0.0156	1.1000e-004		1.4100e-003	1.4100e-003		1.4100e-003	1.4100e-003	0.0000	20.2071	20.2071	3.9000e-004	3.7000e-004	20.3271

Maverik Manteca - San Joaquin County, Annual

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

Supermarket	2.1241e+006	0.0115	0.1041	0.0875	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003	0.0000	113.3501	113.3501	2.1700e-003	2.0800e-003	114.0237
Total		**0.0452**	**0.4112**	**0.3454**	**2.4600e-003**		**0.0312**	**0.0312**		**0.0312**	**0.0312**	**0.0000**	**447.6388**	**447.6388**	**8.5800e-003**	**8.2100e-003**	**450.2989**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	36900	2.0000e-004	1.8100e-003	1.5200e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9691	1.9691	4.0000e-005	4.0000e-005	1.9808
Convenience Market with Gas Pumps	70638	3.8000e-004	3.4600e-003	2.9100e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7695	3.7695	7.0000e-005	7.0000e-005	3.7919
Fast Food Restaurant with Drive Thru	975639	5.2600e-003	0.0478	0.0402	2.9000e-004		3.6300e-003	3.6300e-003		3.6300e-003	3.6300e-003	0.0000	52.0638	52.0638	1.0000e-003	9.5000e-004	52.3732
Hotel	4.80249e+006	0.0259	0.2354	0.1978	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	256.2792	256.2792	4.9100e-003	4.7000e-003	257.8021
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	378666	2.0400e-003	0.0186	0.0156	1.1000e-004		1.4100e-003	1.4100e-003		1.4100e-003	1.4100e-003	0.0000	20.2071	20.2071	3.9000e-004	3.7000e-004	20.3271
Supermarket	2.1241e+006	0.0115	0.1041	0.0875	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003	0.0000	113.3501	113.3501	2.1700e-003	2.0800e-003	114.0237
Total		**0.0452**	**0.4112**	**0.3454**	**2.4600e-003**		**0.0312**	**0.0312**		**0.0312**	**0.0312**	**0.0000**	**447.6388**	**447.6388**	**8.5800e-003**	**8.2100e-003**	**450.2989**

5.3 Energy by Land Use - Electricity

Unmitigated

Maverik Manteca - San Joaquin County, Annual

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	16560	1.5322	2.5000e-004	3.0000e-005	1.5473
Convenience Market with Gas Pumps	69357	6.4172	1.0400e-003	1.3000e-004	6.4806
Fast Food Restaurant with Drive Thru	274765	25.4223	4.1100e-003	5.0000e-004	25.6737
Hotel	1.16523e+006	107.8115	0.0174	2.1100e-003	108.8775
Parking Lot	92960	8.6010	1.3900e-003	1.7000e-004	8.6861
Regional Shopping Center	371799	34.4003	5.5700e-003	6.7000e-004	34.7404
Supermarket	2.17965e+006	201.6694	0.0326	3.9500e-003	203.6636
Total		**385.8538**	**0.0624**	**7.5600e-003**	**389.6692**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	16560	1.5322	2.5000e-004	3.0000e-005	1.5473
Convenience Market with Gas Pumps	69357	6.4172	1.0400e-003	1.3000e-004	6.4806

Maverik Manteca - San Joaquin County, Annual

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

Fast Food Restaurant with Drive Thru	274765	25.4223	4.1100e-003	5.0000e-004	25.6737
Hotel	1.16523e+006	107.8115	0.0174	2.1100e-003	108.8775
Parking Lot	92960	8.6010	1.3900e-003	1.7000e-004	8.6861
Regional Shopping Center	371799	34.4003	5.5700e-003	6.7000e-004	34.7404
Supermarket	2.17965e+006	201.6694	0.0326	3.9500e-003	203.6636
Total		**385.8538**	**0.0624**	**7.5600e-003**	**389.6692**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.3404	7.0000e-005	8.2100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0160	0.0160	4.0000e-005	0.0000	0.0170
Unmitigated	1.3404	7.0000e-005	8.2100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0160	0.0160	4.0000e-005	0.0000	0.0170

6.2 Area by SubCategory

Unmitigated

Maverik Manteca - San Joaquin County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2046					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1351					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.6000e-004	7.0000e-005	8.2100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0160	0.0160	4.0000e-005	0.0000	0.0170
Total	**1.3404**	**7.0000e-005**	**8.2100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0160**	**0.0160**	**4.0000e-005**	**0.0000**	**0.0170**

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	0.2046					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1351					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.6000e-004	7.0000e-005	8.2100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0160	0.0160	4.0000e-005	0.0000	0.0170
Total	**1.3404**	**7.0000e-005**	**8.2100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0160**	**0.0160**	**4.0000e-005**	**0.0000**	**0.0170**

Maverik Manteca - San Joaquin County, Annual

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

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11.0864	0.4112	9.8200e-003	24.2926
Unmitigated	13.7110	0.5140	0.0123	30.2173

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			

Maverik Manteca - San Joaquin County, Annual

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

Automobile Care Center	0.188162 / 0.115325	0.1912	6.1500e-003	1.5000e-004	0.3890
Convenience Market with Gas Pumps	0.451842 / 0.276936	0.4592	0.0148	3.5000e-004	0.9341
Fast Food Restaurant with Drive Thru	2.71663 / 0.173402	2.2781	0.0888	2.1200e-003	5.1280
Hotel	3.17085 / 0.352316	2.7075	0.1036	2.4700e-003	6.0344
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.42217 / 1.48456	2.4618	0.0792	1.9000e-003	5.0071
Supermarket	6.77975 / 0.209683	5.6131	0.2215	5.2800e-003	12.7247
Total		**13.7110**	**0.5140**	**0.0123**	**30.2173**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0.15053 / 0.10829	0.1582	4.9200e-003	1.2000e-004	0.3164
Convenience Market with Gas Pumps	0.361474 / 0.260043	0.3799	0.0118	2.8000e-004	0.7598
Fast Food Restaurant with Drive Thru	2.1733 / 0.162824	1.8303	0.0710	1.6900e-003	4.1103
Hotel	2.53668 / 0.330825	2.1819	0.0829	1.9800e-003	4.8436
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.93774 / 1.394	2.0363	0.0634	1.5200e-003	4.0732

Maverik Manteca - San Joaquin County, Annual

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

Supermarket	5.4238 / 0.196892	4.4999	0.1772	4.2300e-003	10.1893
Total		**11.0864**	**0.4112**	**9.8200e-003**	**24.2926**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	55.0146	3.2513	0.0000	136.2964
Unmitigated	110.0292	6.5025	0.0000	272.5927

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e

Maverik Manteca - San Joaquin County, Annual

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

Land Use	tons	MT/yr			
Automobile Care Center	7.64	1.5509	0.0917	0.0000	3.8422
Convenience Market with Gas Pumps	18.33	3.7208	0.2199	0.0000	9.2182
Fast Food Restaurant with Drive Thru	103.09	20.9263	1.2367	0.0000	51.8441
Hotel	68.44	13.8927	0.8210	0.0000	34.4186
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	34.34	6.9707	0.4120	0.0000	17.2696
Supermarket	310.2	62.9678	3.7213	0.0000	156.0001
Total		**110.0292**	**6.5025**	**0.0000**	**272.5927**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	3.82	0.7754	0.0458	0.0000	1.9211
Convenience Market with Gas Pumps	9.165	1.8604	0.1100	0.0000	4.6091
Fast Food Restaurant with Drive Thru	51.545	10.4632	0.6184	0.0000	25.9221
Hotel	34.22	6.9464	0.4105	0.0000	17.2093

Maverik Manteca - San Joaquin County, Annual

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

Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	17.17	3.4854	0.2060	0.0000	8.6348
Supermarket	155.1	31.4839	1.8607	0.0000	78.0000
Total		**55.0146**	**3.2513**	**0.0000**	**136.2964**

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation