Analysis of Impacts to Air Quality, Greenhouse Gas Emissions and Public Health from Proposed Gasoline Station and Convenience Store

Sacramento, California

March 15, 2022

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Air Quality • Permitting • OHSA • RMP/PSM

March 15, 2022

Mr. Sandeep Dhanda
Imperial Real Estate, LLC
5453 Cosumnes Drive
Stockton, CA 95219

Subject: Final Report – Impacts to Air Quality and Greenhouse Gas Emissions from the Proposed 76 Gas Station and Convenience Store, Sacramento CA

Dear Mr. Dhanda:

Attached is the Final Air Quality and GHG Report for the proposed 76 Gas Station and Convenience proposed for the Northeast Corner of Stockton Boulevard and Gerber Road in Sacramento.

The revised site plan shifts the convenience store to the northern portion of the property and decreases the number of dispensing pumps from six to five. Other project metrics such as number of gasoline annual volume of gasoline dispensed or volume of traffic remain the same. As a result, the air quality and impacts to public health remain unchanged from the August 10, 2020 report.

The final report includes the updated site map and two revisions based on comments from Sacramento Metropolitan Air Quality Management District (SMAQMD).

Specifically, SMAQMD's requested the use of the current version of the CalEEMOD (Version 2020.4.0 instead of Version 2016.3.2) and that exhaust PM-10 instead of exhaust PM-2.5 be used to characterize diesel particulate matter. The updated CalEEMOD run and the revised DPM emission estimated were submitted to the District. The District confirmed (E-Mail from Rachael DuBose dated November 22, 2021 forwarded by Carol Gregory) that the updated CalEEMOd run and the updated DPM emission estimates were appropriate and therefore, are included in the attached final report.

The overall results and conclusion of the analysis remain unchanged from the November 14, 2021 version of the report. Impacts to air quality and public health remain less than significant for the proposed gasoline station, car wash and convenience store.

If you have any questions or require any additional information, please contact me at (916) 687-8352 or by e-mail: ray.kapahi@gmail.com at your convenience.

Sincerely,

Ray Kapahi

Ray Kapahi
Principal
Environmental Permitting Specialists
www.EPSConsulting.org

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SECTION 1: INTRODUCTION

Environmental Permitting Specialists (EPS) has been retained by Imperial Real Estate, LLC to evaluate air quality, greenhouse gas emissions (GHG) and impacts to public health from a proposed gasoline station, convenience store with a car wash (Project) to be located in Sacramento, California. This analysis has been requested by the Office of Planning and Environmental Review, Sacramento County as part of their environmental review of the proposed Project.

The Project would be located on a 0.88 acre parcel at the Northeast corner of Gerber Road and Stockton Boulevard in Sacramento. It has been assigned an Assessor's Parcel Number 051-0180-021-000. Figures 1 and 2 illustrate the project location and site map respectively. Construction is expected to begin summer of 2022 and be completed by January of 2023.

The objective of the proposed analysis is to evaluate three (3) categories of impacts associated with the construction and operational phase of this Project:

1. Air Quality Impacts
2. Impacts from GHG Emissions
3. Impacts to Public Health

The significance of the project's impacts is determined by comparing construction and operational emissions and health risk with thresholds of significance established by the Sacramento Metropolitan Air Quality Management District (SMAQMD). The project is considered to have potentially significant environmental impact if any of the three impacts exceed the thresholds of significance.

This report is divided into 6 sections. Immediately following this Introduction, the projects metrics are described in Section 2. Next, the methodology for calculating air quality, GHG emission and public health risks are discussed in Section 3. The Project impacts are discussed in Section 4. The report concludes with a discussion of the significance of the project's air quality, GHG and public health impacts (Section 5). References, technical details and calculations are provided in Section 6 and in the Appendix.

Figure 1-1
Vicinity Map

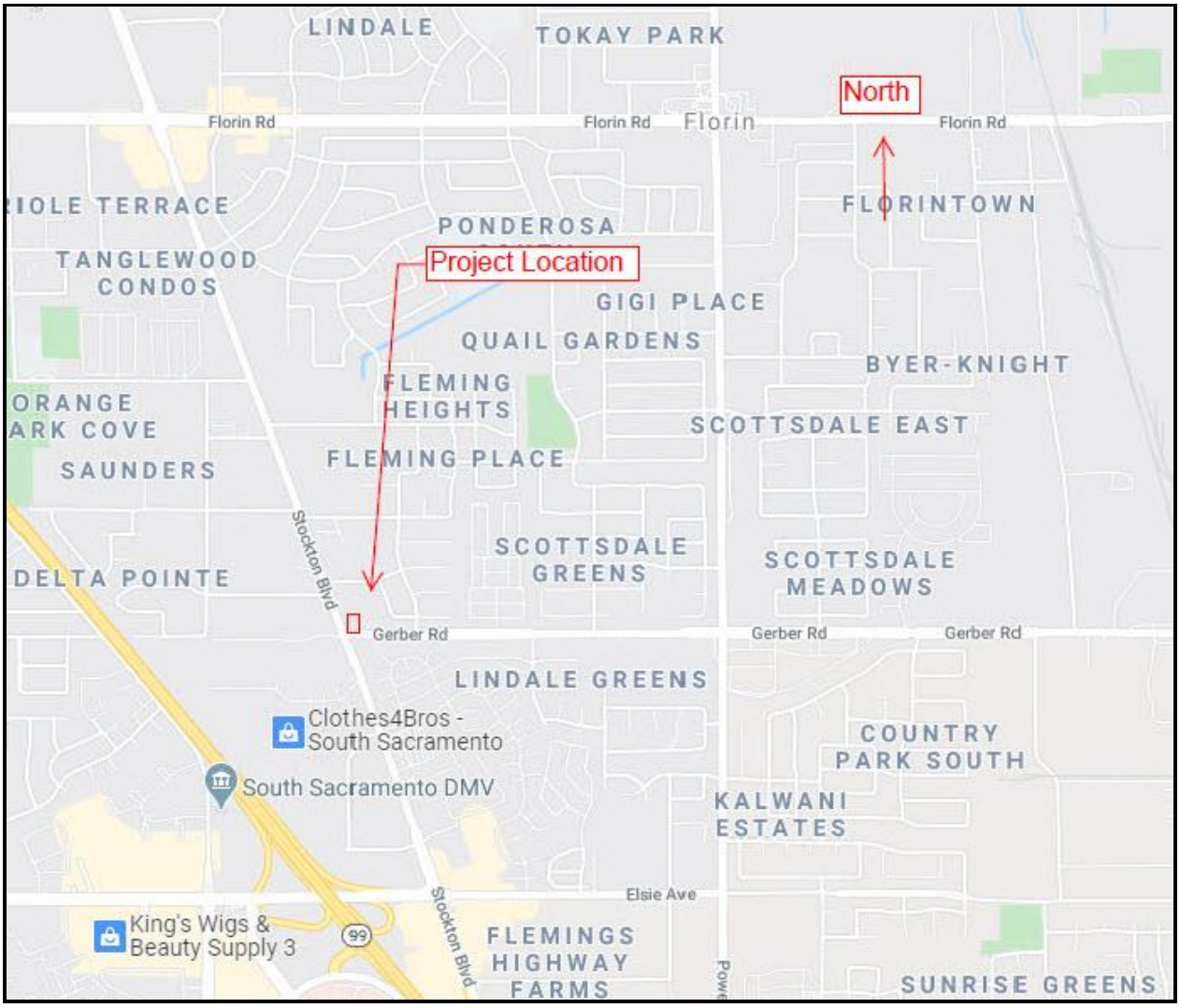


Figure 1-2
Site Map

Source: MHA Design Services



SECTION 2: PROJECT DETAILS

As noted in the Introduction, the proposed project would occupy 0.88 acres (38,458 square feet). The convenience store would occupy approximately 3,000 square feet. There would be a total of five fuel dispensers. The car wash would be located on the northeast portion of the site. It would occupy 816 square feet (17 feet x 48 feet). A total of 13 parking spaces are planned.

There are no structures at the site, therefore, no demolition would be required. The site is already graded and level, therefore no grading will be required and no soil would have to be imported or exported. Electrical, water and sewage services are available at the site, therefore, minimal infrastructure development will be needed.

The actual building would be constructed with hand tools, portable compressors, a forklift. On-site electrical power would be established after 30 days from start of construction, so there would be minimal usage of portable gasoline fueled generators. No heavy construction equipment would be used during the actual building of the store or car wash.

The project is subject to District Rule 403 that requires control of fugitive dust emissions. Due to the small size of the project, there are no access roads, trucks transporting soil, or storage piles of soil that may be subject to wind erosion. The project would use water sprays on exposed/disturbed area and limit truck idling to no more than 5 minutes.

The traffic volume is based on Trip Generation Manual 10th Edition, Institute of Traffic Engineers. The trip generation rates are based on Profile # 852 (Convenience Market with Gasoline Pumps). The number of daily trips are projected to equal 322 trips per day.

Table 2-1 summarizes all the project metrics based on information from the Project developer. As noted in the Introduction, the construction has been delayed to Spring of 2022.

Table 2-1

Phase		Details	Comments
	Start Date	August 1, 2022	Based on data provided by MHA Design Group.
	End Date	January 18, 2023	
	Lot Size	0.88 acres	
	Parking Spaces	13	
	Paved Area	20,000 square feet paved asphalt	
	Convenience Store Area	3,060 square feet (approx.)	
	Construction Related Traffic	Default Values	Note 1.
Operational	Start Date	October 1, 2021	
	Average Daily Traffic	322 trip	ITE Trip Generation Manual 10th Ed. For Profile # 853
	Volume of Gasoline Dispensed	1.2 million gallons per year 3,300 gallons per day Total 5 pumps	Fuel would be delivered in 8,500 gallon tanker trucks. 142 annual fuel deliveries per year

	Trip Length	5 to 10 miles	Note 1
	Energy Usage (Electricity)	4.2 KWhr/ft2	Note 1
	Energy Usage (Natural Gas)	6 kBTU/ft2	Note 1
	Water Usage	10,457 gallons/yr per pump inside 6,409 gallons/yr per pump outside	Note 1
	Solid Waste	0.42 tons/yr per pump	Note 1

Note 1.
Based on recommended default value for Convenience Store with Gas Pumps located at Climate Zone 6. Ref: CalEEMod emissions model version 2020.4.0. See Appendix D "Default Data Tables" Pages D-310, D-340, D-351.Available at: http://caleemod.com/

SECTION 3: CALCULATION METHODOLOGY

The construction and operation of the proposed gas station and convenience store would release a variety of air pollutants, including GHG emissions and emissions of toxic air pollutants (TACs). Project impacts are directly related to short-term and long-term emissions of these pollutants. This section identifies these pollutants and describes how they will be quantified.

3.1 Emissions of Criteria Air Pollutants

Criteria air pollutants refers to those pollutants for which the state and/or the federal government has established ambient (outside) air quality standards. The following criteria air pollutants will be quantified for the current project:

- Oxides of Nitrogen (NOx)
- Reactive Organic Compounds (ROG)
- Particulate Matter (PM-10)
- Fine Particulate Matter (PM-2.5)
- Carbon Monoxide
- Sulfur Dioxide (SO_2)

The maximum daily emission rates of each of these air pollutants will be quantified using the CalEEMod emissions model. This model is recommended by the SMAQMD. Version 2016.3.2 of this model will be used. These emissions would be released during the construction and operational phases.

3.2 Emissions of GHG Emissions

Greenhouse gases refer to a variety of gases such as carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hyrofluorocarbons, and others. The current analysis is limited to emissions of CO_2, N_2O and CH_4 only. The project will not emit hydofluorocarbons or other known

greenhouse gases. GHG emissions will be reported in terms of annual metric tons of carbon dioxide equivalents [MT CO_2 (e)].

As with criteria air pollutants, Version 2020.4.0 of the CalEEMod emissions model will be used to calculate annual GHG emissions in terms of CO_2(e). These emissions would be released during both the construction and operational phases.

3.3 Emissions of Toxic Air Contaminants

There are two categories of TACs that would be released from the current project:

1. Diesel Particulate Matter (DPM) from use of construction equipment and idling of fuel delivery trucks.

2. BTEX Compounds (benzene, toluene, xylene) from gasoline dispensing, storage and delivery. This includes spillage of gasoline from fuel dispensing.

Toxic Air Contaminants that may be released and the calculation methodology is summarized below in Table 3-1.

Table 3-1
Sources of Toxic Air Contaminants

Toxic Air Contaminant	Construction Phase	Operational Phase	Calculation Methodology
Diesel Particulate Matter	Use of Diesel fueled Construction Equipment	Idling of Fuel Delivery Truck	For construction phase, use "Exhaust PM-10" emission rates calculated using CalEEMod Emissions Model For Operational Phase – Use idling emission factors for HD Trucks using EMFAC 2017 for CY 2021. Assume 15 minutes idle time per truck delivery
Benzene	N/A	Storage and Dispensing of Gasoline EVR Phase I and II for Underground Storage Tanks	Recommended emission factors in Appendix A in the 1997 CAPCOA Air Toxics "Hot Spots" Program document, *Gasoline Service Station Industrywide Risk Assessment Guidelines*.
Ethyl Benzene	N/A	Storage and Dispensing of Gasoline	Same as Benzene
Toluene	N/A	Storage and Dispensing of Gasoline	Same as Benzene
Xylene	N/A	Storage and	Same as Benzene

		Dispensing of Gasoline	

SECTION 4: PROJECT IMPACTS

This section discusses the air quality, GHG and public health impacts associated with the Project. The significance of the impacts is discussed in Section 5.

4.1 Impacts to Air Quality

Impacts to air quality were determined by calculating the maximum daily emission rate of each the criteria air pollutant identified earlier in Section 3.1.

Based on the use of the CalEEMod emissions model, the daily emission rates are summarized in Table 4-1. Daily emissions for the construction phase range from 0.28 lbs/day to 7.51 lbs/day depending on the pollutant. Emissions for the operational phase range from 0.36 lbs/day to 7.2 lbs/day depending on the pollutant.

Table 4-1
Summary of Maximum Daily Emissions
Construction Phase
(in Pounds per day)

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Year	lb/day									
2022	0.1003	0.8721	0.9983	1.6000e-003	0.2880	0.8556	0.2993	0.0347	0.7991	0.0577
2023	6.0463	5.5337	7.5102	0.0125	0.1369	0.2650	0.4019	0.0363	0.2472	0.2835
Maximum	**6.0463**	**5.5337**	**7.5102**	**0.0125**	**0.2880**	**0.8556**	**0.4019**	**0.0363**	**0.7991**	**0.2835**

Table 4-2
Summary of Maximum Daily Emissions
Operational Phase
(in pounds/day)

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Category	lb/day									
Area	0.0742	1.0000e-005	1.4300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005
Energy	6.2000e-004	5.6400e-003	4.7400e-003	3.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004
Mobile	1.0183	0.8984	7.1974	0.0139	1.3205	0.0107	1.3311	0.3521	9.9700e-003	0.3621
Total	**1.0931**	**0.9040**	**7.2035**	**0.0139**	**1.3205**	**0.0111**	**1.3316**	**0.3521**	**0.0104**	**0.3625**

4.2 Impacts from GHG Emissions

The annual emissions of GHG emissions is summarized in Table 4-3 below for the construction and operational phases. The annual GHG for the construction and operational phases is estimated to be 7.0 metric tons/year and 231.55 metric tons/yr respectively.

Detailed calculations are provided in Appendix A. There are no hourly or daily standards or thresholds of significance for GHG emissions. Therefore, the analysis is limited to annual GHG emissions only.

Table 4-3
Summary of Annual GHG Emissions
(in Metric tons / Yr)

	CO2	CH4	N2O	CO2(e)
Phase				
Construction	6.908	$1.7X10^{-4}$	$1.6X10^{-4}$	7.00
Operational	226.79	0.0479	0.0119	231.55

4.3 Impacts from TAC Emissions

Construction Phase

Diesel Particulate Matter (DPM)

As noted previously, there are no structures at the site, therefore, no demolition would be required. The site is already graded and level, therefore no grading will be required and no soil would have to be imported or exported. Electrical, water and sewage services are available at the site, therefore, minimal infrastructure development will be needed.

DPM emissions are limited to the site preparation and paving phases. Site preparation would require the limited use of a tractor/loader/backhoe used to prepare the foundation and trenching to install electrical, sewer and water connections. Paving would involve use of a paver and a roller.

The actual building would be constructed with hand tools, portable compressors, a forklift. On-site electrical power would be established after 30 days from start of construction, so there would be minimal usage of portable gasoline fueled generators. No diesel fueled heavy construction equipment would be used during the actual building of the store or car wash.

DPM emissions for the construction phase were calculated using the CalEEMod emissions model. The annual emission rates of "Exhaust PM-10" were used as a surrogate for DPM. The annual emissions from the site preparation and paving phases are summarized in Table 4-4

Table 4-4
Summary of On-Site DPM Emissions Construction Phase

	DPM Emissions	
Construction Phase	**(tons/year)**	**(pounds/year)**
Site Preparation	1.00×10^{-5}	2.0E-02
Paving	6.6×10^{-4}	1.32
Total	11.0×10^{-5}	1.34
Ref: Annual Emissions Report, CalEEMod Emissions Model. Copy provided in Appendix A.		

Operational Phase

Diesel Particulate Matter (DPM)

The main source of DPM for the operational phase is heavy duty fuel delivery trucks. It is estimated there would be 142 fuel deliveries annually based on 8,550 gallons per delivery. Each truck was assumed to idle for 15 minutes. Based on the EMFAC 2017 emissions model, annual emissions of DPM are estimated to equal only 0.0029 pounds per year. Detailed calculations are provided in Appendix C.

Toxic Organic Compounds

The dispensing, storage and delivery of gasoline will result in emissions toxic air contaminants. A two-step procedure is used to estimate maximum hourly and annual emissions rates. First, the emission rate of VOCs is calculated based on recommended emission factors by the California Air Pollution Control Officers Association (CAPCOA) *Gasoline Service Station Industrywide Risk Assessment Guidelines (1997)*. VOCs include toxic air contaminants such as benzene, acetaldehyde, etc. The VOCs are then speciated into individual toxic compounds. The speciation data have been compiled by the San Joaquin Valley Air Pollution Control District (2017). A copy of this data is provided in Appendix C.

The maximum hourly and annual emissions of TACs is summarized in Table 4-5. Detailed calculations are provided in Appendix C.

Table 4-5
Summary of Maximum Hourly and Annual TAC Emissions
(Note: 1.10E-06 lbs/hr = 1.10 x 10^{-6} lbs/hr)

TAC	lbs/hr	lbs/yr
DPM	1.88E-08	0.0002
Benzene	7.96E-04	6.94E+00
Ethyl Benzene	2.09E-03	1.82E+01
Toluene	1.04E-02	9.11E+01
Xylenes	3.13E-03	2.73E+01

These emissions were used to calculate a screening level risk score for each of the 3 types of risks. "Screening Level" refers to a rough estimate of potential risk based on conservative assumptions, such as worst case exposure, and emissions.

Unlike a detailed health risk assessment that provides a numerical probability of cancer risk, a screening level risk analysis yields a "Risk Score". The objective in preparing a screening level risk analysis is to avoid preparing a detail HRA is the screening level risk scores are below the thresholds of significance.

Table 4-5 Types of Health Risks Evaluated	
Cancer Risk	Calculated as a Cancer Risk Score
Chronic (non-cancer) Risk	Calculated as a Chronic Score
Acute (non-cancer risk)	Calculated as an Acute Score

The screening level risk calculations are based on the Air Toxics "Hot-Spots" Emissions Potency Method under the AB-2588 regulation. The results of the evaluation are summarized in Tables 4-5 and 4-6 for the construction and operational phases respectively for distances up 2,000 meters (1.2 miles) from the Project site. Detailed calculations are provided in Appendix C.

The results of the analysis show that the cancer risk score for the construction phase range from 1.34 to less than 0.001 depending on distance from the project site. The cancer risk for the operational phase vary between 1.9 to less than 0.001 depending on distance. Non-cancer risks are below 0.05 at all locations for both construction and operational phases. The significance of the risk scores is discussed in the next section. Detailed calculation is provided in Appendix C.

Table 4-5
Summary of Screening Level Risk Evaluation
Construction Phase

Prioritization Calculator

Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in gray areas.

Matthew Cegielski	*Last Update*	March 17, 2020
76 Gas Station Screening Risk Evaluation 7599 Stockton Blvd., Sacramento Construction Phase R. Kapahi		
8,760.00		

Cancer Score	Chronic Score	Acute Score	Max Score
3.10E+00	4.59E-03	0.00E+00	3.10E+00
7.74E-01	1.15E-03	0.00E+00	7.74E-01
1.24E-01	1.84E-04	0.00E+00	1.24E-01
3.40E-02	5.05E-05	0.00E+00	3.40E-02
9.29E-03	1.38E-05	0.00E+00	9.29E-03
6.19E-03	9.18E-06	0.00E+00	6.19E-03
3.10E-03	4.59E-06	0.00E+00	3.10E-03

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
9901	1.34E+00		1.53E-04	3.10E+00	4.59E-03	0.00E+00
			0.00E+00	0.00E+00	0.00E+00	0.00E+00
			0.00E+00	0.00E+00	0.00E+00	0.00E+00
			0.00E+00	0.00E+00	0.00E+00	0.00E+00
			0.00E+00	0.00E+00	0.00E+00	0.00E+00

Table 4-6
Summary of Screening Level Risk Evaluation
Operational Phase

Name		Prioritization Calculat			
Applicability		Use to provide a Prioritization score based on the emission poter yellow areas, output in gray areas			
Author or updater		Ray Kapahi	*Last Update*		October
Facility:		76 Gas Station Screening Risk Evaluation			
Location		7599 Stockton Blvd., Sacramento			
Project Phase:		Operational Phase			
Modeler:		R. Kapahi			
Operating Hours hr/yr		8,760.00			
Receptor Proximity and Proximity Factors		Cancer Score	Chronic Score	Acute Score	Max Score
0< R<100	1.000	1.90E+00	4.56E-02	4.49E-02	1.90E+00
100≤R<250	0.250	4.75E-01	1.14E-02	1.12E-02	4.75E-01
250≤R<500	0.040	7.60E-02	1.83E-03	1.79E-03	7.60E-02
500≤R<1000	0.011	2.09E-02	5.02E-04	4.93E-04	2.09E-02
1000≤R<1500	0.003	5.70E-03	1.37E-04	1.35E-04	5.70E-03
1500≤R<2000	0.002	3.80E-03	9.13E-05	8.97E-05	3.80E-03
2000<R	0.001	1.90E-03	4.56E-05	4.49E-05	1.90E-03
R. Kapahi		Enter the unit's CAS# of the substances emitted and their amounts.			
Substance		CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)
Diesel engine exhaust, particulate matter (Diesel PM)		9901	2.00E-04	1.88E-08	2.28E-08
Benzene		71432	6.94E+00	7.96E-04	7.92E-04
Ethyl benzene		100414	1.82E+01	2.09E-03	2.08E-03
Toluene		108883	9.11E+01	1.04E-02	1.04E-02
Xylene		1330207	2.73E+01	3.13E-03	3.12E-03

SECTION 5: SIGNIFICANCE OF PROJECT IMPACTS

The results of the current analysis for criteria air pollutants are compared with mass emission thresholds established by SMAQMD. The significance of project impacts for the construction and operational phases is summarized in Table 5-1.

Table 5-1 Summary of Project Level Air Quality Impacts (pounds/day)				
Pollutant	Construction Phase	Operational Phase	Significance Threshold	Significant?
NOx	5.5	0.90	65	No
VOC	6.04	1.09	65	No
PM-10	0.40	1.33	80	No
PM-2.5	0.28	0.36	82	No

The SMAQMD has provided screening level criteria in terms of the project's area (in square feet) that allow Applicants to assess the significance of their project's air quality impact. Based on this criteria, free standing retail stores, strip malls below 153,000 square feet are estimated to have less than significant impacts from air quality and GHG emissions. As a result, modeling of CO, NOx, SOx and lead is not needed.

Based on the daily emission rates presented in Table 5-1 and on the SMAQMD screening criteria, the project would not have significant air quality impact.

Impacts from emissions of toxic air contaminants are summarized in Table 5-2. The cancer and non-cancer scores are compared with SMAQMD thresholds of significance.

Table 5-2 Summary of Project Level Health Risks				
Risk Metric	Construction Phase	Operational (Occupancy) Phase	Significance Threshold	Significant?
Maximum Cancer Risk Score	3.1	1.9	10	Potentially Significant for Construction Phase Insignificant for Operational Phase
Maximum Chronic Risk Score	0.0046	0.0456	1.0	No
Maximum Acute Score	0.00	0.0449	1.0	No

These results indicate that the project would not pose a significant public health risk. By its very nature, a screening level health risk evaluation is very conservative that substantially overstates the actual public health risks. Given the low health risks, a detailed HRA is not necessary.

SECTION 6: REFERENCES

CAPCOA (1997) Gasoline Service Station Industrywide Risks Assessment Guidelines. Available at: https://ww2.arb.ca.gov/sites/default/files/classic//ab2588/rrap-iwra/gasiwra.pdf

CARB (2003) HARP User's Guide. Available at: http://www.arb.ca.gov/toxics/harp/harp.htm December 2003.

OEHHA (2014) Consolidated Table of Approved health Risk Values. Cal EPA, Office of Environmental Health Hazard Assessment. Available at: file:///C:/2014%20Feather%20River%20AQMD/Hollycross%20Cemetary/OEHHA%20contable.pdf. October 2, 2020.

SMAQMD (2015) Thresholds of Significance Table and Operational Screening Level Table. Available at: http://www.airquality.org/Residents/CEQA-Land-Use-Planning/CEQA-Guidance-Tools

APPENDIX

A: Construction and Operational Emissions

B Detailed Emission Calculation

C: Analysis of Toxic Air Contaminants

Appendix A

Construction and Operational Emissions

76 Gas Stn Rev 2 - Sacramento County, Summer

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

76 Gas Stn Rev 2

Sacramento County, Summer

Daily Construction and Operational Emissions

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.07	3,000.00	0
Parking Lot	13.00	Space	0.12	5,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2023
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	357.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per project design specs

Construction Phase - No demolition or grading required

Off-road Equipment - Per project specs

Off-road Equipment - No demolition required

Off-road Equipment - Per project site characteristics

Grading - No grading, minimal site prep required.

Vehicle Trips - For gas station with conveneince market

Energy Use - Per project specs.

Water And Wastewater - Per project specs

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

Solid Waste - Default value 0.42 tons/yr per pump x 6 pumps

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	1.00	2.00
tblConstructionPhase	NumDays	2.00	0.00
tblEnergyUse	LightingElect	0.35	0.88
tblEnergyUse	LightingElect	0.00	6.45
tblEnergyUse	NT24E	0.00	2.98
tblEnergyUse	NT24NG	0.00	1.00
tblEnergyUse	T24E	0.00	4.20
tblEnergyUse	T24NG	0.00	6.00
tblGrading	AcresOfGrading	0.00	1.50
tblGrading	AcresOfGrading	0.00	0.50
tblLandUse	LandUseSquareFeet	0.00	3,000.00
tblLandUse	LotAcreage	0.00	0.07
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	4.00	2.00
tblOffRoadEquipment	UsageHours	8.00	0.10
tblSolidWaste	SolidWasteGenerationRate	0.00	2.52
tblVehicleTrips	CC_TTP	0.00	90.00
tblVehicleTrips	CNW_TTP	0.00	5.00
tblVehicleTrips	CW_TTP	0.00	5.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	0.00	323.00
tblVehicleTrips	SU_TR	0.00	323.00

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

tblVehicleTrips	WD_TR	0.00	323.00
tblWater	IndoorWaterUseRate	0.00	10,457.00
tblWater	OutdoorWaterUseRate	0.00	6,409.00

2.0 Emissions Summary

76 Gas Stn Rev 2 - Sacramento County, Summer

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Daily Construction Emissions

	ROG	NOx	CO	SO2	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	0.1003	0.8721	0.9983	1.6000e-003	0.2880	0.8556	0.2993	0.0347	0.7991	0.0577	0.0000	157.7322	157.7322	0.0383	3.6700e-003	159.7827
2023	6.0463	5.5337	7.5102	0.0125	0.1369	0.2650	0.4019	0.0363	0.2472	0.2835	0.0000	1,162.6072	1,162.6072	0.3053	3.5200e-003	1,171.1779
Maximum	**6.0463**	**5.5337**	**7.5102**	**0.0125**	**0.2880**	**0.8556**	**0.4019**	**0.0363**	**0.7991**	**0.2835**	**0.0000**	**1,162.6072**	**1,162.6072**	**0.3053**	**3.6700e-003**	**1,171.1779**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.1003	0.8721	0.9983	1.6000e-003	0.2880	0.8556	0.2993	0.0347	0.7991	0.0577	0.0000	157.7322	157.7322	0.0383	3.6700e-003	159.7827
2023	6.0463	5.5337	7.5102	0.0125	0.1369	0.2650	0.4019	0.0363	0.2472	0.2835	0.0000	1,162.6072	1,162.6072	0.3053	3.5200e-003	1,171.1779
Maximum	**6.0463**	**5.5337**	**7.5102**	**0.0125**	**0.2880**	**0.8556**	**0.4019**	**0.0363**	**0.7991**	**0.2835**	**0.0000**	**1,162.6072**	**1,162.6072**	**0.3053**	**3.6700e-003**	**1,171.1779**

76 Gas Stn Rev 2 - Sacramento County, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	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

76 Gas Stn Rev 2 - Sacramento County, Summer

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

2.2 Overall Operational

Unmitigated Operational

Daily Operational Emissions

	ROG	NOx	CO	SO2	Fugitive 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	0.0742	1.0000e-005	1.4300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.0600e-003	3.0600e-003	1.0000e-005		3.2600e-003
Energy	6.2000e-004	5.6400e-003	4.7400e-003	3.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004		6.7687	6.7687	1.3000e-004	1.2000e-004	6.8090
Mobile	1.0183	0.8984	7.1974	0.0139	1.3205	0.0107	1.3311	0.3521	9.9700e-003	0.3621		1,415.7882	1,415.7882	0.0968	0.0687	1,438.6821
Total	**1.0931**	**0.9040**	**7.2035**	**0.0139**	**1.3205**	**0.0111**	**1.3316**	**0.3521**	**0.0104**	**0.3625**		**1,422.5600**	**1,422.5600**	**0.0970**	**0.0688**	**1,445.4943**

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	0.0742	1.0000e-005	1.4300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.0600e-003	3.0600e-003	1.0000e-005		3.2600e-003
Energy	6.2000e-004	5.6400e-003	4.7400e-003	3.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004		6.7687	6.7687	1.3000e-004	1.2000e-004	6.8090
Mobile	1.0183	0.8984	7.1974	0.0139	1.3205	0.0107	1.3311	0.3521	9.9700e-003	0.3621		1,415.7882	1,415.7882	0.0968	0.0687	1,438.6821
Total	**1.0931**	**0.9040**	**7.2035**	**0.0139**	**1.3205**	**0.0111**	**1.3316**	**0.3521**	**0.0104**	**0.3625**		**1,422.5600**	**1,422.5600**	**0.0970**	**0.0688**	**1,445.4943**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	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	7/31/2022	5	0	
2	Site Preparation	Site Preparation	8/13/2022	8/16/2022	5	2	
3	Grading	Grading	8/16/2022	8/15/2022	5	0	
4	Building Construction	Building Construction	8/18/2022	1/4/2023	5	100	
5	Paving	Paving	1/5/2023	1/11/2023	5	5	
6	Architectural Coating	Architectural Coating	1/12/2023	1/18/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.12

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,500; Non-Residential Outdoor: 1,500; Striped Parking Area: 312 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	1.00	97	0.37

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

Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	0	2.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	1	0.10	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	1	3.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	2	3.00	1.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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

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					
Off-Road	0.0000	0.0000	0.0000	0.0000	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**

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	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**

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

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	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**

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	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**

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

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					0.2651	0.0000	0.2651	0.0286	0.0000	0.0286			0.0000			0.0000
Off-Road	0.0206	0.2095	0.2797	3.9000e-004		0.0113	0.0113		0.0104	0.0104		37.6549	37.6549	0.0122		37.9593
Total	**0.0206**	**0.2095**	**0.2797**	**3.9000e-004**	**0.2651**	**0.0113**	**0.2764**	**0.0286**	**0.0104**	**0.0390**		**37.6549**	**37.6549**	**0.0122**		**37.9593**

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	0.0109	5.4900e-003	0.0886	2.2000e-004	0.0228	1.2000e-004	0.0229	6.0500e-003	1.1000e-004	6.1700e-003		21.7816	21.7816	6.5000e-004	5.7000e-004	21.9667
Total	**0.0109**	**5.4900e-003**	**0.0886**	**2.2000e-004**	**0.0228**	**1.2000e-004**	**0.0229**	**6.0500e-003**	**1.1000e-004**	**6.1700e-003**		**21.7816**	**21.7816**	**6.5000e-004**	**5.7000e-004**	**21.9667**

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

3.3 Site Preparation - 2022

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					0.2651	0.0000	0.2651	0.0286	0.0000	0.0286			0.0000			0.0000
Off-Road	0.0206	0.2095	0.2797	3.9000e-004		0.0113	0.0113		0.0104	0.0104	0.0000	37.6549	37.6549	0.0122		37.9593
Total	**0.0206**	**0.2095**	**0.2797**	**3.9000e-004**	**0.2651**	**0.0113**	**0.2764**	**0.0286**	**0.0104**	**0.0390**	**0.0000**	**37.6549**	**37.6549**	**0.0122**		**37.9593**

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	0.0109	5.4900e-003	0.0886	2.2000e-004	0.0228	1.2000e-004	0.0229	6.0500e-003	1.1000e-004	6.1700e-003		21.7816	21.7816	6.5000e-004	5.7000e-004	21.9667
Total	**0.0109**	**5.4900e-003**	**0.0886**	**2.2000e-004**	**0.0228**	**1.2000e-004**	**0.0229**	**6.0500e-003**	**1.1000e-004**	**6.1700e-003**		**21.7816**	**21.7816**	**6.5000e-004**	**5.7000e-004**	**21.9667**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	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**

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	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**

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

3.4 Grading - 2022

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	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**

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	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**

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

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	0.0873	0.8121	0.8933	1.1800e-003		0.0535	0.0535		0.0493	0.0493		114.7886	114.7886	0.0371		115.7167
Total	**0.0873**	**0.8121**	**0.8933**	**1.1800e-003**		**0.0535**	**0.0535**		**0.0493**	**0.0493**		**114.7886**	**114.7886**	**0.0371**		**115.7167**

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	2.1600e-003	0.0545	0.0164	2.0000e-004	6.0300e-003	5.3000e-004	6.5500e-003	1.7300e-003	5.1000e-004	2.2400e-003		21.1619	21.1619	5.5000e-004	3.1000e-003	22.0993
Worker	0.0109	5.4900e-003	0.0886	2.2000e-004	0.0228	1.2000e-004	0.0229	6.0500e-003	1.1000e-004	6.1700e-003		21.7816	21.7816	6.5000e-004	5.7000e-004	21.9667
Total	**0.0130**	**0.0600**	**0.1050**	**4.2000e-004**	**0.0289**	**6.5000e-004**	**0.0295**	**7.7800e-003**	**6.2000e-004**	**8.4100e-003**		**42.9436**	**42.9436**	**1.2000e-003**	**3.6700e-003**	**44.0660**

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

3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0873	0.8121	0.8933	1.1800e-003		0.0535	0.0535		0.0493	0.0493	0.0000	114.7886	114.7886	0.0371		115.7167
Total	**0.0873**	**0.8121**	**0.8933**	**1.1800e-003**		**0.0535**	**0.0535**		**0.0493**	**0.0493**	**0.0000**	**114.7886**	**114.7886**	**0.0371**		**115.7167**

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	2.1600e-003	0.0545	0.0164	2.0000e-004	6.0300e-003	5.3000e-004	6.5500e-003	1.7300e-003	5.1000e-004	2.2400e-003		21.1619	21.1619	5.5000e-004	3.1000e-003	22.0993
Worker	0.0109	5.4900e-003	0.0886	2.2000e-004	0.0228	1.2000e-004	0.0229	6.0500e-003	1.1000e-004	6.1700e-003		21.7816	21.7816	6.5000e-004	5.7000e-004	21.9667
Total	**0.0130**	**0.0600**	**0.1050**	**4.2000e-004**	**0.0289**	**6.5000e-004**	**0.0295**	**7.7800e-003**	**6.2000e-004**	**8.4100e-003**		**42.9436**	**42.9436**	**1.2000e-003**	**3.6700e-003**	**44.0660**

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

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	0.0788	0.7390	0.8865	1.1900e-003		0.0454	0.0454		0.0418	0.0418		114.7928	114.7928	0.0371		115.7210
Total	**0.0788**	**0.7390**	**0.8865**	**1.1900e-003**		**0.0454**	**0.0454**		**0.0418**	**0.0418**		**114.7928**	**114.7928**	**0.0371**		**115.7210**

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	1.3400e-003	0.0463	0.0144	1.9000e-004	6.0200e-003	2.6000e-004	6.2800e-003	1.7300e-003	2.5000e-004	1.9800e-003		20.4384	20.4384	5.1000e-004	3.0000e-003	21.3439
Worker	0.0101	4.8500e-003	0.0815	2.1000e-004	0.0228	1.2000e-004	0.0229	6.0500e-003	1.1000e-004	6.1600e-003		21.0866	21.0866	5.9000e-004	5.2000e-004	21.2575
Total	**0.0114**	**0.0512**	**0.0960**	**4.0000e-004**	**0.0288**	**3.8000e-004**	**0.0292**	**7.7800e-003**	**3.6000e-004**	**8.1400e-003**		**41.5250**	**41.5250**	**1.1000e-003**	**3.5200e-003**	**42.6013**

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

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0788	0.7390	0.8865	1.1900e-003		0.0454	0.0454		0.0418	0.0418	0.0000	114.7928	114.7928	0.0371		115.7210
Total	**0.0788**	**0.7390**	**0.8865**	**1.1900e-003**		**0.0454**	**0.0454**		**0.0418**	**0.0418**	**0.0000**	**114.7928**	**114.7928**	**0.0371**		**115.7210**

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	1.3400e-003	0.0463	0.0144	1.9000e-004	6.0200e-003	2.6000e-004	6.2800e-003	1.7300e-003	2.5000e-004	1.9800e-003		20.4384	20.4384	5.1000e-004	3.0000e-003	21.3439
Worker	0.0101	4.8500e-003	0.0815	2.1000e-004	0.0228	1.2000e-004	0.0229	6.0500e-003	1.1000e-004	6.1600e-003		21.0866	21.0866	5.9000e-004	5.2000e-004	21.2575
Total	**0.0114**	**0.0512**	**0.0960**	**4.0000e-004**	**0.0288**	**3.8000e-004**	**0.0292**	**7.7800e-003**	**3.6000e-004**	**8.1400e-003**		**41.5250**	**41.5250**	**1.1000e-003**	**3.5200e-003**	**42.6013**

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

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	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0629					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6740**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**		**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

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	0.0606	0.0291	0.4892	1.2500e-003	0.1369	7.0000e-004	0.1376	0.0363	6.5000e-004	0.0370		126.5195	126.5195	3.5200e-003	3.1500e-003	127.5449
Total	**0.0606**	**0.0291**	**0.4892**	**1.2500e-003**	**0.1369**	**7.0000e-004**	**0.1376**	**0.0363**	**6.5000e-004**	**0.0370**		**126.5195**	**126.5195**	**3.5200e-003**	**3.1500e-003**	**127.5449**

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

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0629					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6740**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**	**0.0000**	**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

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	0.0606	0.0291	0.4892	1.2500e-003	0.1369	7.0000e-004	0.1376	0.0363	6.5000e-004	0.0370		126.5195	126.5195	3.5200e-003	3.1500e-003	127.5449
Total	**0.0606**	**0.0291**	**0.4892**	**1.2500e-003**	**0.1369**	**7.0000e-004**	**0.1376**	**0.0363**	**6.5000e-004**	**0.0370**		**126.5195**	**126.5195**	**3.5200e-003**	**3.1500e-003**	**127.5449**

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

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	5.8512					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	**6.0429**	**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	3.3700e-003	1.6200e-003	0.0272	7.0000e-005	7.6100e-003	4.0000e-005	7.6500e-003	2.0200e-003	4.0000e-005	2.0500e-003		7.0289	7.0289	2.0000e-004	1.7000e-004	7.0858
Total	**3.3700e-003**	**1.6200e-003**	**0.0272**	**7.0000e-005**	**7.6100e-003**	**4.0000e-005**	**7.6500e-003**	**2.0200e-003**	**4.0000e-005**	**2.0500e-003**		**7.0289**	**7.0289**	**2.0000e-004**	**1.7000e-004**	**7.0858**

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

3.7 Architectural Coating - 2023

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	5.8512					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	**6.0429**	**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	3.3700e-003	1.6200e-003	0.0272	7.0000e-005	7.6100e-003	4.0000e-005	7.6500e-003	2.0200e-003	4.0000e-005	2.0500e-003		7.0289	7.0289	2.0000e-004	1.7000e-004	7.0858
Total	**3.3700e-003**	**1.6200e-003**	**0.0272**	**7.0000e-005**	**7.6100e-003**	**4.0000e-005**	**7.6500e-003**	**2.0200e-003**	**4.0000e-005**	**2.0500e-003**		**7.0289**	**7.0289**	**2.0000e-004**	**1.7000e-004**	**7.0858**

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0183	0.8984	7.1974	0.0139	1.3205	0.0107	1.3311	0.3521	9.9700e-003	0.3621		1,415.7882	1,415.7882	0.0968	0.0687	1,438.6821
Unmitigated	1.0183	0.8984	7.1974	0.0139	1.3205	0.0107	1.3311	0.3521	9.9700e-003	0.3621		1,415.7882	1,415.7882	0.0968	0.0687	1,438.6821

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
User Defined Commercial	323.00	323.00	323.00	626,071	626,071
Total	323.00	323.00	323.00	626,071	626,071

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
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
User Defined Commercial	10.00	5.00	6.50	5.00	90.00	5.00	100	0	0

4.4 Fleet Mix

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.538353	0.056973	0.184081	0.133246	0.026575	0.006093	0.013235	0.009306	0.000942	0.000548	0.026135	0.001006	0.003507
User Defined Commercial	0.538353	0.056973	0.184081	0.133246	0.026575	0.006093	0.013235	0.009306	0.000942	0.000548	0.026135	0.001006	0.003507

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	6.2000e-004	5.6400e-003	4.7400e-003	3.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004		6.7687	6.7687	1.3000e-004	1.2000e-004	6.8090
NaturalGas Unmitigated	6.2000e-004	5.6400e-003	4.7400e-003	3.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004		6.7687	6.7687	1.3000e-004	1.2000e-004	6.8090

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

5.2 Energy by Land Use - NaturalGas

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					
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
User Defined Commercial	57.5342	6.2000e-004	5.6400e-003	4.7400e-003	3.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004		6.7687	6.7687	1.3000e-004	1.2000e-004	6.8090
Total		**6.2000e-004**	**5.6400e-003**	**4.7400e-003**	**3.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**		**6.7687**	**6.7687**	**1.3000e-004**	**1.2000e-004**	**6.8090**

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					
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
User Defined Commercial	0.0575342	6.2000e-004	5.6400e-003	4.7400e-003	3.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004		6.7687	6.7687	1.3000e-004	1.2000e-004	6.8090
Total		**6.2000e-004**	**5.6400e-003**	**4.7400e-003**	**3.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**		**6.7687**	**6.7687**	**1.3000e-004**	**1.2000e-004**	**6.8090**

6.0 Area Detail

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

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	0.0742	1.0000e-005	1.4300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.0600e-003	3.0600e-003	1.0000e-005		3.2600e-003
Unmitigated	0.0742	1.0000e-005	1.4300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.0600e-003	3.0600e-003	1.0000e-005		3.2600e-003

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	8.0200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0660					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3000e-004	1.0000e-005	1.4300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.0600e-003	3.0600e-003	1.0000e-005		3.2600e-003
Total	**0.0742**	**1.0000e-005**	**1.4300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.0600e-003**	**3.0600e-003**	**1.0000e-005**		**3.2600e-003**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.0200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0660					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3000e-004	1.0000e-005	1.4300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.0600e-003	3.0600e-003	1.0000e-005		3.2600e-003
Total	**0.0742**	**1.0000e-005**	**1.4300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.0600e-003**	**3.0600e-003**	**1.0000e-005**		**3.2600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

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

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

76 Gas Stn Rev 2

Sacramento County, Annual

Annual Construction and Operational Emissions

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.07	3,000.00	0
Parking Lot	13.00	Space	0.12	5,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2023
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	357.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per project design specs

Construction Phase - No demolition or grading required

Off-road Equipment - Per project specs

Off-road Equipment - No demolition required

Off-road Equipment - Per project site characteristics

Grading - No grading, minimal site prep required.

Vehicle Trips - For gas station with conveneince market

Energy Use - Per project specs.

Water And Wastewater - Per project specs

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

Solid Waste - Default value 0.42 tons/yr per pump x 6 pumps

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	1.00	2.00
tblConstructionPhase	NumDays	2.00	0.00
tblEnergyUse	LightingElect	0.35	0.88
tblEnergyUse	LightingElect	0.00	6.45
tblEnergyUse	NT24E	0.00	2.98
tblEnergyUse	NT24NG	0.00	1.00
tblEnergyUse	T24E	0.00	4.20
tblEnergyUse	T24NG	0.00	6.00
tblGrading	AcresOfGrading	0.00	1.50
tblGrading	AcresOfGrading	0.00	0.50
tblLandUse	LandUseSquareFeet	0.00	3,000.00
tblLandUse	LotAcreage	0.00	0.07
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	4.00	2.00
tblOffRoadEquipment	UsageHours	8.00	0.10
tblSolidWaste	SolidWasteGenerationRate	0.00	2.52
tblVehicleTrips	CC_TTP	0.00	90.00
tblVehicleTrips	CNW_TTP	0.00	5.00
tblVehicleTrips	CW_TTP	0.00	5.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	0.00	323.00
tblVehicleTrips	SU_TR	0.00	323.00

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

tblVehicleTrips	WD_TR	0.00	323.00
tblWater	IndoorWaterUseRate	0.00	10,457.00
tblWater	OutdoorWaterUseRate	0.00	6,409.00

2.0 Emissions Summary

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					
2022	4.8100e-003	0.0427	0.0482	8.0000e-005	1.6400e-003	2.6400e-003	4.2800e-003	4.0000e-004	2.4300e-003	2.8300e-003	0.0000	6.9080	6.9080	1.7000e-003	1.6000e-004	6.9993
2023	0.0171	0.0183	0.0246	4.0000e-005	3.9000e-004	9.1000e-004	1.3000e-003	1.0000e-004	8.6000e-004	9.6000e-004	0.0000	3.4747	3.4747	7.8000e-004	1.0000e-005	3.4982
Maximum	**0.0171**	**0.0427**	**0.0482**	**8.0000e-005**	**1.6400e-003**	**2.6400e-003**	**4.2800e-003**	**4.0000e-004**	**2.4300e-003**	**2.8300e-003**	**0.0000**	**6.9080**	**6.9080**	**1.7000e-003**	**1.6000e-004**	**6.9993**

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	4.8100e-003	0.0427	0.0482	8.0000e-005	1.6400e-003	2.6400e-003	4.2800e-003	4.0000e-004	2.4300e-003	2.8300e-003	0.0000	6.9080	6.9080	1.7000e-003	1.6000e-004	6.9993
2023	0.0171	0.0183	0.0246	4.0000e-005	3.9000e-004	9.1000e-004	1.3000e-003	1.0000e-004	8.6000e-004	9.6000e-004	0.0000	3.4747	3.4747	7.8000e-004	1.0000e-005	3.4981
Maximum	**0.0171**	**0.0427**	**0.0482**	**8.0000e-005**	**1.6400e-003**	**2.6400e-003**	**4.2800e-003**	**4.0000e-004**	**2.4300e-003**	**2.8300e-003**	**0.0000**	**6.9080**	**6.9080**	**1.7000e-003**	**1.6000e-004**	**6.9993**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**8-1-2022**	**10-31-2022**	0.0264	0.0264
2	**11-1-2022**	**1-31-2023**	0.0566	0.0566
		Highest	0.0566	0.0566

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	0.0135	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5000e-004	3.5000e-004	0.0000	0.0000	3.7000e-004
Energy	1.1000e-004	1.0300e-003	8.6000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	8.5033	8.5033	7.0000e-004	1.0000e-004	8.5515
Mobile	0.1479	0.1772	1.2286	2.3500e-003	0.2321	1.9400e-003	0.2341	0.0621	1.8100e-003	0.0639	0.0000	217.7631	217.7631	0.0170	0.0118	221.7128
Waste						0.0000	0.0000		0.0000	0.0000	0.5115	0.0000	0.5115	0.0302	0.0000	1.2673
Water						0.0000	0.0000		0.0000	0.0000	3.7000e-003	0.0121	0.0158	1.0000e-005	1.0000e-005	0.0186
Total	**0.1616**	**0.1782**	**1.2296**	**2.3600e-003**	**0.2321**	**2.0200e-003**	**0.2341**	**0.0621**	**1.8900e-003**	**0.0640**	**0.5152**	**226.2788**	**226.7940**	**0.0479**	**0.0119**	**231.5506**

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	0.0135	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5000e-004	3.5000e-004	0.0000	0.0000	3.7000e-004
Energy	1.1000e-004	1.0300e-003	8.6000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	8.5033	8.5033	7.0000e-004	1.0000e-004	8.5515
Mobile	0.1479	0.1772	1.2286	2.3500e-003	0.2321	1.9400e-003	0.2341	0.0621	1.8100e-003	0.0639	0.0000	217.7631	217.7631	0.0170	0.0118	221.7128
Waste						0.0000	0.0000		0.0000	0.0000	0.5115	0.0000	0.5115	0.0302	0.0000	1.2673
Water						0.0000	0.0000		0.0000	0.0000	3.7000e-003	0.0121	0.0158	1.0000e-005	1.0000e-005	0.0186
Total	**0.1616**	**0.1782**	**1.2296**	**2.3600e-003**	**0.2321**	**2.0200e-003**	**0.2341**	**0.0621**	**1.8900e-003**	**0.0640**	**0.5152**	**226.2788**	**226.7940**	**0.0479**	**0.0119**	**231.5506**

	ROG	NOx	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	7/31/2022	5	0	
2	Site Preparation	Site Preparation	8/13/2022	8/16/2022	5	2	
3	Grading	Grading	8/16/2022	8/15/2022	5	0	

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

4	Building Construction	Building Construction	8/18/2022	1/4/2023	5	100	
5	Paving	Paving	1/5/2023	1/11/2023	5	5	
6	Architectural Coating	Architectural Coating	1/12/2023	1/18/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.12

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,500; Non-Residential Outdoor: 1,500; Striped Parking Area: 312 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	1.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	0	2.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	1	0.10	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	4	10.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	1	3.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	2	3.00	1.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2022

Unmitigated Construction On-Site

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

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

3.2 Demolition - 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	0.0000	0.0000	0.0000	0.0000	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**

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	0.0000	0.0000	0.0000	0.0000	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**

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

3.2 Demolition - 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	0.0000	0.0000	0.0000	0.0000	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					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0000e-005	2.1000e-004	2.8000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.0342	0.0342	1.0000e-005	0.0000	0.0344
Total	**2.0000e-005**	**2.1000e-004**	**2.8000e-004**	**0.0000**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**3.0000e-005**	**1.0000e-005**	**4.0000e-005**	**0.0000**	**0.0342**	**0.0342**	**1.0000e-005**	**0.0000**	**0.0344**

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

3.3 Site Preparation - 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	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0180	0.0180	0.0000	0.0000	0.0182
Total	**1.0000e-005**	**1.0000e-005**	**8.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0180**	**0.0180**	**0.0000**	**0.0000**	**0.0182**

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					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0000e-005	2.1000e-004	2.8000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.0342	0.0342	1.0000e-005	0.0000	0.0344
Total	**2.0000e-005**	**2.1000e-004**	**2.8000e-004**	**0.0000**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**3.0000e-005**	**1.0000e-005**	**4.0000e-005**	**0.0000**	**0.0342**	**0.0342**	**1.0000e-005**	**0.0000**	**0.0344**

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

3.3 Site Preparation - 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	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0180	0.0180	0.0000	0.0000	0.0182
Total	**1.0000e-005**	**1.0000e-005**	**8.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0180**	**0.0180**	**0.0000**	**0.0000**	**0.0182**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	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**

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

3.4 Grading - 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	0.0000	0.0000	0.0000	0.0000	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**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	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**

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

3.4 Grading - 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	0.0000	0.0000	0.0000	0.0000	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**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.2300e-003	0.0394	0.0433	6.0000e-005		2.6000e-003	2.6000e-003		2.3900e-003	2.3900e-003	0.0000	5.0505	5.0505	1.6300e-003	0.0000	5.0914
Total	**4.2300e-003**	**0.0394**	**0.0433**	**6.0000e-005**		**2.6000e-003**	**2.6000e-003**		**2.3900e-003**	**2.3900e-003**	**0.0000**	**5.0505**	**5.0505**	**1.6300e-003**	**0.0000**	**5.0914**

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

3.5 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	1.0000e-004	2.7800e-003	8.1000e-004	1.0000e-005	2.8000e-004	3.0000e-005	3.1000e-004	8.0000e-005	2.0000e-005	1.1000e-004	0.0000	0.9310	0.9310	2.0000e-005	1.4000e-004	0.9723
Worker	4.5000e-004	2.9000e-004	3.6700e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0700e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8743	0.8743	3.0000e-005	3.0000e-005	0.8829
Total	**5.5000e-004**	**3.0700e-003**	**4.4800e-003**	**2.0000e-005**	**1.3500e-003**	**4.0000e-005**	**1.3800e-003**	**3.6000e-004**	**3.0000e-005**	**4.0000e-004**	**0.0000**	**1.8053**	**1.8053**	**5.0000e-005**	**1.7000e-004**	**1.8553**

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	4.2300e-003	0.0394	0.0433	6.0000e-005		2.6000e-003	2.6000e-003		2.3900e-003	2.3900e-003	0.0000	5.0505	5.0505	1.6300e-003	0.0000	5.0914
Total	**4.2300e-003**	**0.0394**	**0.0433**	**6.0000e-005**		**2.6000e-003**	**2.6000e-003**		**2.3900e-003**	**2.3900e-003**	**0.0000**	**5.0505**	**5.0505**	**1.6300e-003**	**0.0000**	**5.0914**

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

3.5 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	1.0000e-004	2.7800e-003	8.1000e-004	1.0000e-005	2.8000e-004	3.0000e-005	3.1000e-004	8.0000e-005	2.0000e-005	1.1000e-004	0.0000	0.9310	0.9310	2.0000e-005	1.4000e-004	0.9723
Worker	4.5000e-004	2.9000e-004	3.6700e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0700e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8743	0.8743	3.0000e-005	3.0000e-005	0.8829
Total	**5.5000e-004**	**3.0700e-003**	**4.4800e-003**	**2.0000e-005**	**1.3500e-003**	**4.0000e-005**	**1.3800e-003**	**3.6000e-004**	**3.0000e-005**	**4.0000e-004**	**0.0000**	**1.8053**	**1.8053**	**5.0000e-005**	**1.7000e-004**	**1.8553**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.2000e-004	1.1100e-003	1.3300e-003	0.0000		7.0000e-005	7.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.1562	0.1562	5.0000e-005	0.0000	0.1575
Total	**1.2000e-004**	**1.1100e-003**	**1.3300e-003**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.1562**	**0.1562**	**5.0000e-005**	**0.0000**	**0.1575**

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

3.5 Building Construction - 2023

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	7.0000e-005	2.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0278	0.0278	0.0000	0.0000	0.0291
Worker	1.0000e-005	1.0000e-005	1.0000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0262	0.0262	0.0000	0.0000	0.0264
Total	**1.0000e-005**	**8.0000e-005**	**1.2000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0540**	**0.0540**	**0.0000**	**0.0000**	**0.0555**

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	1.2000e-004	1.1100e-003	1.3300e-003	0.0000		7.0000e-005	7.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.1562	0.1562	5.0000e-005	0.0000	0.1575
Total	**1.2000e-004**	**1.1100e-003**	**1.3300e-003**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.1562**	**0.1562**	**5.0000e-005**	**0.0000**	**0.1575**

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

3.5 Building Construction - 2023

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	7.0000e-005	2.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0278	0.0278	0.0000	0.0000	0.0291
Worker	1.0000e-005	1.0000e-005	1.0000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0262	0.0262	0.0000	0.0000	0.0264
Total	**1.0000e-005**	**8.0000e-005**	**1.2000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0540**	**0.0540**	**0.0000**	**0.0000**	**0.0555**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669
Paving	1.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.6900e-003**	**0.0138**	**0.0176**	**3.0000e-005**		**6.6000e-004**	**6.6000e-004**		**6.2000e-004**	**6.2000e-004**	**0.0000**	**2.3498**	**2.3498**	**6.8000e-004**	**0.0000**	**2.3669**

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

3.6 Paving - 2023

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	1.3000e-004	8.0000e-005	1.0500e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2619	0.2619	1.0000e-005	1.0000e-005	0.2643
Total	**1.3000e-004**	**8.0000e-005**	**1.0500e-003**	**0.0000**	**3.3000e-004**	**0.0000**	**3.3000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2619**	**0.2619**	**1.0000e-005**	**1.0000e-005**	**0.2643**

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	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669
Paving	1.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.6900e-003**	**0.0138**	**0.0176**	**3.0000e-005**		**6.6000e-004**	**6.6000e-004**		**6.2000e-004**	**6.2000e-004**	**0.0000**	**2.3498**	**2.3498**	**6.8000e-004**	**0.0000**	**2.3669**

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

3.6 Paving - 2023

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	1.3000e-004	8.0000e-005	1.0500e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2619	0.2619	1.0000e-005	1.0000e-005	0.2643
Total	**1.3000e-004**	**8.0000e-005**	**1.0500e-003**	**0.0000**	**3.3000e-004**	**0.0000**	**3.3000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2619**	**0.2619**	**1.0000e-005**	**1.0000e-005**	**0.2643**

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	0.0146					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	**0.0151**	**3.2600e-003**	**4.5300e-003**	**1.0000e-005**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6393**

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

3.7 Architectural Coating - 2023

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	1.0000e-005	0.0000	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0146	0.0146	0.0000	0.0000	0.0147
Total	**1.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0146**	**0.0146**	**0.0000**	**0.0000**	**0.0147**

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	0.0146					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	**0.0151**	**3.2600e-003**	**4.5300e-003**	**1.0000e-005**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6393**

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

3.7 Architectural Coating - 2023

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	1.0000e-005	0.0000	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0146	0.0146	0.0000	0.0000	0.0147
Total	**1.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0146**	**0.0146**	**0.0000**	**0.0000**	**0.0147**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1479	0.1772	1.2286	2.3500e-003	0.2321	1.9400e-003	0.2341	0.0621	1.8100e-003	0.0639	0.0000	217.7631	217.7631	0.0170	0.0118	221.7128
Unmitigated	0.1479	0.1772	1.2286	2.3500e-003	0.2321	1.9400e-003	0.2341	0.0621	1.8100e-003	0.0639	0.0000	217.7631	217.7631	0.0170	0.0118	221.7128

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
User Defined Commercial	323.00	323.00	323.00	626,071	626,071
Total	323.00	323.00	323.00	626,071	626,071

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
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
User Defined Commercial	10.00	5.00	6.50	5.00	90.00	5.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.538353	0.056973	0.184081	0.133246	0.026575	0.006093	0.013235	0.009306	0.000942	0.000548	0.026135	0.001006	0.003507
User Defined Commercial	0.538353	0.056973	0.184081	0.133246	0.026575	0.006093	0.013235	0.009306	0.000942	0.000548	0.026135	0.001006	0.003507

5.0 Energy Detail

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

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	7.3826	7.3826	6.8000e-004	8.0000e-005	7.4242
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.3826	7.3826	6.8000e-004	8.0000e-005	7.4242
NaturalGas Mitigated	1.1000e-004	1.0300e-003	8.6000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1206	1.1206	2.0000e-005	2.0000e-005	1.1273
NaturalGas Unmitigated	1.1000e-004	1.0300e-003	8.6000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1206	1.1206	2.0000e-005	2.0000e-005	1.1273

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

5.2 Energy by Land Use - NaturalGas

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					
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
User Defined Commercial	21000	1.1000e-004	1.0300e-003	8.6000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1206	1.1206	2.0000e-005	2.0000e-005	1.1273
Total		**1.1000e-004**	**1.0300e-003**	**8.6000e-004**	**1.0000e-005**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**	**0.0000**	**1.1206**	**1.1206**	**2.0000e-005**	**2.0000e-005**	**1.1273**

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					
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
User Defined Commercial	21000	1.1000e-004	1.0300e-003	8.6000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1206	1.1206	2.0000e-005	2.0000e-005	1.1273
Total		**1.1000e-004**	**1.0300e-003**	**8.6000e-004**	**1.0000e-005**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**	**0.0000**	**1.1206**	**1.1206**	**2.0000e-005**	**2.0000e-005**	**1.1273**

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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	4576	0.7430	7.0000e-005	1.0000e-005	0.7472
User Defined Commercial	40890	6.6396	6.1000e-004	7.0000e-005	6.6770
Total		**7.3826**	**6.8000e-004**	**8.0000e-005**	**7.4242**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	4576	0.7430	7.0000e-005	1.0000e-005	0.7472
User Defined Commercial	40890	6.6396	6.1000e-004	7.0000e-005	6.6770
Total		**7.3826**	**6.8000e-004**	**8.0000e-005**	**7.4242**

6.0 Area Detail

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

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	0.0135	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5000e-004	3.5000e-004	0.0000	0.0000	3.7000e-004
Unmitigated	0.0135	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5000e-004	3.5000e-004	0.0000	0.0000	3.7000e-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	1.4600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0121					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	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5000e-004	3.5000e-004	0.0000	0.0000	3.7000e-004
Total	**0.0135**	**0.0000**	**1.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.5000e-004**	**3.5000e-004**	**0.0000**	**0.0000**	**3.7000e-004**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.4600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0121					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	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5000e-004	3.5000e-004	0.0000	0.0000	3.7000e-004
Total	**0.0135**	**0.0000**	**1.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.5000e-004**	**3.5000e-004**	**0.0000**	**0.0000**	**3.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

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	0.0158	1.0000e-005	1.0000e-005	0.0186
Unmitigated	0.0158	1.0000e-005	1.0000e-005	0.0186

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0.010457 / 0.006409	0.0158	1.0000e-005	1.0000e-005	0.0186
Total		**0.0158**	**1.0000e-005**	**1.0000e-005**	**0.0186**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0.010457 / 0.006409	0.0158	1.0000e-005	1.0000e-005	0.0186
Total		**0.0158**	**1.0000e-005**	**1.0000e-005**	**0.0186**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.5115	0.0302	0.0000	1.2673
Unmitigated	0.5115	0.0302	0.0000	1.2673

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	2.52	0.5115	0.0302	0.0000	1.2673
Total		**0.5115**	**0.0302**	**0.0000**	**1.2673**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	2.52	0.5115	0.0302	0.0000	1.2673
Total		**0.5115**	**0.0302**	**0.0000**	**1.2673**

9.0 Operational Offroad

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

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

Appendix B

Detailed Emission Calculation

Table B-1
Calculation of DPM Emissions from Idling of Fuel Delivery Trucks
Basis: 142 Trucks per Year Each Idling for 15 min
Idle Emission Factor from EMFAC 2021 for T6 In-State HD Trucks

IDLING EMISSIONS FROM FUEL DELIVERY TRUCKS	Units	Value
Deliveries per year (142 deliveries/year)	*veh/yr*	142
Idle Time per Truck (min)	*min*	15
Total Annual Idle Time *(# trucks x 15 min/truck)*	*min*	2,130
	hrs	35.5
DPM Emission Factor for Truck Idling *(From EMFAC 2021 for Sacramento County for CY 2023. Excerpt shown below)*	*(grams/veh-hr)*	0.037483
Idling Emissions All Trucks	*(grams/yr)*	1.3306
	(lbs/yr)	0.0029

2023	Annual	Sacramen	T6 instate	Dsl	70	40	RUNEX	90	PM10	0.011418
2023	Annual	Sacramen	T6 instate	Dsl	70	40	RUNEX	90	PM2_5	0.010924
2023	Annual	Sacramen	T6 instate	Dsl			IDLEX		HC	0.468511
2023	Annual	Sacramen	T6 instate	Dsl			IDLEX		CO	21.437
2023	Annual	Sacramen	T6 instate	Dsl			IDLEX		NOx	30.74668
2023	Annual	Sacramen	T6 instate	Dsl			IDLEX		SOx	0.060112
2023	Annual	Sacramen	T6 instate	Dsl			IDLEX		PM	0.037709
2023	Annual	Sacramen	T6 instate	Dsl			IDLEX		TOG	0.675453
2023	Annual	Sacramen	T6 instate	Dsl			IDLEX		ROG	0.593323
2023	Annual	Sacramen	T6 instate	Dsl			IDLEX		CO2	6300.69
2023	Annual	Sacramen	T6 instate	Dsl			IDLEX		CH4	0.027558
2023	Annual	Sacramen	T6 instate	Dsl			IDLEX		PM10	0.037483
2023	Annual	Sacramen	T6 instate	Dsl			IDLEX		PM2_5	0.035861
2023	Annual	Sacramen	T6 instate	Dsl			STREX	5	NOx	0.075471

Appendix C

Analysis of Toxic Air Contaminants

Table C-1
Calculation of VOC Emissions

Gasoline Dispensing Operations VOC Calculator

Applicability	Use this spreadsheet to calculate VOC emissions from gasoline dispensing operations. Entries required in yellow areas, output in grey areas.		
Author or updater	Matthew Cegielski	*Last Update*	January 25, 2017
Facility: **ID#:** **Project #:**	76 Gas Station Stockton Blvd Sacramento, CA		

Inputs	gal/day	gal/yr	**Formula**
	3.30E+03	1.20E+06	
	1,000 gal /hr	1,000 gal /yr	
Gasoline Throughput	1.38E-01	1.20E+03	Enter the **change** in gas station throughput in units of gallons/day and gallons/yr. Select the Phase I and Phase II type using the drop down provided. VOC emissions are calculated by the multiplication of Throughput Rates and Emission Factors.
Application Type	Type #		
EVR Phase I and EVR Phase II Installed Underground Tank	9		

Substances	**lb VOC/ 1,000 gal**	**LB/HR**	**LB/YR**
Vapor Tank Filling Loss VOC	0.08	1.16E-02	1.01E+02
Vehicle Refueling VOC	0.42	5.78E-02	5.04E+02
Breathing Loss VOC	0.03	3.44E-03	3.00E+01
Spillage VOC	0.42	5.78E-02	5.04E+02
Total VOC	0.95	1.30E-01	1.14E+03

References:

* The emission factors are derived from Appendix A in the 1997 CAPCOA Air Toxics "Hot Spots" Program document, *Gasoline Service Station Industrywide Risk Asesssment Guidelines* .

Table C-2
Calculation of TACs from Gasoline Dispensing, Storage Tank Filling

	lbs/hr	lbs/yr	
Total Vapor VOCs (Re-Fuel) Less Spillage	7.27E-02	6.35E+02	*(From Table 1)*
Total Liquid VOCs (Spillage)	5.78E-02	5.04E+02	*(From Table 1)*
TOTAL VOCs	0.130	1138.8	

	Benzene	**Ethyl Benzene**	**Toluene**	**Xylenes**
EF Vapor (lbs/lb VOC)	3.00E-03	1.60E-02	8.00E-02	2.40E-02
Emissions (lbs/hr)	2.18E-04	1.16E-03	5.82E-03	1.75E-03
Emissions (lbs/yr)	1.90E+00	1.02E+01	5.08E+01	1.52E+01
EF Liquid (lb/lb VOC)	1.00E-02	1.60E-02	8.00E-02	2.40E-02
Emissions (lbs/hr)	5.78E-04	9.24E-04	4.62E-03	1.39E-03
Emissions (lbs/yr)	5.04E+00	8.06E+00	4.03E+01	1.21E+01
Total (lbs/hr)	7.96E-04	2.09E-03	1.04E-02	3.13E-03
Total (lbs/yr)	6.94E+00	1.82E+01	9.11E+01	2.73E+01

EFs from SJVAPCD Speciation Guidance March 27, 2017.

Z1 SU Gasoline Dispensing Op VOC Liquid Speciation

District Toxic Profile ID	261
Description	Z1 SU Gasoline Dispensing Op VOC Liquid Speciation
Source	The emission factors are derived from the table, "Content of Reformulated Gasoline", in the 1997 CAPCOA Air Toxics "Hot Spots" Program document, Gasoline Service Station Industrywide Risk Asessment Guidelines.

Pollutant Name	Emission Factor	Emission Factor Units	CAS#
Benzene	1.00E-02	lb/lb VOC	71432
Ethyl benzene	1.60E-02	lb/lb VOC	100414
Toluene	8.00E-02	lb/lb VOC	108883
Xylenes (mixed)	2.40E-02	lb/lb VOC	1330207

Z1 SU Gasoline Dispensing Op VOC Vapor Speciation

District Toxic Profile ID	128
Description	Z1 SU Gasoline Dispensing Op VOC Vapor Speciation
Source	The emission factors are derived from the table, "Content of Reformulated Gasoline", in the 1997 CAPCOA Air Toxics "Hot Spots" Program document, Gasoline Service Station Industrywide Risk Asessment Guidelines.

Pollutant Name	Emission Factor	Emission Factor Units	CAS#
Benzene	3.00E-03	lb/lb VOC	71432
Ethyl benzene	1.60E-02	lb/lb VOC	100414
Toluene	8.00E-02	lb/lb VOC	108883
Xylenes (mixed)	2.40E-02	lb/lb VOC	1330207

Table C-3
Construction Related Risk Evaluation

Name **Prioritizatio**

Applicability	Use to provide a Prioritization score based on t in yellow areas, ou
Author or updater	Matthew Cegielski *Last Update*
Facility:	76 Gas Station Screening Risk Evaluation
Location	7599 Stockton Blvd., Sacramento
Project Phase:	Construction Phase
Modeler:	R. Kapahi

Operating Hours hr/yr	8,760.00		
Receptor Proximity and Proximity Factors	**Cancer Score**	**Chronic Score**	**Acute Score**
0< R<100 1.000	3.10E+00	4.59E-03	0.00E+00
100≤R<250 0.250	7.74E-01	1.15E-03	0.00E+00
250≤R<500 0.040	1.24E-01	1.84E-04	0.00E+00
500≤R<1000 0.011	3.40E-02	5.05E-05	0.00E+00
1000≤R<1500 0.003	9.29E-03	1.38E-05	0.00E+00
1500≤R<2000 0.002	6.19E-03	9.18E-06	0.00E+00
2000<R 0.001	3.10E-03	4.59E-06	0.00E+00

R. Kapahi Enter the unit's CAS# of the substances emit amounts.

Substance	**CAS#**	**Annual Emissions (lbs/yr)**	**Maximum Hourly (lbs/hr)**
Diesel engine exhaust, particulate matter (Diesel PM)	**9901**	1.34E+00	

Table C-4
Operation Health Risk Evaluation

Name **Prioritizatio**

Applicability	Use to provide a Prioritization score based on t in yellow areas, ou		
Author or updater	Ray Kapahi	*Last Update*	
Facility:	76 Gas Station Screening Risk Evaluation		
Location	7599 Stockton Blvd., Sacramento		
Project Phase:	Operational Phase		
Modeler:	R. Kapahi		
Operating Hours hr/yr	8,760.00		

Receptor Proximity and Proximity Factors		Cancer Score	Chronic Score	Acute Score
0< R<100	**1.000**	1.90E+00	4.56E-02	4.49E-02
100≤R<250	**0.250**	4.75E-01	1.14E-02	1.12E-02
250≤R<500	**0.040**	7.60E-02	1.83E-03	1.79E-03
500≤R<1000	**0.011**	2.09E-02	5.02E-04	4.93E-04
1000≤R<1500	**0.003**	5.70E-03	1.37E-04	1.35E-04
1500≤R<2000	**0.002**	3.80E-03	9.13E-05	8.97E-05
2000<R	**0.001**	1.90E-03	4.56E-05	4.49E-05

Enter the unit's CAS# of the substances emit amounts.

R. Kapahi

Substance	CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)
Diesel engine exhaust, particulate matter (Diesel PM)	**9901**	2.00E-04	1.88E-08
Benzene	**71432**	6.94E+00	7.96E-04
Ethyl benzene	**100414**	1.82E+01	2.09E-03
Toluene	**108883**	9.11E+01	1.04E-02
Xylene	**1330207**	2.73E+01	3.13E-03