

Redding Distribution Facility - Shasta County, Annual

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

Redding Distribution Facility

Shasta County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	250.96	1000sqft	5.76	250,960.00	0
Parking Lot	609.40	1000sqft	13.99	609,400.00	0
City Park	19.69	Acre	19.69	857,696.40	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2023
Utility Company	Redding Electric Utility				
CO2 Intensity (lb/MW hr)	336.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - City park proxy for landscape area

Construction Phase - Per construction timeline

Off-road Equipment - Anticapted equipment for cut/fill onsite

Trips and VMT -

Grading -

Vehicle Trips - Per TIA

Construction Off-road Equipment Mitigation - SCAQMD regulations

Water Mitigation -

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Waste Mitigation - Per AB 939

Fleet Mix - Per TIA

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	55.00	87.00
tblConstructionPhase	NumDays	740.00	166.00
tblConstructionPhase	NumDays	50.00	0.00
tblConstructionPhase	NumDays	75.00	45.00
tblConstructionPhase	NumDays	55.00	20.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	1.00
tblFleetMix	LDA	0.47	1.00
tblFleetMix	LDA	0.47	0.00
tblFleetMix	LDA	0.47	0.00
tblFleetMix	LDT1	0.05	0.00
tblFleetMix	LDT1	0.05	0.00
tblFleetMix	LDT1	0.05	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.05	0.00
tblFleetMix	LHD1	0.05	0.00
tblFleetMix	LHD1	0.05	0.00
tblFleetMix	LHD2	9.6840e-003	0.00
tblFleetMix	LHD2	9.6840e-003	1.00

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tblFleetMix	LHD2	9.6840e-003	0.00
tblFleetMix	MCY	0.04	0.00
tblFleetMix	MCY	0.04	0.00
tblFleetMix	MCY	0.04	0.00
tblFleetMix	MDV	0.15	0.00
tblFleetMix	MDV	0.15	0.00
tblFleetMix	MDV	0.15	0.00
tblFleetMix	MH	6.7080e-003	0.00
tblFleetMix	MH	6.7080e-003	0.00
tblFleetMix	MH	6.7080e-003	0.00
tblFleetMix	MHD	9.2030e-003	0.00
tblFleetMix	MHD	9.2030e-003	0.00
tblFleetMix	MHD	9.2030e-003	0.00
tblFleetMix	OBUS	6.5900e-004	0.00
tblFleetMix	OBUS	6.5900e-004	0.00
tblFleetMix	OBUS	6.5900e-004	0.00
tblFleetMix	SBUS	1.4530e-003	0.00
tblFleetMix	SBUS	1.4530e-003	0.00
tblFleetMix	SBUS	1.4530e-003	0.00
tblFleetMix	UBUS	1.5300e-004	0.00
tblFleetMix	UBUS	1.5300e-004	0.00
tblFleetMix	UBUS	1.5300e-004	0.00
tblGrading	MaterialImported	0.00	15,300.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00

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tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TL	7.30	49.50
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	41.00	100.00
tblVehicleTrips	CW_TL	9.50	9.42
tblVehicleTrips	CW_TL	9.50	49.50
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	32.20
tblVehicleTrips	ST_TR	0.00	0.60
tblVehicleTrips	ST_TR	1.74	0.34
tblVehicleTrips	SU_TR	2.19	32.20
tblVehicleTrips	SU_TR	0.00	0.60
tblVehicleTrips	SU_TR	1.74	0.34
tblVehicleTrips	WD_TR	0.78	32.20
tblVehicleTrips	WD_TR	0.00	0.60
tblVehicleTrips	WD_TR	1.74	0.34

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	2.9177	4.5443	4.7792	0.0149	1.1793	0.1551	1.3344	0.4177	0.1449	0.5626	0.0000	1,367.0927	1,367.0927	0.1267	0.0927	1,397.8934
2023	0.7982	0.0329	0.0805	2.1000e-004	0.0161	1.2600e-003	0.0174	4.3100e-003	1.2300e-003	5.5500e-003	0.0000	19.4922	19.4922	8.6000e-004	7.8000e-004	19.7472
Maximum	2.9177	4.5443	4.7792	0.0149	1.1793	0.1551	1.3344	0.4177	0.1449	0.5626	0.0000	1,367.0927	1,367.0927	0.1267	0.0927	1,397.8934

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	2.9177	4.5443	4.7792	0.0149	0.8579	0.1551	1.0130	0.2756	0.1449	0.4204	0.0000	1,367.0922	1,367.0922	0.1267	0.0927	1,397.8929
2023	0.7982	0.0329	0.0805	2.1000e-004	0.0153	1.2600e-003	0.0166	4.1100e-003	1.2300e-003	5.3400e-003	0.0000	19.4921	19.4921	8.6000e-004	7.8000e-004	19.7472
Maximum	2.9177	4.5443	4.7792	0.0149	0.8579	0.1551	1.0130	0.2756	0.1449	0.4204	0.0000	1,367.0922	1,367.0922	0.1267	0.0927	1,397.8929

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Percent Reduction	0.00	0.00	0.00	0.00	26.96	0.00	23.84	33.73	0.00	25.05	0.00	0.00	0.00	0.00	0.00	0.00
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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-3-2022	4-2-2022	1.3742	1.3742
2	4-3-2022	7-2-2022	1.0292	1.0292
3	7-3-2022	10-2-2022	1.2821	1.2821
4	10-3-2022	1-2-2023	3.7518	3.7518
5	1-3-2023	4-2-2023	0.7668	0.7668
		Highest	3.7518	3.7518

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.3403	7.0000e-005	8.0900e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0157	0.0157	4.0000e-005	0.0000	0.0168
Energy	0.0242	0.2203	0.1851	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	628.4330	628.4330	0.0427	9.0100e-003	632.1842
Mobile	1.3005	18.2773	8.7691	0.0802	4.2137	0.2325	4.4462	1.1888	0.2222	1.4109	0.0000	7,600.4659	7,600.4659	0.0749	0.8979	7,869.8998
Waste						0.0000	0.0000		0.0000	0.0000	48.2286	0.0000	48.2286	2.8502	0.0000	119.4844
Water						0.0000	0.0000		0.0000	0.0000	18.4117	60.5500	78.9616	1.8970	0.0454	139.9067
Total	2.6650	18.4977	8.9623	0.0815	4.2137	0.2493	4.4629	1.1888	0.2389	1.4277	66.6403	8,289.4646	8,356.1048	4.8648	0.9522	8,761.4918

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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	1.3403	7.0000e-005	8.0900e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0157	0.0157	4.0000e-005	0.0000	0.0168
Energy	0.0242	0.2203	0.1851	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	628.4330	628.4330	0.0427	9.0100e-003	632.1842
Mobile	1.3005	18.2773	8.7691	0.0802	4.2137	0.2325	4.4462	1.1888	0.2222	1.4109	0.0000	7,600.4659	7,600.4659	0.0749	0.8979	7,869.8998
Waste						0.0000	0.0000		0.0000	0.0000	24.1143	0.0000	24.1143	1.4251	0.0000	59.7422
Water						0.0000	0.0000		0.0000	0.0000	14.7293	50.1845	64.9139	1.5178	0.0363	113.6804
Total	2.6650	18.4977	8.9623	0.0815	4.2137	0.2493	4.4629	1.1888	0.2389	1.4277	38.8437	8,279.0991	8,317.9428	3.0605	0.9432	8,675.5233

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.71	0.13	0.46	37.09	0.95	0.98

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	1/3/2022	1/2/2022	5	0	
2	Site Preparation	Site Preparation	1/3/2022	2/11/2022	5	30	
3	Grading	Grading	2/14/2022	4/15/2022	5	45	
4	Paving	Paving	4/18/2022	5/13/2022	5	20	

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5	Building Construction	Building Construction	5/16/2022	1/2/2023	5	166
6	Architectural Coating	Architectural Coating	10/3/2022	1/31/2023	5	87

Acres of Grading (Site Preparation Phase): 45**Acres of Grading (Grading Phase): 135****Acres of Paving: 13.99****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 376,440; Non-Residential Outdoor: 125,480; Striped Parking Area: 36,564****OffRoad Equipment**

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

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 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					0.2949	0.0000	0.2949	0.1515	0.0000	0.1515	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0476	0.4963	0.2955	5.7000e-004		0.0242	0.0242		0.0223	0.0223	0.0000	50.1591	50.1591	0.0162	0.0000	50.5647
Total	0.0476	0.4963	0.2955	5.7000e-004	0.2949	0.0242	0.3191	0.1515	0.0223	0.1738	0.0000	50.1591	50.1591	0.0162	0.0000	50.5647

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.2000e-004	6.7000e-004	7.5700e-003	2.0000e-005	2.1100e-003	1.0000e-005	2.1200e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.8106	1.8106	6.0000e-005	6.0000e-005	1.8289
Total	9.2000e-004	6.7000e-004	7.5700e-003	2.0000e-005	2.1100e-003	1.0000e-005	2.1200e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.8106	1.8106	6.0000e-005	6.0000e-005	1.8289

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					0.1261	0.0000	0.1261	0.0648	0.0000	0.0648	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0476	0.4963	0.2955	5.7000e-004		0.0242	0.0242		0.0223	0.0223	0.0000	50.1590	50.1590	0.0162	0.0000	50.5646
Total	0.0476	0.4963	0.2955	5.7000e-004	0.1261	0.0242	0.1502	0.0648	0.0223	0.0870	0.0000	50.1590	50.1590	0.0162	0.0000	50.5646

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.2000e-004	6.7000e-004	7.5700e-003	2.0000e-005	2.0000e-003	1.0000e-005	2.0100e-003	5.3000e-004	1.0000e-005	5.5000e-004	0.0000	1.8106	1.8106	6.0000e-005	6.0000e-005	1.8289
Total	9.2000e-004	6.7000e-004	7.5700e-003	2.0000e-005	2.0000e-003	1.0000e-005	2.0100e-003	5.3000e-004	1.0000e-005	5.5000e-004	0.0000	1.8106	1.8106	6.0000e-005	6.0000e-005	1.8289

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					0.2082	0.0000	0.2082	0.0824	0.0000	0.0824	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0816	0.8740	0.6534	1.4000e-003		0.0368	0.0368		0.0338	0.0338	0.0000	122.7029	122.7029	0.0397	0.0000	123.6950
Total	0.0816	0.8740	0.6534	1.4000e-003	0.2082	0.0368	0.2450	0.0824	0.0338	0.1162	0.0000	122.7029	122.7029	0.0397	0.0000	123.6950

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.6400e-003	0.1564	0.0292	5.9000e-004	0.0161	1.5000e-003	0.0176	4.4200e-003	1.4400e-003	5.8600e-003	0.0000	56.7537	56.7537	1.5000e-004	8.9200e-003	59.4158
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5300e-003	1.1100e-003	0.0126	3.0000e-005	3.5200e-003	2.0000e-005	3.5400e-003	9.4000e-004	2.0000e-005	9.6000e-004	0.0000	3.0177	3.0177	1.0000e-004	9.0000e-005	3.0482
Total	5.1700e-003	0.1576	0.0419	6.2000e-004	0.0196	1.5200e-003	0.0211	5.3600e-003	1.4600e-003	6.8200e-003	0.0000	59.7713	59.7713	2.5000e-004	9.0100e-003	62.4639

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					0.0890	0.0000	0.0890	0.0352	0.0000	0.0352	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0816	0.8740	0.6534	1.4000e-003		0.0368	0.0368		0.0338	0.0338	0.0000	122.7027	122.7027	0.0397	0.0000	123.6948
Total	0.0816	0.8740	0.6534	1.4000e-003	0.0890	0.0368	0.1258	0.0352	0.0338	0.0691	0.0000	122.7027	122.7027	0.0397	0.0000	123.6948

Redding Distribution Facility - Shasta County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.6400e-003	0.1564	0.0292	5.9000e-004	0.0153	1.5000e-003	0.0168	4.2500e-003	1.4400e-003	5.6900e-003	0.0000	56.7537	56.7537	1.5000e-004	8.9200e-003	59.4158
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5300e-003	1.1100e-003	0.0126	3.0000e-005	3.3300e-003	2.0000e-005	3.3600e-003	8.9000e-004	2.0000e-005	9.1000e-004	0.0000	3.0177	3.0177	1.0000e-004	9.0000e-005	3.0482
Total	5.1700e-003	0.1576	0.0419	6.2000e-004	0.0187	1.5200e-003	0.0202	5.1400e-003	1.4600e-003	6.6000e-003	0.0000	59.7713	59.7713	2.5000e-004	9.0100e-003	62.4639

3.5 Paving - 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	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	0.0183					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0294	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895

Redding Distribution Facility - Shasta County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	5.1000e-004	3.7000e-004	4.2100e-003	1.0000e-005	1.1700e-003	1.0000e-005	1.1800e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0059	1.0059	3.0000e-005	3.0000e-005	1.0161
Total	5.1000e-004	3.7000e-004	4.2100e-003	1.0000e-005	1.1700e-003	1.0000e-005	1.1800e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0059	1.0059	3.0000e-005	3.0000e-005	1.0161

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	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	0.0183					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0294	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895

Redding Distribution Facility - Shasta County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	5.1000e-004	3.7000e-004	4.2100e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0059	1.0059	3.0000e-005	3.0000e-005	1.0161
Total	5.1000e-004	3.7000e-004	4.2100e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0059	1.0059	3.0000e-005	3.0000e-005	1.0161

3.6 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	0.1408	1.2883	1.3500	2.2200e-003		0.0667	0.0667		0.0628	0.0628	0.0000	191.1733	191.1733	0.0458	0.0000	192.3183
Total	0.1408	1.2883	1.3500	2.2200e-003		0.0667	0.0667		0.0628	0.0628	0.0000	191.1733	191.1733	0.0458	0.0000	192.3183

Redding Distribution Facility - Shasta County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	0.0553	1.4113	0.4199	5.0300e-003	0.1514	0.0144	0.1658	0.0439	0.0138	0.0577	0.0000	481.3245	481.3245	2.6400e-003	0.0703	502.3315
Worker	0.2031	0.1473	1.6708	4.3300e-003	0.4654	2.8600e-003	0.4683	0.1239	2.6300e-003	0.1266	0.0000	399.4360	399.4360	0.0139	0.0124	403.4733
Total	0.2583	1.5586	2.0907	9.3600e-003	0.6168	0.0173	0.6341	0.1678	0.0164	0.1842	0.0000	880.7605	880.7605	0.0165	0.0827	905.8048

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	0.1408	1.2883	1.3500	2.2200e-003		0.0667	0.0667		0.0628	0.0628	0.0000	191.1731	191.1731	0.0458	0.0000	192.3181
Total	0.1408	1.2883	1.3500	2.2200e-003		0.0667	0.0667		0.0628	0.0628	0.0000	191.1731	191.1731	0.0458	0.0000	192.3181

Mitigated Construction Off-Site

Redding Distribution Facility - Shasta 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					
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	0.0553	1.4113	0.4199	5.0300e-003	0.1450	0.0144	0.1595	0.0423	0.0138	0.0561	0.0000	481.3245	481.3245	2.6400e-003	0.0703	502.3315
Worker	0.2031	0.1473	1.6708	4.3300e-003	0.4414	2.8600e-003	0.4442	0.1180	2.6300e-003	0.1207	0.0000	399.4360	399.4360	0.0139	0.0124	403.4733
Total	0.2583	1.5586	2.0907	9.3600e-003	0.5864	0.0173	0.6037	0.1603	0.0164	0.1767	0.0000	880.7605	880.7605	0.0165	0.0827	905.8048

3.6 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	7.9000e-004	7.1900e-003	8.1200e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.3000e-004	3.3000e-004	0.0000	1.1590	1.1590	2.8000e-004	0.0000	1.1659
Total	7.9000e-004	7.1900e-003	8.1200e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.3000e-004	3.3000e-004	0.0000	1.1590	1.1590	2.8000e-004	0.0000	1.1659

Unmitigated Construction Off-Site

Redding Distribution Facility - Shasta 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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-004	7.1400e-003	2.2600e-003	3.0000e-005	9.2000e-004	5.0000e-005	9.6000e-004	2.7000e-004	4.0000e-005	3.1000e-004	0.0000	2.8212	2.8212	1.0000e-005	4.1000e-004	2.9438
Worker	1.1400e-003	7.9000e-004	9.3200e-003	3.0000e-005	2.8200e-003	2.0000e-005	2.8400e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	2.3578	2.3578	8.0000e-005	7.0000e-005	2.3803
Total	1.3400e-003	7.9300e-003	0.0116	6.0000e-005	3.7400e-003	7.0000e-005	3.8000e-003	1.0200e-003	6.0000e-005	1.0800e-003	0.0000	5.1790	5.1790	9.0000e-005	4.8000e-004	5.3241

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	7.9000e-004	7.1900e-003	8.1200e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.3000e-004	3.3000e-004	0.0000	1.1590	1.1590	2.8000e-004	0.0000	1.1659
Total	7.9000e-004	7.1900e-003	8.1200e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.3000e-004	3.3000e-004	0.0000	1.1590	1.1590	2.8000e-004	0.0000	1.1659

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
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Redding Distribution Facility - Shasta County, Annual

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-004	7.1400e-003	2.2600e-003	3.0000e-005	8.8000e-004	5.0000e-005	9.3000e-004	2.6000e-004	4.0000e-005	3.0000e-004	0.0000	2.8212	2.8212	1.0000e-005	4.1000e-004	2.9438
Worker	1.1400e-003	7.9000e-004	9.3200e-003	3.0000e-005	2.6700e-003	2.0000e-005	2.6900e-003	7.2000e-004	2.0000e-005	7.3000e-004	0.0000	2.3578	2.3578	8.0000e-005	7.0000e-005	2.3803
Total	1.3400e-003	7.9300e-003	0.0116	6.0000e-005	3.5500e-003	7.0000e-005	3.6200e-003	9.8000e-004	6.0000e-005	1.0300e-003	0.0000	5.1790	5.1790	9.0000e-005	4.8000e-004	5.3241

3.7 Architectural Coating - 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					
Archit. Coating	2.3309					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6500e-003	0.0458	0.0589	1.0000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	8.2981	8.2981	5.4000e-004	0.0000	8.3116
Total	2.3376	0.0458	0.0589	1.0000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	8.2981	8.2981	5.4000e-004	0.0000	8.3116

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
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Redding Distribution Facility - Shasta County, Annual

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0160	0.0116	0.1313	3.4000e-004	0.0366	2.2000e-004	0.0368	9.7400e-003	2.1000e-004	9.9400e-003	0.0000	31.3835	31.3835	1.0900e-003	9.7000e-004	31.7008
Total	0.0160	0.0116	0.1313	3.4000e-004	0.0366	2.2000e-004	0.0368	9.7400e-003	2.1000e-004	9.9400e-003	0.0000	31.3835	31.3835	1.0900e-003	9.7000e-004	31.7008

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	2.3309					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6500e-003	0.0458	0.0589	1.0000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	8.2981	8.2981	5.4000e-004	0.0000	8.3116
Total	2.3376	0.0458	0.0589	1.0000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	8.2981	8.2981	5.4000e-004	0.0000	8.3116

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
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Redding Distribution Facility - Shasta County, Annual

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0160	0.0116	0.1313	3.4000e-004	0.0347	2.2000e-004	0.0349	9.2700e-003	2.1000e-004	9.4800e-003	0.0000	31.3835	31.3835	1.0900e-003	9.7000e-004	31.7008
Total	0.0160	0.0116	0.1313	3.4000e-004	0.0347	2.2000e-004	0.0349	9.2700e-003	2.1000e-004	9.4800e-003	0.0000	31.3835	31.3835	1.0900e-003	9.7000e-004	31.7008

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	0.7889					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1100e-003	0.0143	0.0199	3.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	2.8086	2.8086	1.7000e-004	0.0000	2.8128
Total	0.7910	0.0143	0.0199	3.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	2.8086	2.8086	1.7000e-004	0.0000	2.8128

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
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Redding Distribution Facility - Shasta County, Annual

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

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	5.0000e-003	3.4500e-003	0.0409	1.1000e-004	0.0124	7.0000e-005	0.0125	3.3000e-003	7.0000e-005	3.3600e-003	0.0000	10.3456	10.3456	3.3000e-004	3.0000e-004	10.4444
Total	5.0000e-003	3.4500e-003	0.0409	1.1000e-004	0.0124	7.0000e-005	0.0125	3.3000e-003	7.0000e-005	3.3600e-003	0.0000	10.3456	10.3456	3.3000e-004	3.0000e-004	10.4444

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7889					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1100e-003	0.0143	0.0199	3.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	2.8086	2.8086	1.7000e-004	0.0000	2.8128
Total	0.7910	0.0143	0.0199	3.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	2.8086	2.8086	1.7000e-004	0.0000	2.8128

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

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	5.0000e-003	3.4500e-003	0.0409	1.1000e-004	0.0117	7.0000e-005	0.0118	3.1400e-003	7.0000e-005	3.2000e-003	0.0000	10.3456	10.3456	3.3000e-004	3.0000e-004	10.4444
Total	5.0000e-003	3.4500e-003	0.0409	1.1000e-004	0.0117	7.0000e-005	0.0118	3.1400e-003	7.0000e-005	3.2000e-003	0.0000	10.3456	10.3456	3.3000e-004	3.0000e-004	10.4444

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	1.3005	18.2773	8.7691	0.0802	4.2137	0.2325	4.4462	1.1888	0.2222	1.4109	0.0000	7,600.4659	7,600.4659	0.0749	0.8979	7,869.8998
Unmitigated	1.3005	18.2773	8.7691	0.0802	4.2137	0.2325	4.4462	1.1888	0.2222	1.4109	0.0000	7,600.4659	7,600.4659	0.0749	0.8979	7,869.8998

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT

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City Park	634.02	634.02	634.02	2,173,972	2,173,972
Parking Lot	365.64	365.64	365.64	6,588,102	6,588,102
Unrefrigerated Warehouse-No Rail	85.33	85.33	85.33	1,537,411	1,537,411
Total	1,084.98	1,084.98	1,084.98	10,299,484	10,299,484

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.42	0.00	0.00	100.00	0.00	0.00	100	0	0
Parking Lot	49.50	0.00	0.00	100.00	0.00	0.00	100	0	0
Unrefrigerated Warehouse-No Rail	0.00	0.00	49.50	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

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Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	388.5790	388.5790	0.0381	4.6100e-003	390.9049
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	388.5790	388.5790	0.0381	4.6100e-003	390.9049
NaturalGas Mitigated	0.0242	0.2203	0.1851	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	239.8540	239.8540	4.6000e-003	4.4000e-003	241.2793
NaturalGas Unmitigated	0.0242	0.2203	0.1851	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	239.8540	239.8540	4.6000e-003	4.4000e-003	241.2793

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					
City Park	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
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
Unrefrigerated Warehouse-No Rail	4.49469e+006	0.0242	0.2203	0.1851	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	239.8540	239.8540	4.6000e-003	4.4000e-003	241.2793
Total		0.0242	0.2203	0.1851	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	239.8540	239.8540	4.6000e-003	4.4000e-003	241.2793

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

Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	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
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
Unrefrigerated Warehouse-No Rail	4.49469e+006	0.0242	0.2203	0.1851	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	239.8540	239.8540	4.6000e-003	4.4000e-003	241.2793
Total		0.0242	0.2203	0.1851	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	239.8540	239.8540	4.6000e-003	4.4000e-003	241.2793

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	213290	32.6017	3.1900e-003	3.9000e-004	32.7969
Unrefrigerated Warehouse-No Rail	2.32891e+006	355.9773	0.0349	4.2300e-003	358.1080
Total		388.5791	0.0381	4.6200e-003	390.9049

Mitigated

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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			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	213290	32.6017	3.1900e-003	3.9000e-004	32.7969
Unrefrigerated Warehouse-No Rail	2.32891e+006	355.9773	0.0349	4.2300e-003	358.1080
Total		388.5791	0.0381	4.6200e-003	390.9049

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	1.3403	7.0000e-005	8.0900e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0157	0.0157	4.0000e-005	0.0000	0.0168
Unmitigated	1.3403	7.0000e-005	8.0900e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0157	0.0157	4.0000e-005	0.0000	0.0168

6.2 Area by SubCategory**Unmitigated**

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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	0.3120					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0276					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.5000e-004	7.0000e-005	8.0900e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0157	0.0157	4.0000e-005	0.0000	0.0168
Total	1.3403	7.0000e-005	8.0900e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0157	0.0157	4.0000e-005	0.0000	0.0168

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	0.3120					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0276					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.5000e-004	7.0000e-005	8.0900e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0157	0.0157	4.0000e-005	0.0000	0.0168
Total	1.3403	7.0000e-005	8.0900e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0157	0.0157	4.0000e-005	0.0000	0.0168

7.0 Water Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	64.9139	1.5178	0.0363	113.6804
Unmitigated	78.9616	1.8970	0.0454	139.9067

7.2 Water by Land Use**Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 23.4603	12.5508	1.2300e-003	1.5000e-004	12.6259
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000

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

Unrefrigerated Warehouse-No Rail	58.0345 / 0	66.4108	1.8958	0.0452	127.2808
Total		78.9616	1.8970	0.0454	139.9067

Mitigated

Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 22.0292	11.7852	1.1500e-003	1.4000e-004	11.8557
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	46.4276 / 0	53.1287	1.5166	0.0362	101.8246
Total		64.9139	1.5178	0.0363	113.6804

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

Category/Year

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	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	24.1143	1.4251	0.0000	59.7422
Unmitigated	48.2286	2.8502	0.0000	119.4844

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.69	0.3431	0.0203	0.0000	0.8499
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	235.9	47.8856	2.8300	0.0000	118.6345
Total		48.2286	2.8502	0.0000	119.4844

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	tons	MT/yr			
City Park	0.845	0.1715	0.0101	0.0000	0.4250
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	117.95	23.9428	1.4150	0.0000	59.3172
Total		24.1143	1.4251	0.0000	59.7422

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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11.0 Vegetation