



July 20, 2023

Sienna Construction

C/O Fernando Nieto, Owner
5408 Brigadoon Lane, Bakersfield, CA 93312
661.303.5218
SiennaConstruction11@gmail.com

Dear Mr. Nieto,

The Soar Environmental Team is pleased to provide this Vehicle Miles Traveled (VMT) analyses Letter Report. This VMT Letter Report includes VMT analysis for the proposed light industrial development in Bakersfield, California. The project site is in Kern County, which is within the San Joaquin Valley Air Pollution Control District (SJVAPCD). These evaluations will support an Initial Study (IS) or a Mitigated Negative Declaration (MND) from the County under the California Environmental Quality Act (CEQA).

PROJECT DESCRIPTION

The proposed project is located at 185 Quantico Avenue, Bakersfield (APN 142-230-13-00-0), CA and involves the development and construction of the property for a truck maintenance shop. The maintenance shop will be conducting semi-truck repairs and dispatching activities for their own semi-truck fleet. Approximately 20 trucks, with or without trailers, will be at the maintenance shop on any given day. This includes approximately 15 trucks entering and exiting the shop, with approximately 5 trucks being parked at the shop for up to one week. The back portion of the site will be paved for longer-term storage of up to 40 trucks at any given time.

The 9-acre parcel is currently vacant; therefore, no demolition will be required. The nearest sensitive receptor is a residence adjacent to the project site to the east. The nearest school to the project site is Virginia Avenue Elementary School approximately 0.5 mile (800 meters) northeast of the project site. The nearest airport is Bakersfield Municipal Airport approximately 3 miles (4,830 meters) southwest of the property.

ASSUMPTIONS

The following basic assumptions were used in developing the emission estimates for the proposed project using CalEEMod:

- CalEEMod defaults were applied to all phases of the project, unless otherwise specified.
- Institute of Traffic Engineers (ITE) default trip distances for the San Joaquin Valley Air Basin, as contained in CalEEMod, were assumed for the operational traffic analysis.
- Some project design features including sizes and number of buildings were defined by the Applicant and replaced some CalEEMod default settings.
- CalEEMod construction timelines are generally accurate, unless otherwise stated.
- During the site preparation and grading phases of construction, it is anticipated that no soil will need to be exported from or imported to the project site.

- The default equipment from CalEEMod for each construction phase, is representative of actual construction equipment used during construction.

LIST OF TABLES

The project analyses and results are summarized in the following tables:

- Table 1: Estimated Operational Vehicle Miles Traveled Impacts

VEHICLE MILES TRAVELED IMPACTS ANALYSES

VMT Analysis Methodology

CalEEMod contains built-in Institute of Transportation Engineers (ITE) data tables (10th Edition) for determining operational trip rates for calculating vehicle miles traveled (VMT). Trip lengths are defined in

CalEEMod at the Statewide, Air Basin, Air District, and County level for rural and urban project settings. The VMT results are used for calculating mobile source emissions of criteria pollutants and GHGs using the mobile source emission factors (EMFAC) database, which is also built into CalEEMod.

Trip rates are in terms of the size metric (thousand square footage or dwelling unit) are defined in CalEEMod/ITE for the applicable land use for weekdays, Saturdays, and Sundays (if available). Trip lengths are for primary trips. Trip purposes are primary, diverted, and pass-by trips. Diverted trips are assumed to take a slightly different path than a primary trip and are assumed to be 25% of the primary trip lengths. Pass-by trips are assumed to be 0.1 miles in length and are a result of no diversion from the primary route. Residential trip types are defined as home-work (H-W), home-shopping (H-S), and home-other (H-O). Non-residential trip types are defined as commercial-customer (C-C), commercial-work (C-W), and commercial-nonwork (C-NW), such as delivery trips. (CalEEMod 2020)

In its review comments to the September 2021 report, the City's Planning Division requested an updated VMT analysis because the planned size of the building increased. As discussed below, the size increase would have no effect on the projected VMT for the proposed project:

The original design included an 11,600 square-foot prefabricated steel building; the updated design increases the size of the building by 23% to 14,300 square feet. This is the result of adding 2,700 square feet office space with no increase in office staff; only more workspace for each employee will be added. The truck shop area will be the same size, and the capacity to service up to 20 trucks per day will not increase. The additional 2,700 square feet of office space will have no effect on daily truck traffic in and out of the facility, and the same number of office workers will be commuting. Thus, the increase in building size will not result in a substantive change in the results of the VMT and related air quality and greenhouse gas analyses, and results will remain less than significant. A revised VMT analysis is unnecessary.

Project Specific Trip Rates for VMT Estimates

CalEEMod is the SJVAPCD's accepted air quality model for determining direct and indirect emissions associated with various types of land uses, which it relies on to assist in evaluating project-related emissions for employees or residents traveling to and from a project site. Yorke's evaluation was based

on the potential size of light industrial building that would be constructed on the site (i.e., prefabricated 11,600 square feet), as well as the trip generation rate (i.e., trips per 1,000 square feet or ksf of occupied building) for the potential land uses. Default trip generation rates are provided in the CalEEMod user guide, Appendix D, which are adopted from the Institute of Transportation Engineers (ITE) trip generation manual, 10th edition. As shown in Table 4.3 of Appendix D of the CalEEMod user guide, Mobile Trip Rates, Trip Purpose, Trip Type by Land Use the default single-building weekday trip generation rate for General Light Industry is 4.96 trips/ksf. To reasonably account for up to 20 heavy duty trucks serviced per day, Yorke increased the trip rate for any given day in a week to 6.90 trips/ksf (80 trips/day), allowing for heavy-heavy duty trucks (HHD) to make up 25% (20 trips/day) of the traffic fleet mix moving through the facility during operations. The balance of 60 trips/day (5.17 trips/ksf) was allocated as 20 passenger cars (LDA) and 40 light duty pickup trucks (LDT1, LDT2).

Results of VMT Analysis

The trip rates are based on ITE 10th Edition average trip rates for the respective land use categories (CalEEMod version 2020.4.0). For standard land use projects, such as residential, commercial, or industrial, the VMT values output by CalEEMod based on ITE reference data are considered generally representative. As determined with CalEEMod using default trip lengths for the land use data shown in in Table 1, estimated VMT impacts are presented in Table 6.

Table 1: Estimated Operational Vehicle Miles Traveled Impacts				
Land Use	Average Daily Trip Rate			Annual VMT
	Weekday	Saturday	Sunday	
General Light Industry	60	60	60	175,258
Heavy Duty Trucks	20	20	20	58,419
Total	80	80	80	233,678

Sources: Applicant 2021, CalEEMod version 2020.4.0

Discussion

Based on projections provided by Soar, the prospective truck maintenance facility would be able to service up to 20 heavy-heavy duty (HHD) trucks per day. Operational traffic by heavy duty trucks to be serviced would represent approximately 25% of the 233,700 annual VMT shown in Table 1, with the remaining 75% available for light passenger vehicles and trucks (60 trips/day).

PROJECTED IMPACT: Less Than Significant (LTS)

MITIGATION: None Required

ATTACHMENTS

CalEEMod Outputs



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CLOSING

Thank you very much for the opportunity to be of assistance to Soar Environmental Consulting, Inc. Should you have any questions, please contact me at (805) 217-4947 (mobile) or (805) 293-7867 (office).

Sincerely,

A handwritten signature in blue ink, appearing to read "B. Boyes", is positioned below the word "Sincerely,".

Bradford L. Boyes, BSEnvE, MBA, QEP | Ventura Office
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ATTACHMENT 1 – CALEEMOD OUTPUTS

185 Quantico Truck Repair Shop - San Joaquin Valley Air Basin, Annual

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

**185 Quantico Truck Repair Shop
San Joaquin Valley Air Basin, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	11.60	1000sqft	0.27	11,600.00	0
Parking Lot	8.73	Acre	8.73	380,439.97	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	45
Climate Zone	3			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 - CEC Forecasting Climate Zone based on 93307 zip. PG&E provider for Bakersfield.

Land Use -

Construction Phase - No demolition; plot is already vacated.

Trips and VMT - Where do I adjust to 20 trips/day?

Vehicle Trips - Per Applicant - 20 HHD trips per day, setting HHD operational traffic to 25% of fleet mix.

Construction Off-road Equipment Mitigation - Per Applicant

Grading - Per Applicant

Fleet Mix - Per Applicant

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	75

185 Quantico Truck Repair Shop - San Joaquin Valley Air Basin, Annual

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

tblFleetMix	HHD	0.03	0.25
tblFleetMix	HHD	0.03	0.25
tblFleetMix	LDA	0.51	0.25
tblFleetMix	LDA	0.51	0.25
tblFleetMix	LDT1	0.05	0.25
tblFleetMix	LDT1	0.05	0.25
tblFleetMix	LDT2	0.17	0.25
tblFleetMix	LDT2	0.17	0.25
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.8800e-003	0.00
tblFleetMix	LHD2	7.8800e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.17	0.00
tblFleetMix	MDV	0.17	0.00
tblFleetMix	MH	3.7190e-003	0.00
tblFleetMix	MH	3.7190e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	6.6400e-004	0.00
tblFleetMix	OBUS	6.6400e-004	0.00
tblFleetMix	SBUS	1.5050e-003	0.00
tblFleetMix	SBUS	1.5050e-003	0.00
tblFleetMix	UBUS	3.1700e-004	0.00
tblFleetMix	UBUS	3.1700e-004	0.00
tblGrading	AcresOfGrading	20.00	9.00
tblGrading	AcresOfGrading	15.00	9.00
tblVehicleTrips	ST_TR	1.99	6.90

185 Quantico Truck Repair Shop - San Joaquin Valley Air Basin, Annual

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tblVehicleTrips	SU_TR	5.00	6.90
tblVehicleTrips	WD_TR	4.96	6.90

2.0 Emissions Summary

185 Quantico Truck Repair Shop - San Joaquin Valley Air Basin, Annual

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

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1050	0.9487	0.7835	1.7000e-003	0.2012	0.0453	0.2465	0.0949	0.0422	0.1371	0.0000	151.4898	151.4898	0.0277	5.3400e-003	153.7735
2022	0.4090	1.9327	2.1997	5.1200e-003	0.1651	0.0857	0.2508	0.0448	0.0806	0.1254	0.0000	459.7962	459.7962	0.0623	0.0211	467.6283
Maximum	0.4090	1.9327	2.1997	5.1200e-003	0.2012	0.0857	0.2508	0.0949	0.0806	0.1371	0.0000	459.7962	459.7962	0.0623	0.0211	467.6283

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					
2021	0.1050	0.9487	0.7835	1.7000e-003	0.0780	0.0453	0.1233	0.0376	0.0422	0.0797	0.0000	151.4897	151.4897	0.0277	5.3400e-003	153.7733
2022	0.4090	1.9327	2.1997	5.1200e-003	0.0627	0.0857	0.1483	0.0196	0.0806	0.1002	0.0000	459.7960	459.7960	0.0623	0.0211	467.6280
Maximum	0.4090	1.9327	2.1997	5.1200e-003	0.0780	0.0857	0.1483	0.0376	0.0806	0.1002	0.0000	459.7960	459.7960	0.0623	0.0211	467.6280

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	61.60	0.00	45.38	59.06	0.00	31.45	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-23-2021	11-22-2021	0.7084	0.7084
2	11-23-2021	2-22-2022	0.7663	0.7663
3	2-23-2022	5-22-2022	0.6973	0.6973
4	5-23-2022	8-22-2022	0.7178	0.7178
5	8-23-2022	9-30-2022	0.2624	0.2624
		Highest	0.7663	0.7663

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0859	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.9000e-004
Energy	1.2900e-003	0.0118	9.8900e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004	0.0000	34.3745	34.3745	3.7300e-003	6.6000e-004	34.6639
Mobile	0.0273	0.2417	0.3063	1.4900e-003	0.0898	2.1000e-003	0.0919	0.0241	2.0000e-003	0.0261	0.0000	140.6066	140.6066	2.6100e-003	0.0155	145.2878
Waste						0.0000	0.0000		0.0000	0.0000	2.9190	0.0000	2.9190	0.1725	0.0000	7.2317
Water						0.0000	0.0000		0.0000	0.0000	0.8510	1.3430	2.1940	0.0876	2.0900e-003	5.0076
Total	0.1145	0.2535	0.3164	1.5600e-003	0.0898	2.9900e-003	0.0928	0.0241	2.8900e-003	0.0270	3.7700	176.3245	180.0946	0.2665	0.0182	192.1913

185 Quantico Truck Repair Shop - San Joaquin Valley Air Basin, Annual

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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0859	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.9000e-004
Energy	1.2900e-003	0.0118	9.8900e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004	0.0000	34.3745	34.3745	3.7300e-003	6.6000e-004	34.6639
Mobile	0.0273	0.2417	0.3063	1.4900e-003	0.0898	2.1000e-003	0.0919	0.0241	2.0000e-003	0.0261	0.0000	140.6066	140.6066	2.6100e-003	0.0155	145.2878
Waste						0.0000	0.0000		0.0000	0.0000	2.9190	0.0000	2.9190	0.1725	0.0000	7.2317
Water						0.0000	0.0000		0.0000	0.0000	0.8510	1.3430	2.1940	0.0876	2.0900e-003	5.0076
Total	0.1145	0.2535	0.3164	1.5600e-003	0.0898	2.9900e-003	0.0928	0.0241	2.8900e-003	0.0270	3.7700	176.3245	180.0946	0.2665	0.0182	192.1913

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/18/2021	10/1/2021	5	10	
2	Grading	Grading	10/2/2021	10/29/2021	5	20	
3	Building Construction	Building Construction	10/30/2021	9/16/2022	5	230	

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

4	Paving	Paving	9/17/2022	10/14/2022	5	20
5	Architectural Coating	Architectural Coating	10/15/2022	11/11/2022	5	20

Acres of Grading (Site Preparation Phase): 9

Acres of Grading (Grading Phase): 9

Acres of Paving: 8.73

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 17,400; Non-Residential Outdoor: 5,800; Striped Parking Area: 22,826 (Architectural Coating – sqft)

OffRoad Equipment

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

185 Quantico Truck Repair Shop - San Joaquin Valley Air Basin, Annual

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

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	165.00	64.00	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	33.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2021

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					0.0951	0.0000	0.0951	0.0502	0.0000	0.0502	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530
Total	0.0194	0.2025	0.1058	1.9000e-004	0.0951	0.0102	0.1053	0.0502	9.4000e-003	0.0596	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530

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

3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.5000e-004	2.7000e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6136	0.6136	2.0000e-005	2.0000e-005	0.6202
Total	3.4000e-004	2.5000e-004	2.7000e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6136	0.6136	2.0000e-005	2.0000e-005	0.6202

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					0.0371	0.0000	0.0371	0.0196	0.0000	0.0196	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530
Total	0.0194	0.2025	0.1058	1.9000e-004	0.0371	0.0102	0.0473	0.0196	9.4000e-003	0.0290	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530

185 Quantico Truck Repair Shop - San Joaquin Valley Air Basin, Annual

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

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.5000e-004	2.7000e-003	1.0000e-005	2.5000e-004	0.0000	2.6000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.6136	0.6136	2.0000e-005	2.0000e-005	0.6202
Total	3.4000e-004	2.5000e-004	2.7000e-003	1.0000e-005	2.5000e-004	0.0000	2.6000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.6136	0.6136	2.0000e-005	2.0000e-005	0.6202

3.3 Grading - 2021

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					0.0650	0.0000	0.0650	0.0336	0.0000	0.0336	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644
Total	0.0229	0.2474	0.1586	3.0000e-004	0.0650	0.0116	0.0766	0.0336	0.0107	0.0443	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644

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

3.3 Grading - 2021

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	5.6000e-004	4.2000e-004	4.5100e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0227	1.0227	4.0000e-005	3.0000e-005	1.0337
Total	5.6000e-004	4.2000e-004	4.5100e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0227	1.0227	4.0000e-005	3.0000e-005	1.0337

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					0.0254	0.0000	0.0254	0.0131	0.0000	0.0131	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643
Total	0.0229	0.2474	0.1586	3.0000e-004	0.0254	0.0116	0.0370	0.0131	0.0107	0.0238	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643

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3.3 Grading - 2021

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	5.6000e-004	4.2000e-004	4.5100e-003	1.0000e-005	4.2000e-004	1.0000e-005	4.3000e-004	1.3000e-004	1.0000e-005	1.3000e-004	0.0000	1.0227	1.0227	4.0000e-005	3.0000e-005	1.0337
Total	5.6000e-004	4.2000e-004	4.5100e-003	1.0000e-005	4.2000e-004	1.0000e-005	4.3000e-004	1.3000e-004	1.0000e-005	1.3000e-004	0.0000	1.0227	1.0227	4.0000e-005	3.0000e-005	1.0337

3.4 Building Construction - 2021

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	0.0428	0.3922	0.3729	6.1000e-004		0.0216	0.0216		0.0203	0.0203	0.0000	52.1184	52.1184	0.0126	0.0000	52.4327
Total	0.0428	0.3922	0.3729	6.1000e-004		0.0216	0.0216		0.0203	0.0203	0.0000	52.1184	52.1184	0.0126	0.0000	52.4327

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3.4 Building Construction - 2021

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	5.1100e-003	0.0957	0.0275	3.1000e-004	9.5500e-003	1.7000e-003	0.0112	2.7600e-003	1.6200e-003	4.3800e-003	0.0000	29.6528	29.6528	2.8000e-004	4.4500e-003	30.9862
Worker	0.0139	0.0103	0.1115	2.8000e-004	0.0297	1.8000e-004	0.0299	7.8900e-003	1.6000e-004	8.0500e-003	0.0000	25.3108	25.3108	9.4000e-004	8.4000e-004	25.5833
Total	0.0190	0.1060	0.1390	5.9000e-004	0.0392	1.8800e-003	0.0411	0.0107	1.7800e-003	0.0124	0.0000	54.9636	54.9636	1.2200e-003	5.2900e-003	56.5695

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	0.0428	0.3922	0.3729	6.1000e-004		0.0216	0.0216		0.0203	0.0203	0.0000	52.1183	52.1183	0.0126	0.0000	52.4327
Total	0.0428	0.3922	0.3729	6.1000e-004		0.0216	0.0216		0.0203	0.0203	0.0000	52.1183	52.1183	0.0126	0.0000	52.4327

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

3.4 Building Construction - 2021

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	5.1100e-003	0.0957	0.0275	3.1000e-004	4.5000e-003	1.7000e-003	6.1900e-003	1.5200e-003	1.6200e-003	3.1400e-003	0.0000	29.6528	29.6528	2.8000e-004	4.4500e-003	30.9862
Worker	0.0139	0.0103	0.1115	2.8000e-004	0.0104	1.8000e-004	0.0106	3.1600e-003	1.6000e-004	3.3200e-003	0.0000	25.3108	25.3108	9.4000e-004	8.4000e-004	25.5833
Total	0.0190	0.1060	0.1390	5.9000e-004	0.0149	1.8800e-003	0.0168	4.6800e-003	1.7800e-003	6.4600e-003	0.0000	54.9636	54.9636	1.2200e-003	5.2900e-003	56.5695

3.4 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	0.1578	1.4445	1.5136	2.4900e-003		0.0748	0.0748		0.0704	0.0704	0.0000	214.3459	214.3459	0.0514	0.0000	215.6296
Total	0.1578	1.4445	1.5136	2.4900e-003		0.0748	0.0748		0.0704	0.0704	0.0000	214.3459	214.3459	0.0514	0.0000	215.6296

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

3.4 Building Construction - 2022

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	0.0128	0.3250	0.0935	1.2400e-003	0.0393	3.6100e-003	0.0429	0.0113	3.4600e-003	0.0148	0.0000	118.8756	118.8756	7.7000e-004	0.0178	124.2057
Worker	0.0522	0.0368	0.4156	1.1000e-003	0.1220	6.9000e-004	0.1227	0.0324	6.3000e-004	0.0331	0.0000	100.8232	100.8232	3.4400e-003	3.1300e-003	101.8432
Total	0.0650	0.3618	0.5091	2.3400e-003	0.1613	4.3000e-003	0.1656	0.0438	4.0900e-003	0.0479	0.0000	219.6987	219.6987	4.2100e-003	0.0210	226.0488

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	0.1578	1.4445	1.5136	2.4900e-003		0.0748	0.0748		0.0704	0.0704	0.0000	214.3456	214.3456	0.0514	0.0000	215.6294
Total	0.1578	1.4445	1.5136	2.4900e-003		0.0748	0.0748		0.0704	0.0704	0.0000	214.3456	214.3456	0.0514	0.0000	215.6294

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

3.4 Building Construction - 2022

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	0.0128	0.3250	0.0935	1.2400e-003	0.0185	3.6100e-003	0.0221	6.2400e-003	3.4600e-003	9.7000e-003	0.0000	118.8756	118.8756	7.7000e-004	0.0178	124.2057
Worker	0.0522	0.0368	0.4156	1.1000e-003	0.0428	6.9000e-004	0.0435	0.0130	6.3000e-004	0.0136	0.0000	100.8232	100.8232	3.4400e-003	3.1300e-003	101.8432
Total	0.0650	0.3618	0.5091	2.3400e-003	0.0613	4.3000e-003	0.0656	0.0192	4.0900e-003	0.0233	0.0000	219.6987	219.6987	4.2100e-003	0.0210	226.0488

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	0.0114					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0225	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

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3.5 Paving - 2022

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	3.6000e-004	4.0800e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9909	0.9909	3.0000e-005	3.0000e-005	1.0009
Total	5.1000e-004	3.6000e-004	4.0800e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9909	0.9909	3.0000e-005	3.0000e-005	1.0009

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	0.0114					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0225	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

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3.5 Paving - 2022

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	3.6000e-004	4.0800e-003	1.0000e-005	4.2000e-004	1.0000e-005	4.3000e-004	1.3000e-004	1.0000e-005	1.3000e-004	0.0000	0.9909	0.9909	3.0000e-005	3.0000e-005	1.0009
Total	5.1000e-004	3.6000e-004	4.0800e-003	1.0000e-005	4.2000e-004	1.0000e-005	4.3000e-004	1.3000e-004	1.0000e-005	1.3000e-004	0.0000	0.9909	0.9909	3.0000e-005	3.0000e-005	1.0009

3.6 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	0.1600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	0.1621	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574

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3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1300e-003	8.0000e-004	8.9900e-003	2.0000e-005	2.6400e-003	1.0000e-005	2.6500e-003	7.0000e-004	1.0000e-005	7.1000e-004	0.0000	2.1800	2.1800	7.0000e-005	7.0000e-005	2.2020
Total	1.1300e-003	8.0000e-004	8.9900e-003	2.0000e-005	2.6400e-003	1.0000e-005	2.6500e-003	7.0000e-004	1.0000e-005	7.1000e-004	0.0000	2.1800	2.1800	7.0000e-005	7.0000e-005	2.2020

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	0.1600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	0.1621	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574

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3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1300e-003	8.0000e-004	8.9900e-003	2.0000e-005	9.3000e-004	1.0000e-005	9.4000e-004	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	2.1800	2.1800	7.0000e-005	7.0000e-005	2.2020
Total	1.1300e-003	8.0000e-004	8.9900e-003	2.0000e-005	9.3000e-004	1.0000e-005	9.4000e-004	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	2.1800	2.1800	7.0000e-005	7.0000e-005	2.2020

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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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					
Mitigated	0.0273	0.2417	0.3063	1.4900e-003	0.0898	2.1000e-003	0.0919	0.0241	2.0000e-003	0.0261	0.0000	140.6066	140.6066	2.6100e-003	0.0155	145.2878
Unmitigated	0.0273	0.2417	0.3063	1.4900e-003	0.0898	2.1000e-003	0.0919	0.0241	2.0000e-003	0.0261	0.0000	140.6066	140.6066	2.6100e-003	0.0155	145.2878

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	80.04	80.04	80.04	233,678	233,678
Parking Lot	0.00	0.00	0.00		
Total	80.04	80.04	80.04	233,678	233,678

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
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.250000	0.250000	0.250000	0.000000	0.000000	0.000000	0.000000	0.250000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.250000	0.250000	0.250000	0.000000	0.000000	0.000000	0.000000	0.250000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

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Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	21.5608	21.5608	3.4900e-003	4.2000e-004	21.7740
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	21.5608	21.5608	3.4900e-003	4.2000e-004	21.7740
NaturalGas Mitigated	1.2900e-003	0.0118	9.8900e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004	0.0000	12.8137	12.8137	2.5000e-004	2.3000e-004	12.8899
NaturalGas Unmitigated	1.2900e-003	0.0118	9.8900e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004	0.0000	12.8137	12.8137	2.5000e-004	2.3000e-004	12.8899

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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					
General Light Industry	240120	1.2900e-003	0.0118	9.8900e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004	0.0000	12.8137	12.8137	2.5000e-004	2.3000e-004	12.8899
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
Total		1.2900e-003	0.0118	9.8900e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004	0.0000	12.8137	12.8137	2.5000e-004	2.3000e-004	12.8899

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	240120	1.2900e-003	0.0118	9.8900e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004	0.0000	12.8137	12.8137	2.5000e-004	2.3000e-004	12.8899
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
Total		1.2900e-003	0.0118	9.8900e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004	0.0000	12.8137	12.8137	2.5000e-004	2.3000e-004	12.8899

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	99876	9.2409	1.4900e-003	1.8000e-004	9.3323
Parking Lot	133154	12.3199	1.9900e-003	2.4000e-004	12.4417
Total		21.5608	3.4800e-003	4.2000e-004	21.7740

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	99876	9.2409	1.4900e-003	1.8000e-004	9.3323
Parking Lot	133154	12.3199	1.9900e-003	2.4000e-004	12.4417
Total		21.5608	3.4800e-003	4.2000e-004	21.7740

6.0 Area Detail

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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	0.0859	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.9000e-004
Unmitigated	0.0859	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0160					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0699					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.9000e-004
Total	0.0859	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.9000e-004

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0160					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0699					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.9000e-004
Total	0.0859	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.6000e-004	3.6000e-004	0.0000	0.0000	3.9000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.1940	0.0876	2.0900e-003	5.0076
Unmitigated	2.1940	0.0876	2.0900e-003	5.0076

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	2.6825 / 0	2.1940	0.0876	2.0900e-003	5.0076
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.1940	0.0876	2.0900e-003	5.0076

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	2.6825 / 0	2.1940	0.0876	2.0900e-003	5.0076
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.1940	0.0876	2.0900e-003	5.0076

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.9190	0.1725	0.0000	7.2317
Unmitigated	2.9190	0.1725	0.0000	7.2317

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	14.38	2.9190	0.1725	0.0000	7.2317
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		2.9190	0.1725	0.0000	7.2317

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	14.38	2.9190	0.1725	0.0000	7.2317
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		2.9190	0.1725	0.0000	7.2317

9.0 Operational Offroad

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

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
