Maverik Manteca - San Joaquin County, Winter

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

Maverik Manteca

San Joaquin County, Winter

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

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Grading -

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

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tblVehicleTrips	SU_TR	5.95	7.20
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 (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					
2022	4.1163	44.1568	31.3392	0.0703	19.8049	1.8031	21.4182	10.1417	1.6588	11.6259	0.0000	6,813.6333	6,813.6333	2.1574	0.3523	6,869.1458
2023	50.8006	20.3260	25.3615	0.0657	2.7951	0.8065	3.6016	0.7552	0.7633	1.5185	0.0000	6,562.5177	6,562.5177	0.7441	0.3456	6,682.8402
Maximum	**50.8006**	**44.1568**	**31.3392**	**0.0703**	**19.8049**	**1.8031**	**21.4182**	**10.1417**	**1.6588**	**11.6259**	**0.0000**	**6,813.6333**	**6,813.6333**	**2.1574**	**0.3523**	**6,869.1458**

Mitigated Construction

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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
Year	lb/day										lb/day					
2022	4.1163	44.1568	31.3392	0.0703	8.5435	1.8031	10.1569	4.3561	1.6588	5.8404	0.0000	6,813.6333	6,813.6333	2.1574	0.3523	6,869.1458
2023	50.8006	20.3260	25.3615	0.0657	2.6550	0.8065	3.4616	0.7209	0.7633	1.4841	0.0000	6,562.5177	6,562.5177	0.7441	0.3456	6,682.8402
Maximum	**50.8006**	**44.1568**	**31.3392**	**0.0703**	**8.5435**	**1.8031**	**10.1569**	**4.3561**	**1.6588**	**5.8404**	**0.0000**	**6,813.6333**	**6,813.6333**	**2.1574**	**0.3523**	**6,869.1458**

	ROG	NOx	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**	**50.45**	**0.00**	**45.57**	**53.41**	**0.00**	**44.28**	**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	7.3491	8.3000e-004	0.0912	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1956	0.1956	5.1000e-004		0.2084
Energy	0.2479	2.2531	1.8926	0.0135		0.1712	0.1712		0.1712	0.1712		2,703.7658	2,703.7658	0.0518	0.0496	2,719.8330
Mobile	24.3289	29.8652	187.4868	0.2950	28.8090	0.2699	29.0789	7.6850	0.2525	7.9374		30,339.4996	30,339.4996	3.0306	2.1802	31,064.9707

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Total	**31.9258**	**32.1192**	**189.4707**	**0.3085**	**28.8090**	**0.4415**	**29.2504**	**7.6850**	**0.4240**	**8.1090**		**33,043.4610**	**33,043.4610**	**3.0830**	**2.2298**	**33,785.0121**

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	7.3491	8.3000e-004	0.0912	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1956	0.1956	5.1000e-004		0.2084
Energy	0.2479	2.2531	1.8926	0.0135		0.1712	0.1712		0.1712	0.1712		2,703.7658	2,703.7658	0.0518	0.0496	2,719.8330
Mobile	24.3289	29.8652	187.4868	0.2950	28.8090	0.2699	29.0789	7.6850	0.2525	7.9374		30,339.4996	30,339.4996	3.0306	2.1802	31,064.9707
Total	**31.9258**	**32.1192**	**189.4707**	**0.3085**	**28.8090**	**0.4415**	**29.2504**	**7.6850**	**0.4240**	**8.1090**		**33,043.4610**	**33,043.4610**	**3.0830**	**2.2298**	**33,785.0121**

	ROG	NOx	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**	**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	8/1/2022	8/26/2022	5	20	

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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
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

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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

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2022

Unmitigated Construction On-Site

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1100	0.0000	0.1100	0.0167	0.0000	0.0167			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.1100**	**1.2427**	**1.3526**	**0.0167**	**1.1553**	**1.1719**		**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

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	1.8700e-003	0.0783	0.0147	3.1000e-004	8.7600e-003	7.7000e-004	9.5300e-003	2.4000e-003	7.4000e-004	3.1400e-003		32.6127	32.6127	2.3000e-004	5.1300e-003	34.1469
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	0.0498	0.0363	0.3756	1.0300e-003	0.1232	6.3000e-004	0.1239	0.0327	5.8000e-004	0.0333		104.9634	104.9634	3.7700e-003	3.4500e-003	106.0865
Total	**0.0517**	**0.1146**	**0.3903**	**1.3400e-003**	**0.1320**	**1.4000e-003**	**0.1334**	**0.0351**	**1.3200e-003**	**0.0364**		**137.5760**	**137.5760**	**4.0000e-003**	**8.5800e-003**	**140.2333**

Mitigated Construction On-Site

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0470	0.0000	0.0470	7.1200e-003	0.0000	7.1200e-003			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.0470**	**1.2427**	**1.2897**	**7.1200e-003**	**1.1553**	**1.1624**	**0.0000**	**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

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	1.8700e-003	0.0783	0.0147	3.1000e-004	8.3600e-003	7.7000e-004	9.1300e-003	2.3000e-003	7.4000e-004	3.0400e-003		32.6127	32.6127	2.3000e-004	5.1300e-003	34.1469
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	0.0498	0.0363	0.3756	1.0300e-003	0.1168	6.3000e-004	0.1174	0.0311	5.8000e-004	0.0317		104.9634	104.9634	3.7700e-003	3.4500e-003	106.0865
Total	**0.0517**	**0.1146**	**0.3903**	**1.3400e-003**	**0.1252**	**1.4000e-003**	**0.1266**	**0.0334**	**1.3200e-003**	**0.0347**		**137.5760**	**137.5760**	**4.0000e-003**	**8.5800e-003**	**140.2333**

3.3 Site Preparation - 2022

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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	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**19.6570**	**1.6126**	**21.2696**	**10.1025**	**1.4836**	**11.5860**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

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	0.0598	0.0436	0.4507	1.2400e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		125.9560	125.9560	4.5300e-003	4.1400e-003	127.3038
Total	**0.0598**	**0.0436**	**0.4507**	**1.2400e-003**	**0.1479**	**7.5000e-004**	**0.1486**	**0.0392**	**6.9000e-004**	**0.0399**		**125.9560**	**125.9560**	**4.5300e-003**	**4.1400e-003**	**127.3038**

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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					8.4034	0.0000	8.4034	4.3188	0.0000	4.3188			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**8.4034**	**1.6126**	**10.0159**	**4.3188**	**1.4836**	**5.8024**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

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	0.0598	0.0436	0.4507	1.2400e-003	0.1402	7.5000e-004	0.1409	0.0373	6.9000e-004	0.0380		125.9560	125.9560	4.5300e-003	4.1400e-003	127.3038
Total	**0.0598**	**0.0436**	**0.4507**	**1.2400e-003**	**0.1402**	**7.5000e-004**	**0.1409**	**0.0373**	**6.9000e-004**	**0.0380**		**125.9560**	**125.9560**	**4.5300e-003**	**4.1400e-003**	**127.3038**

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

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	lb/day										lb/day					
Fugitive Dust					9.7338	0.0000	9.7338	3.7110	0.0000	3.7110			0.0000			0.0000
Off-Road	4.0398	44.1011	30.7633	0.0687		1.8021	1.8021		1.6579	1.6579		6,652.6895	6,652.6895	2.1516		6,706.4798
Total	**4.0398**	**44.1011**	**30.7633**	**0.0687**	**9.7338**	**1.8021**	**11.5359**	**3.7110**	**1.6579**	**5.3689**		**6,652.6895**	**6,652.6895**	**2.1516**		**6,706.4798**

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	0.0764	0.0557	0.5759	1.5800e-003	0.1889	9.6000e-004	0.1899	0.0501	8.8000e-004	0.0510		160.9438	160.9438	5.7800e-003	5.2900e-003	162.6659
Total	**0.0764**	**0.0557**	**0.5759**	**1.5800e-003**	**0.1889**	**9.6000e-004**	**0.1899**	**0.0501**	**8.8000e-004**	**0.0510**		**160.9438**	**160.9438**	**5.7800e-003**	**5.2900e-003**	**162.6659**

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Maverik Manteca - San Joaquin County, Winter

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

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					4.1612	0.0000	4.1612	1.5865	0.0000	1.5865			0.0000			0.0000
Off-Road	4.0398	44.1011	30.7633	0.0687		1.8021	1.8021		1.6579	1.6579	0.0000	6,652.6895	6,652.6895	2.1516		6,706.4798
Total	**4.0398**	**44.1011**	**30.7633**	**0.0687**	**4.1612**	**1.8021**	**5.9633**	**1.5865**	**1.6579**	**3.2444**	**0.0000**	**6,652.6895**	**6,652.6895**	**2.1516**		**6,706.4798**

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	0.0764	0.0557	0.5759	1.5800e-003	0.1791	9.6000e-004	0.1801	0.0477	8.8000e-004	0.0486		160.9438	160.9438	5.7800e-003	5.2900e-003	162.6659

Maverik Manteca - San Joaquin County, Winter

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

Total	**0.0764**	**0.0557**	**0.5759**	**1.5800e-003**	**0.1791**	**9.6000e-004**	**0.1801**	**0.0477**	**8.8000e-004**	**0.0486**		**160.9438**	**160.9438**	**5.7800e-003**	**5.2900e-003**	**162.6659**

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	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.1878	5.0654	1.3950	0.0188	0.6099	0.0545	0.6645	0.1756	0.0522	0.2278		1,987.0835	1,987.0835	0.0140	0.3012	2,077.2021
Worker	0.7377	0.5378	5.5590	0.0153	1.8237	9.2800e-003	1.8330	0.4837	8.5400e-003	0.4923		1,553.4578	1,553.4578	0.0558	0.0511	1,570.0800

Maverik Manteca - San Joaquin County, Winter

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

Total	**0.9255**	**5.6032**	**6.9540**	**0.0341**	**2.4336**	**0.0638**	**2.4974**	**0.6593**	**0.0607**	**0.7200**		**3,540.5413**	**3,540.5413**	**0.0698**	**0.3523**	**3,647.2820**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.1878	5.0654	1.3950	0.0188	0.5839	0.0545	0.6384	0.1692	0.0522	0.2214		1,987.0835	1,987.0835	0.0140	0.3012	2,077.2021
Worker	0.7377	0.5378	5.5590	0.0153	1.7286	9.2800e-003	1.7379	0.4604	8.5400e-003	0.4689		1,553.4578	1,553.4578	0.0558	0.0511	1,570.0800

Maverik Manteca - San Joaquin County, Winter

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

Total	**0.9255**	**5.6032**	**6.9540**	**0.0341**	**2.3124**	**0.0638**	**2.3763**	**0.6296**	**0.0607**	**0.6903**		**3,540.5413**	**3,540.5413**	**0.0698**	**0.3523**	**3,647.2820**

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	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	0.0923	4.0760	1.1937	0.0181	0.6099	0.0255	0.6354	0.1756	0.0244	0.2000		1,913.5487	1,913.5487	9.2500e-003	0.2894	2,000.0175
Worker	0.6787	0.4691	5.1016	0.0148	1.8237	8.7500e-003	1.8324	0.4837	8.0500e-003	0.4918		1,512.5303	1,512.5303	0.0501	0.0469	1,527.7503

Maverik Manteca - San Joaquin County, Winter

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

Total	**0.7710**	**4.5452**	**6.2952**	**0.0329**	**2.4336**	**0.0343**	**2.4679**	**0.6593**	**0.0325**	**0.6918**		**3,426.0790**	**3,426.0790**	**0.0593**	**0.3363**	**3,527.7678**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	0.0923	4.0760	1.1937	0.0181	0.5839	0.0255	0.6094	0.1692	0.0244	0.1936		1,913.5487	1,913.5487	9.2500e-003	0.2894	2,000.0175
Worker	0.6787	0.4691	5.1016	0.0148	1.7286	8.7500e-003	1.7373	0.4604	8.0500e-003	0.4684		1,512.5303	1,512.5303	0.0501	0.0469	1,527.7503

Maverik Manteca - San Joaquin County, Winter

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

Total	**0.7710**	**4.5452**	**6.2952**	**0.0329**	**2.3124**	**0.0343**	**2.3467**	**0.6296**	**0.0325**	**0.6621**		**3,426.0790**	**3,426.0790**	**0.0593**	**0.3363**	**3,527.7678**

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	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.7834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8161**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

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

Maverik Manteca - San Joaquin County, Winter

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

Worker	0.0459	0.0317	0.3447	1.0000e-003	0.1232	5.9000e-004	0.1238	0.0327	5.4000e-004	0.0332		102.1980	102.1980	3.3800e-003	3.1700e-003	103.2264
Total	**0.0459**	**0.0317**	**0.3447**	**1.0000e-003**	**0.1232**	**5.9000e-004**	**0.1238**	**0.0327**	**5.4000e-004**	**0.0332**		**102.1980**	**102.1980**	**3.3800e-003**	**3.1700e-003**	**103.2264**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.7834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8161**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

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

Maverik Manteca - San Joaquin County, Winter

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

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	0.0459	0.0317	0.3447	1.0000e-003	0.1168	5.9000e-004	0.1174	0.0311	5.4000e-004	0.0317		102.1980	102.1980	3.3800e-003	3.1700e-003	103.2264
Total	**0.0459**	**0.0317**	**0.3447**	**1.0000e-003**	**0.1168**	**5.9000e-004**	**0.1174**	**0.0311**	**5.4000e-004**	**0.0317**		**102.1980**	**102.1980**	**3.3800e-003**	**3.1700e-003**	**103.2264**

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	lb/day										lb/day					
Archit. Coating	48.1306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**48.3223**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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					

Maverik Manteca - San Joaquin County, Winter

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

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	0.1345	0.0930	1.0111	2.9300e-003	0.3615	1.7300e-003	0.3632	0.0959	1.6000e-003	0.0975		299.7808	299.7808	9.9200e-003	9.2900e-003	302.7974
Total	**0.1345**	**0.0930**	**1.0111**	**2.9300e-003**	**0.3615**	**1.7300e-003**	**0.3632**	**0.0959**	**1.6000e-003**	**0.0975**		**299.7808**	**299.7808**	**9.9200e-003**	**9.2900e-003**	**302.7974**

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	48.1306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**48.3223**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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

Maverik Manteca - San Joaquin County, Winter

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

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	0.1345	0.0930	1.0111	2.9300e-003	0.3426	1.7300e-003	0.3443	0.0913	1.6000e-003	0.0928		299.7808	299.7808	9.9200e-003	9.2900e-003	302.7974
Total	**0.1345**	**0.0930**	**1.0111**	**2.9300e-003**	**0.3426**	**1.7300e-003**	**0.3443**	**0.0913**	**1.6000e-003**	**0.0928**		**299.7808**	**299.7808**	**9.9200e-003**	**9.2900e-003**	**302.7974**

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	24.3289	29.8652	187.4868	0.2950	28.8090	0.2699	29.0789	7.6850	0.2525	7.9374		30,339.4996	30,339.4996	3.0306	2.1802	31,064.9707
Unmitigated	24.3289	29.8652	187.4868	0.2950	28.8090	0.2699	29.0789	7.6850	0.2525	7.9374		30,339.4996	30,339.4996	3.0306	2.1802	31,064.9707

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

Maverik Manteca - San Joaquin County, Winter

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

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
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 Pumps	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive Thru	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	0.0037
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	0.0037
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	0.0037
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	0.0037
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	0.0037
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	0.0037
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	0.0037

5.0 Energy Detail

Historical Energy Use: N

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

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2479	2.2531	1.8926	0.0135		0.1712	0.1712		0.1712	0.1712		2,703.7658	2,703.7658	0.0518	0.0496	2,719.8330
NaturalGas Unmitigated	0.2479	2.2531	1.8926	0.0135		0.1712	0.1712		0.1712	0.1712		2,703.7658	2,703.7658	0.0518	0.0496	2,719.8330

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					
Automobile Care Center	101.096	1.0900e-003	9.9100e-003	8.3300e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004		11.8936	11.8936	2.3000e-004	2.2000e-004	11.9643
Convenience Market with Gas Pumps	193.529	2.0900e-003	0.0190	0.0159	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003		22.7681	22.7681	4.4000e-004	4.2000e-004	22.9034
Fast Food Restaurant with Drive Thru	2672.98	0.0288	0.2621	0.2201	1.5700e-003		0.0199	0.0199		0.0199	0.0199		314.4688	314.4688	6.0300e-003	5.7700e-003	316.3376
Hotel	13157.5	0.1419	1.2900	1.0836	7.7400e-003		0.0980	0.0980		0.0980	0.0980		1,547.9420	1,547.9420	0.0297	0.0284	1,557.1406

Maverik Manteca - San Joaquin County, Winter

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		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1037.44	0.0112	0.1017	0.0854	6.1000e-004		7.7300e-003	7.7300e-003		7.7300e-003	7.7300e-003		122.0519	122.0519	2.3400e-003	2.2400e-003	122.7772
Supermarket	5819.45	0.0628	0.5705	0.4793	3.4200e-003		0.0434	0.0434		0.0434	0.0434		684.6414	684.6414	0.0131	0.0126	688.7099
Total		**0.2479**	**2.2531**	**1.8927**	**0.0135**		**0.1712**	**0.1712**		**0.1712**	**0.1712**		**2,703.7658**	**2,703.7658**	**0.0518**	**0.0496**	**2,719.8330**

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					
Automobile Care Center	0.101096	1.0900e-003	9.9100e-003	8.3300e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004		11.8936	11.8936	2.3000e-004	2.2000e-004	11.9643
Convenience Market with Gas Pumps	0.193529	2.0900e-003	0.0190	0.0159	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003		22.7681	22.7681	4.4000e-004	4.2000e-004	22.9034
Fast Food Restaurant with Drive Thru	2.67298	0.0288	0.2621	0.2201	1.5700e-003		0.0199	0.0199		0.0199	0.0199		314.4688	314.4688	6.0300e-003	5.7700e-003	316.3376
Hotel	13.1575	0.1419	1.2900	1.0836	7.7400e-003		0.0980	0.0980		0.0980	0.0980		1,547.9420	1,547.9420	0.0297	0.0284	1,557.1406
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
Regional Shopping Center	1.03744	0.0112	0.1017	0.0854	6.1000e-004		7.7300e-003	7.7300e-003		7.7300e-003	7.7300e-003		122.0519	122.0519	2.3400e-003	2.2400e-003	122.7772
Supermarket	5.81945	0.0628	0.5705	0.4793	3.4200e-003		0.0434	0.0434		0.0434	0.0434		684.6414	684.6414	0.0131	0.0126	688.7099
Total		**0.2479**	**2.2531**	**1.8927**	**0.0135**		**0.1712**	**0.1712**		**0.1712**	**0.1712**		**2,703.7658**	**2,703.7658**	**0.0518**	**0.0496**	**2,719.8330**

Maverik Manteca - San Joaquin County, Winter

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

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.3491	8.3000e-004	0.0912	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1956	0.1956	5.1000e-004		0.2084
Unmitigated	7.3491	8.3000e-004	0.0912	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1956	0.1956	5.1000e-004		0.2084

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	1.1209					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.2198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.4500e-003	8.3000e-004	0.0912	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1956	0.1956	5.1000e-004		0.2084

Maverik Manteca - San Joaquin County, Winter

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

Total	**7.3491**	**8.3000e-004**	**0.0912**	**1.0000e-005**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**		**0.1956**	**0.1956**	**5.1000e-004**		**0.2084**

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	1.1209					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.2198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.4500e-003	8.3000e-004	0.0912	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1956	0.1956	5.1000e-004		0.2084
Total	**7.3491**	**8.3000e-004**	**0.0912**	**1.0000e-005**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**		**0.1956**	**0.1956**	**5.1000e-004**		**0.2084**

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

Maverik Manteca - San Joaquin County, Winter

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

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

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

Maverik Manteca - San Joaquin County, Summer

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

Maverik Manteca

San Joaquin County, Summer

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 -

Date: 2/14/2022 12:48 PM

Maverik Manteca - San Joaquin County, Summer

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, Summer

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 (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					
2022	4.1215	44.1471	31.4066	0.0705	19.8049	1.8031	21.4182	10.1417	1.6588	11.6259	0.0000	6,830.8695	6,830.8695	2.1567	0.3457	6,886.1743
2023	50.8597	19.9645	25.9996	0.0676	2.7951	0.8065	3.6015	0.7552	0.7632	1.5184	0.0000	6,752.2797	6,752.2797	0.7425	0.3380	6,870.1799
Maximum	**50.8597**	**44.1471**	**31.4066**	**0.0705**	**19.8049**	**1.8031**	**21.4182**	**10.1417**	**1.6588**	**11.6259**	**0.0000**	**6,830.8695**	**6,830.8695**	**2.1567**	**0.3457**	**6,886.1743**

Mitigated Construction

Maverik Manteca - San Joaquin County, Summer

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	lb/day										lb/day					
2022	4.1215	44.1471	31.4066	0.0705	8.5435	1.8031	10.1569	4.3561	1.6588	5.8404	0.0000	6,830.8695	6,830.8695	2.1567	0.3457	6,886.1743
2023	50.8597	19.9645	25.9996	0.0676	2.6550	0.8065	3.4615	0.7209	0.7632	1.4841	0.0000	6,752.2797	6,752.2797	0.7425	0.3380	6,870.1799
Maximum	**50.8597**	**44.1471**	**31.4066**	**0.0705**	**8.5435**	**1.8031**	**10.1569**	**4.3561**	**1.6588**	**5.8404**	**0.0000**	**6,830.8695**	**6,830.8695**	**2.1567**	**0.3457**	**6,886.1743**

	ROG	NOx	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**	**50.45**	**0.00**	**45.57**	**53.41**	**0.00**	**44.28**	**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	7.3491	8.3000e-004	0.0912	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1956	0.1956	5.1000e-004		0.2084
Energy	0.2479	2.2531	1.8926	0.0135		0.1712	0.1712		0.1712	0.1712		2,703.7658	2,703.7658	0.0518	0.0496	2,719.8330
Mobile	31.2978	26.2841	169.5044	0.3166	28.8090	0.2695	29.0784	7.6850	0.2521	7.9370		32,557.8678	32,557.8678	2.4907	2.0006	33,216.3043
Total	**38.8948**	**28.5381**	**171.4883**	**0.3301**	**28.8090**	**0.4410**	**29.2500**	**7.6850**	**0.4236**	**8.1086**		**35,261.8292**	**35,261.8292**	**2.5430**	**2.0501**	**35,936.3457**

Maverik Manteca - San Joaquin County, Summer

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

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	7.3491	8.3000e-004	0.0912	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1956	0.1956	5.1000e-004		0.2084
Energy	0.2479	2.2531	1.8926	0.0135		0.1712	0.1712		0.1712	0.1712		2,703.7658	2,703.7658	0.0518	0.0496	2,719.8330
Mobile	31.2978	26.2841	169.5044	0.3166	28.8090	0.2695	29.0784	7.6850	0.2521	7.9370		32,557.8678	32,557.8678	2.4907	2.0006	33,216.3043
Total	**38.8948**	**28.5381**	**171.4883**	**0.3301**	**28.8090**	**0.4410**	**29.2500**	**7.6850**	**0.4236**	**8.1086**		**35,261.8292**	**35,261.8292**	**2.5430**	**2.0501**	**35,936.3457**

	ROG	NOx	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**	**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	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	

Maverik Manteca - San Joaquin County, Summer

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

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
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

Maverik Manteca - San Joaquin County, Summer

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

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

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	lb/day										lb/day					
Fugitive Dust					0.1100	0.0000	0.1100	0.0167	0.0000	0.0167			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920

Maverik Manteca - San Joaquin County, Summer

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

Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.1100**	**1.2427**	**1.3526**	**0.0167**	**1.1553**	**1.1719**		**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

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	1.9400e-003	0.0734	0.0144	3.1000e-004	8.7600e-003	7.7000e-004	9.5300e-003	2.4000e-003	7.4000e-004	3.1400e-003		32.5918	32.5918	2.3000e-004	5.1300e-003	34.1251
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	0.0533	0.0300	0.4196	1.1400e-003	0.1232	6.3000e-004	0.1239	0.0327	5.8000e-004	0.0333		116.2044	116.2044	3.3400e-003	3.0300e-003	117.1920
Total	**0.0552**	**0.1034**	**0.4339**	**1.4500e-003**	**0.1320**	**1.4000e-003**	**0.1334**	**0.0351**	**1.3200e-003**	**0.0364**		**148.7962**	**148.7962**	**3.5700e-003**	**8.1600e-003**	**151.3172**

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					0.0470	0.0000	0.0470	7.1200e-003	0.0000	7.1200e-003			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920

Maverik Manteca - San Joaquin County, Summer

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

Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.0470**	**1.2427**	**1.2897**	**7.1200e-003**	**1.1553**	**1.1624**	**0.0000**	**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

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	1.9400e-003	0.0734	0.0144	3.1000e-004	8.3600e-003	7.7000e-004	9.1300e-003	2.3000e-003	7.4000e-004	3.0400e-003		32.5918	32.5918	2.3000e-004	5.1300e-003	34.1251
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	0.0533	0.0300	0.4196	1.1400e-003	0.1168	6.3000e-004	0.1174	0.0311	5.8000e-004	0.0317		116.2044	116.2044	3.3400e-003	3.0300e-003	117.1920
Total	**0.0552**	**0.1034**	**0.4339**	**1.4500e-003**	**0.1252**	**1.4000e-003**	**0.1266**	**0.0334**	**1.3200e-003**	**0.0347**		**148.7962**	**148.7962**	**3.5700e-003**	**8.1600e-003**	**151.3172**

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	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655

Maverik Manteca - San Joaquin County, Summer

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

Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**19.6570**	**1.6126**	**21.2696**	**10.1025**	**1.4836**	**11.5860**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

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	0.0640	0.0360	0.5035	1.3700e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		139.4453	139.4453	4.0000e-003	3.6400e-003	140.6304
Total	**0.0640**	**0.0360**	**0.5035**	**1.3700e-003**	**0.1479**	**7.5000e-004**	**0.1486**	**0.0392**	**6.9000e-004**	**0.0399**		**139.4453**	**139.4453**	**4.0000e-003**	**3.6400e-003**	**140.6304**

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					8.4034	0.0000	8.4034	4.3188	0.0000	4.3188			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

Maverik Manteca - San Joaquin County, Summer

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

Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**8.4034**	**1.6126**	**10.0159**	**4.3188**	**1.4836**	**5.8024**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

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	0.0640	0.0360	0.5035	1.3700e-003	0.1402	7.5000e-004	0.1409	0.0373	6.9000e-004	0.0380		139.4453	139.4453	4.0000e-003	3.6400e-003	140.6304
Total	**0.0640**	**0.0360**	**0.5035**	**1.3700e-003**	**0.1402**	**7.5000e-004**	**0.1409**	**0.0373**	**6.9000e-004**	**0.0380**		**139.4453**	**139.4453**	**4.0000e-003**	**3.6400e-003**	**140.6304**

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	lb/day										lb/day					
Fugitive Dust					9.7338	0.0000	9.7338	3.7110	0.0000	3.7110			0.0000			0.0000
Off-Road	4.0398	44.1011	30.7633	0.0687		1.8021	1.8021		1.6579	1.6579		6,652.6895	6,652.6895	2.1516		6,706.4798

Maverik Manteca - San Joaquin County, Summer

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

Total	**4.0398**	**44.1011**	**30.7633**	**0.0687**	**9.7338**	**1.8021**	**11.5359**	**3.7110**	**1.6579**	**5.3689**		**6,652.6895**	**6,652.6895**	**2.1516**		**6,706.4798**

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	0.0817	0.0460	0.6433	1.7500e-003	0.1889	9.6000e-004	0.1899	0.0501	8.8000e-004	0.0510		178.1800	178.1800	5.1100e-003	4.6500e-003	179.6945
Total	**0.0817**	**0.0460**	**0.6433**	**1.7500e-003**	**0.1889**	**9.6000e-004**	**0.1899**	**0.0501**	**8.8000e-004**	**0.0510**		**178.1800**	**178.1800**	**5.1100e-003**	**4.6500e-003**	**179.6945**

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					4.1612	0.0000	4.1612	1.5865	0.0000	1.5865			0.0000			0.0000
Off-Road	4.0398	44.1011	30.7633	0.0687		1.8021	1.8021		1.6579	1.6579	0.0000	6,652.6895	6,652.6895	2.1516		6,706.4798

Maverik Manteca - San Joaquin County, Summer

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

Total	**4.0398**	**44.1011**	**30.7633**	**0.0687**	**4.1612**	**1.8021**	**5.9633**	**1.5865**	**1.6579**	**3.2444**	**0.0000**	**6,652.6895**	**6,652.6895**	**2.1516**		**6,706.4798**

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	0.0817	0.0460	0.6433	1.7500e-003	0.1791	9.6000e-004	0.1801	0.0477	8.8000e-004	0.0486		178.1800	178.1800	5.1100e-003	4.6500e-003	179.6945
Total	**0.0817**	**0.0460**	**0.6433**	**1.7500e-003**	**0.1791**	**9.6000e-004**	**0.1801**	**0.0477**	**8.8000e-004**	**0.0486**		**178.1800**	**178.1800**	**5.1100e-003**	**4.6500e-003**	**179.6945**

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	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Maverik Manteca - San Joaquin County, Summer

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

Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.1924	4.7518	1.3471	0.0188	0.6099	0.0544	0.6643	0.1756	0.0520	0.2276		1,985.3549	1,985.3549	0.0142	0.3007	2,075.3307
Worker	0.7887	0.4439	6.2094	0.0169	1.8237	9.2800e-003	1.8330	0.4837	8.5400e-003	0.4923		1,719.8248	1,719.8248	0.0494	0.0449	1,734.4421
Total	**0.9811**	**5.1957**	**7.5565**	**0.0357**	**2.4336**	**0.0637**	**2.4973**	**0.6593**	**0.0606**	**0.7199**		**3,705.1797**	**3,705.1797**	**0.0636**	**0.3457**	**3,809.7728**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Maverik Manteca - San Joaquin County, Summer

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

Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.1924	4.7518	1.3471	0.0188	0.5839	0.0544	0.6382	0.1692	0.0520	0.2213		1,985.3549	1,985.3549	0.0142	0.3007	2,075.3307
Worker	0.7887	0.4439	6.2094	0.0169	1.7286	9.2800e-003	1.7379	0.4604	8.5400e-003	0.4689		1,719.8248	1,719.8248	0.0494	0.0449	1,734.4421
Total	**0.9811**	**5.1957**	**7.5565**	**0.0357**	**2.3124**	**0.0637**	**2.3761**	**0.6296**	**0.0606**	**0.6902**		**3,705.1797**	**3,705.1797**	**0.0636**	**0.3457**	**3,809.7728**

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	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Maverik Manteca - San Joaquin County, Summer

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

Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	0.0980	3.8124	1.1545	0.0181	0.6099	0.0254	0.6353	0.1756	0.0243	0.1999		1,909.9124	1,909.9124	9.5200e-003	0.2886	1,996.1566
Worker	0.7233	0.3874	5.6668	0.0164	1.8237	8.7500e-003	1.8324	0.4837	8.0500e-003	0.4918		1,673.9378	1,673.9378	0.0440	0.0412	1,687.3237
Total	**0.8213**	**4.1998**	**6.8213**	**0.0344**	**2.4336**	**0.0342**	**2.4678**	**0.6593**	**0.0324**	**0.6917**		**3,583.8502**	**3,583.8502**	**0.0535**	**0.3298**	**3,683.4803**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Maverik Manteca - San Joaquin County, Summer

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

Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	0.0980	3.8124	1.1545	0.0181	0.5839	0.0254	0.6093	0.1692	0.0243	0.1935		1,909.9124	1,909.9124	9.5200e-003	0.2886	1,996.1566
Worker	0.7233	0.3874	5.6668	0.0164	1.7286	8.7500e-003	1.7373	0.4604	8.0500e-003	0.4684		1,673.9378	1,673.9378	0.0440	0.0412	1,687.3237
Total	**0.8213**	**4.1998**	**6.8213**	**0.0344**	**2.3124**	**0.0342**	**2.3466**	**0.6296**	**0.0324**	**0.6620**		**3,583.8502**	**3,583.8502**	**0.0535**	**0.3298**	**3,683.4803**

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	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.7834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Maverik Manteca - San Joaquin County, Summer

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

Total	**1.8161**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

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	0.0489	0.0262	0.3829	1.1100e-003	0.1232	5.9000e-004	0.1238	0.0327	5.4000e-004	0.0332		113.1039	113.1039	2.9700e-003	2.7900e-003	114.0084
Total	**0.0489**	**0.0262**	**0.3829**	**1.1100e-003**	**0.1232**	**5.9000e-004**	**0.1238**	**0.0327**	**5.4000e-004**	**0.0332**		**113.1039**	**113.1039**	**2.9700e-003**	**2.7900e-003**	**114.0084**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.7834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Maverik Manteca - San Joaquin County, Summer

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

Total	**1.8161**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

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	0.0489	0.0262	0.3829	1.1100e-003	0.1168	5.9000e-004	0.1174	0.0311	5.4000e-004	0.0317		113.1039	113.1039	2.9700e-003	2.7900e-003	114.0084
Total	**0.0489**	**0.0262**	**0.3829**	**1.1100e-003**	**0.1168**	**5.9000e-004**	**0.1174**	**0.0311**	**5.4000e-004**	**0.0317**		**113.1039**	**113.1039**	**2.9700e-003**	**2.7900e-003**	**114.0084**

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	lb/day										lb/day					
Archit. Coating	48.1306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Maverik Manteca - San Joaquin County, Summer

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

Total	**48.3223**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1434	0.0768	1.1232	3.2400e-003	0.3615	1.7300e-003	0.3632	0.0959	1.6000e-003	0.0975		331.7715	331.7715	8.7200e-003	8.1700e-003	334.4245
Total	**0.1434**	**0.0768**	**1.1232**	**3.2400e-003**	**0.3615**	**1.7300e-003**	**0.3632**	**0.0959**	**1.6000e-003**	**0.0975**		**331.7715**	**331.7715**	**8.7200e-003**	**8.1700e-003**	**334.4245**

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	48.1306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Maverik Manteca - San Joaquin County, Summer

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

Total	**48.3223**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1434	0.0768	1.1232	3.2400e-003	0.3426	1.7300e-003	0.3443	0.0913	1.6000e-003	0.0928		331.7715	331.7715	8.7200e-003	8.1700e-003	334.4245
Total	**0.1434**	**0.0768**	**1.1232**	**3.2400e-003**	**0.3426**	**1.7300e-003**	**0.3443**	**0.0913**	**1.6000e-003**	**0.0928**		**331.7715**	**331.7715**	**8.7200e-003**	**8.1700e-003**	**334.4245**

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

Maverik Manteca - San Joaquin County, Summer

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

Category	lb/day										lb/day				
Mitigated	31.2978	26.2841	169.5044	0.3166	28.8090	0.2695	29.0784	7.6850	0.2521	7.9370	32,557.8678	32,557.8678	2.4907	2.0006	33,216.3043
Unmitigated	31.2978	26.2841	169.5044	0.3166	28.8090	0.2695	29.0784	7.6850	0.2521	7.9370	32,557.8678	32,557.8678	2.4907	2.0006	33,216.3043

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
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 Pumps	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive Thru	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

Maverik Manteca - San Joaquin County, Summer

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

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

	ROG	NOx	CO	SO2	Fugitive 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	0.2479	2.2531	1.8926	0.0135		0.1712	0.1712		0.1712	0.1712		2,703.7658	2,703.7658	0.0518	0.0496	2,719.8330
NaturalGas Unmitigated	0.2479	2.2531	1.8926	0.0135		0.1712	0.1712		0.1712	0.1712		2,703.7658	2,703.7658	0.0518	0.0496	2,719.8330

5.2 Energy by Land Use - NaturalGas

Unmitigated

Maverik Manteca - San Joaquin County, Summer

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

	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					
Automobile Care Center	101.096	1.0900e-003	9.9100e-003	8.3300e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004		11.8936	11.8936	2.3000e-004	2.2000e-004	11.9643
Convenience Market with Gas Pumps	193.529	2.0900e-003	0.0190	0.0159	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003		22.7681	22.7681	4.4000e-004	4.2000e-004	22.9034
Fast Food Restaurant with Drive Thru	2672.98	0.0288	0.2621	0.2201	1.5700e-003		0.0199	0.0199		0.0199	0.0199		314.4688	314.4688	6.0300e-003	5.7700e-003	316.3376
Hotel	13157.5	0.1419	1.2900	1.0836	7.7400e-003		0.0980	0.0980		0.0980	0.0980		1,547.9420	1,547.9420	0.0297	0.0284	1,557.1406
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
Regional Shopping Center	1037.44	0.0112	0.1017	0.0854	6.1000e-004		7.7300e-003	7.7300e-003		7.7300e-003	7.7300e-003		122.0519	122.0519	2.3400e-003	2.2400e-003	122.7772
Supermarket	5819.45	0.0628	0.5705	0.4793	3.4200e-003		0.0434	0.0434		0.0434	0.0434		684.6414	684.6414	0.0131	0.0126	688.7099
Total		**0.2479**	**2.2531**	**1.8927**	**0.0135**		**0.1712**	**0.1712**		**0.1712**	**0.1712**		**2,703.7658**	**2,703.7658**	**0.0518**	**0.0496**	**2,719.8330**

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					
Automobile Care Center	0.101096	1.0900e-003	9.9100e-003	8.3300e-003	6.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004		11.8936	11.8936	2.3000e-004	2.2000e-004	11.9643
Convenience Market with Gas Pumps	0.193529	2.0900e-003	0.0190	0.0159	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003		22.7681	22.7681	4.4000e-004	4.2000e-004	22.9034
Fast Food Restaurant with Drive Thru	2.67298	0.0288	0.2621	0.2201	1.5700e-003		0.0199	0.0199		0.0199	0.0199		314.4688	314.4688	6.0300e-003	5.7700e-003	316.3376

Maverik Manteca - San Joaquin County, Summer

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

Hotel	13.1575	0.1419	1.2900	1.0836	7.7400e-003		0.0980	0.0980		0.0980	0.0980		1,547.9420	1,547.9420	0.0297	0.0284	1,557.1406
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
Regional Shopping Center	1.03744	0.0112	0.1017	0.0854	6.1000e-004		7.7300e-003	7.7300e-003		7.7300e-003	7.7300e-003		122.0519	122.0519	2.3400e-003	2.2400e-003	122.7772
Supermarket	5.81945	0.0628	0.5705	0.4793	3.4200e-003		0.0434	0.0434		0.0434	0.0434		684.6414	684.6414	0.0131	0.0126	688.7099
Total		**0.2479**	**2.2531**	**1.8927**	**0.0135**		**0.1712**	**0.1712**		**0.1712**	**0.1712**		**2,703.7658**	**2,703.7658**	**0.0518**	**0.0496**	**2,719.8330**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.3491	8.3000e-004	0.0912	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1956	0.1956	5.1000e-004		0.2084
Unmitigated	7.3491	8.3000e-004	0.0912	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1956	0.1956	5.1000e-004		0.2084

6.2 Area by SubCategory

Unmitigated

Maverik Manteca - San Joaquin County, Summer

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	lb/day										lb/day					
Architectural Coating	1.1209					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.2198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.4500e-003	8.3000e-004	0.0912	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1956	0.1956	5.1000e-004		0.2084
Total	**7.3491**	**8.3000e-004**	**0.0912**	**1.0000e-005**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**		**0.1956**	**0.1956**	**5.1000e-004**		**0.2084**

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	1.1209					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.2198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.4500e-003	8.3000e-004	0.0912	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1956	0.1956	5.1000e-004		0.2084
Total	**7.3491**	**8.3000e-004**	**0.0912**	**1.0000e-005**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**		**0.1956**	**0.1956**	**5.1000e-004**		**0.2084**

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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

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

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

Date: 2/14/2022 12:48 PM

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