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CALEEMOD AIR QUALITY/GHG AND NOISE STUDY

**3200 Rio Linda Boulevard
Sacramento, CA 95815**

Prepared for

**Sarita Prasad
427 Santa Ana Avenue
Sacramento, CA 95738**

Prepared by



1322 Shaw Ave
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April 24, 2023



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April 24, 2023

Sarita Prasad
427 Santa Ana Avenue
Sacramento, CA 95738

RE: CalEEMod Air Quality/GHG and Noise Study

Ms. Prasad,

Soar Environmental Consulting, Inc. has performed this assessment under my supervision according to generally accepted environmental practices and procedures, as of the date of this report. I declare to the best of my professional knowledge and belief, I meet the definition of an environmental professional as defined in 312.10 of 40 CFR 312. I have employed the degree of care and skill ordinarily exercised under similar circumstances by reputable environmental professionals practicing in this area.

The conclusions contained within this assessment are based upon site conditions readily observed or were reasonably ascertainable.

Matthew D. Fidel

Matthew D. Fidel
MS Env. Engineering, PMC
Senior Environmental Project Manager
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1. Project Description

The proposed Project is located at 3200 Rio Linda Boulevard, Sacramento, CA 95738, and involves the rehabilitation of the subject property for a gas station and retail building. The approximately 0.5-acre parcel is currently occupied by a non-functioning gas station and retail building. The nearest sensitive receptors are the single-family residences adjacent to the property to the east and south. A church is located adjacent to the west. The nearest school to the Project site is Martin Luther King Jr. Technological Academy located approximately 0.33 miles southeast of the Project site. The nearest airport is Sacramento McClellan Airport, approximately 3 miles northeast east of the Project site.

2. Assumptions

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

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

3. Air Quality and Greenhouse Gas Impacts Analysis

The California Environmental Quality Act (CEQA), Appendix G Guidelines contains an Environmental Checklist Form which consists of a series of questions that are intended to encourage a thoughtful assessment of impacts. To evaluate the questions in the Air Quality and Greenhouse Gas Emissions Sections of the checklist, quantitative significance criteria established by the local air quality agency, such as SMAQMD, may be relied upon to make significance determinations based on mass emissions of criteria pollutants and GHGs, as determined in this report.

3.1 Project Emissions Estimation

A construction and operation analysis were performed using CalEEMod version 2020.4.0, the official statewide land use computer model designed to provide a uniform platform for estimating potential criteria pollutant and GHG emissions associated with both construction and operations of land use projects under CEQA. The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The mobile source emission factors used in the model published by the California Air Resources Board (CARB) include the Pavley standards and Low Carbon Fuel



standards. The model also identifies project design features, regulatory measures, and mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from the selected measures. CalEEMod was developed by the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the San Joaquin Valley Air Pollution Control District (SJVAPCD), the Bay Area Air Quality Management District (BAAQMD), the South Coast Air Quality Management District (SCAQMD), and other California air districts. Default land use data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) were provided by the various California air districts to account for local requirements and conditions. As the official assessment methodology for land use projects in California, CalEEMod is relied upon herein for construction and operational emissions quantification, which forms the basis for the impact analysis.

Based on information received from the Applicant, land use data for CalEEMod input is presented in Table 1. The total parcel area is 0.5-acre. The SMAQMD quantitative significance thresholds shown in Table 2 were used to evaluate project emissions impacts (SMAQMD 2020).

**Table 1
Land Use Data for CalEEMod Input**

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area (Approx.) | Population (Approx.) |
|------------------------------|-----------|------------|-------------|------------------------------|----------------------|
| Convenience Market (24 hour) | 2.00 | 1,000 sqft | 0.05 | 2,000 sqft | 0 |
| Parking Lot | 0.23 | Acre | 0.23 | 10,018 sqft | 0 |
| Gasoline/Service Station | 4.00 | Pump | 0.01 | 564 sqft | 0 |
| Total | NA | NA | 0.29 | 12,582 sqft | 0 |

Source: CalEEMod version 2020.4.0



Table 2
SMAQMD CEQA Thresholds of Significance

| Pollutant / Precursor | Construction-Related Emissions | | Operational Emissions | |
|-----------------------|---|-----------------|---|----------|
| | (lb/day) | (T/year) | (lb/day) | (T/year) |
| NOx | 85 | 15.5 | 65 | 11.9 |
| ROG | N/A | N/A | 65 | 11.9 |
| PM10 | 0 (If all feasible BACT/BMPs are applied, then 80 pounds/day and 14.6 tons/year) | 14.6 | 0 (If all feasible BACT/BMPs are applied, then 80 pounds/day and 14.6 tons/year) | 14.6 |
| PM2.5 | 0 (If all feasible BACT/BMPs are applied, then 82 pounds/day and 15 tons/year) | 15 | 0 (If all feasible BACT/BMPs are applied, then 82 pounds/day and 15 tons/year) | 15 |
| GHG as CO2e | 1,100 (MT/year) | 1,100 (MT/year) | Demonstrate consistency with the Climate Change Scoping Plan by implementing applicable Best Management Practices (BMP), or equivalent on-site or off-site mitigation | |

Source: SMAQMD 2020

3.2 Criteria Pollutants from Project Construction

A project's construction phase produces many types of emissions, but PM10 and PM2.5 in fugitive dust and diesel engine exhaust are the pollutants of greatest concern. Fugitive dust emissions can result from a variety of construction activities, including excavation, grading, demolition, vehicle travel on paved and unpaved surfaces, and vehicle exhaust. Construction-related emissions can cause substantial increases in localized concentrations of PM10, as well as affect PM10 compliance with ambient air quality standards on a regional basis. Particulate emissions from construction activities can lead to adverse health effects as well as nuisance concerns such as reduced visibility and soiling of exposed surfaces. The use of diesel-powered construction equipment emits ozone precursors oxides of nitrogen (NOx) and reactive organic gases (ROG), and diesel particulate matter (DPM). The use of architectural coatings and other materials



associated with finishing buildings may also emit Reactive Organic Gases (ROG). CEQA significant thresholds address the impacts of construction activity emissions on local and regional air quality.

PM10 emitted during construction can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions, and other factors making quantification difficult. Despite this variability in emissions, experience has shown that several feasible control measures can be reasonably implemented to significantly reduce fugitive dust emissions from construction.

3.3 Criteria Pollutants from Project Operation

The term “Project operations” refers to the full range of activities that can or may generate criteria pollutant and GHG emissions when the project is functioning in its intended use. For projects, such as office parks, shopping centers, apartment buildings, residential subdivisions, and other indirect sources, motor vehicles traveling to and from the project represent the primary source of air pollutant emissions. For industrial projects and some commercial projects, equipment operation, and manufacturing processes, (i.e., permitted stationary sources, can be of greatest concern from an emissions standpoint). CEQA significance thresholds address the impacts of operational emission sources on local and regional air quality. For this analysis, the CalEEMod-generated default trip rate was used for calculating project operation emissions.

3.4 Regulatory Setting

3.4.1 Federal

Clean Air Act

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the USEPA to establish the National Ambient Air Quality Standards (NAAQS), with states retaining the option to adopt more stringent standards or to include other specific pollutants. On April 2, 2007, the Supreme Court found that carbon dioxide (CO₂) is an air pollutant covered by the CAA; however, no NAAQS has been established for CO₂.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect public health and welfare. They are designed to protect those “sensitive receptors” most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other diseases or illnesses, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. The USEPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether the NAAQS have been achieved.



3.4.2 State

California Clean Air Act

The California Clean Air Act (CCAA) allows the state to adopt ambient air quality standards and other regulations if they are at least as stringent as federal standards. California Air Resources Board (CARB), a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the California Ambient Air Quality Standards (CAAQS). CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The USEPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register. The plan is updated on a triennial basis and was last updated in 2018. It presents comprehensive strategies to reduce the O₃ precursor pollutants (ROG and NO_x) from stationary, area, mobile, and indirect sources.

3.4.3 Local

Sacramento Metropolitan Air Quality Management District

The SMAQMD is the regional agency responsible for air quality regulation within the SVAB. The SMAQMD regulates air quality through its planning and review activities and has permit authority over most types of stationary emission sources and can require operators of stationary sources to obtain permits, can impose emission limits, set fuel or material specifications, and establish operational limits to reduce air emissions. The SMAQMD regulates new or modified stationary sources of TACs.

For state air quality planning purposes, Sacramento County is classified as a severe nonattainment area for ozone. The "severe" classification triggers various plan submittal requirements and transportation performance standards. To demonstrate the district's ability to eventually meet the federal ozone standards, the SMAQMD, along with the other air districts in the nonattainment area, maintains the region's portion of the SIP for ozone. The Sacramento Air Basin's part of the SIP is a compilation of regulations that govern how the region and State will comply with the FCAA requirements to attain and



maintain the federal ozone standard. The compilation of rules that comprises the Sacramento Nonattainment Area's portion of the SIP is contained in the Sacramento Area Regional Ozone Attainment Plan. Before the certification of the 2007 RSP EIR, the latest update SIP was adopted by the SMAQMD on January 26, 2006. Since then, the SMAQMD has made numerous SIP revisions. The latest revisions made to the SIP include the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions),¹⁷ which addresses attainment of the federal 8-hour ozone standard, as well as the 2009 Triennial Report and Plan Revision,¹⁸ which addresses attainment of the state ozone standard, are the latest plans issued by the SMAQMD.

These attainment plans depend heavily on the SMAQMD's permit authority, which is exercised through SMAQMD's rules and regulations. Concerning the construction phase of the Proposed Project, the applicable SMAQMD regulations would relate to construction and stationary equipment, particulate matter generation, architectural coatings, and paving materials. Equipment used during Proposed Project construction would be subject to the requirements of SMAQMD Regulation 2 (Permits), Rule 201 (General Permit Requirements); Regulation 4 (Prohibitory Rules), Rule 401 (Ringelmann Chart/Opacity), Rule 402 (Nuisance), Rule 403 (Fugitive Dust), Rule 404 (Particulate Matter), Rule 405 (Dust and Condensed Fumes), Rule 411 (Boiler NOx), Rule 420 (Sulfur Content of Fuels), Rule 442 (Architectural Coatings), and Rule 453 (Cutback and Emulsified Asphalt Paving Materials).

3.5 Results of Criteria Emissions Analyses

Table 3 – Indicates unmitigated and mitigated criteria construction emissions and evaluates mitigated emissions against SMAQMD significance thresholds.

Table 4 – Indicates unmitigated and mitigated criteria operational emissions and evaluates mitigated emissions against SMAQMD significance thresholds.

As shown in **Tables 3 and 4**, mass emissions of criteria pollutants from construction and operation are below applicable SMAQMD significance thresholds, (i.e., Less Than Significant (LTS)).

PROJECTED IMPACT: Less Than Significant

RECOMMENDED MITIGATION: None Required



Table 3
Construction Emissions Summary and Significance Evaluation

| Criteria Pollutants | Unmitigated | Mitigated | Threshold | Significance |
|---------------------|-------------|-----------|-----------------|--------------|
| | tons/yr | tons/yr | tons/yr | |
| NOx | 0.33 | 0.33 | 11.9 | LTS |
| ROG | 0.05 | 0.05 | 11.9 | LTS |
| PM 10 | 0.02 | 0.02 | 14.6 | LTS |
| PM 2.5 | 0.02 | 0.02 | 15 | LTS |
| GHG as CO2e | 58.86 | 58.86 | 1,100 (MT/year) | LTS |

Source: CalEEMod version 2020.4.0, SMAQMD 2020

Table 4
Operational Emissions Summary and Significance Evaluation

| Criteria Pollutants | Unmitigated | Mitigated | Threshold | Significance |
|---------------------|-------------|-----------|--|--------------|
| | tons/yr | tons/yr | tons/yr | |
| NOx | 0.51 | 0.51 | 11.9 | LTS |
| ROG | 0.69 | 0.69 | 11.9 | LTS |
| PM 10 | 0.46 | 0.46 | 14.6 | LTS |
| PM 2.5 | 0.13 | 0.13 | 15 | LTS |
| GHG as CO2e | 450.39 | 450.39 | Demonstrate consistency with the Climate Change Scoping Plan by implementing applicable Best Management Practices or equivalent on-site or off-site mitigation | LTS |

Source: CalEEMod version 2020.4.0, SMAQMD 2020



3.6 Greenhouse Gas Emissions from Construction and Operation

Greenhouse gases – primarily carbon dioxide (CO₂), methane (CH₄), and nitrous (N₂O) oxide, collectively reported as carbon dioxide equivalents (CO₂e) – are directly emitted from stationary source combustion of natural gas in equipment such as water heaters, boilers, process heaters, and furnaces. GHGs are also emitted from mobile sources such as on-road vehicles and off-road construction equipment burning fuels such as gasoline, diesel, biodiesel, propane, or natural gas (compressed or liquefied). Indirect GHG emissions result from electric power generated elsewhere (i.e., power plants) used to operate process equipment, lighting, and utilities at a facility. Also, included in GHG quantification is electric power used to pump the water supply (e.g., aqueducts, wells, pipelines) and disposal and decomposition of municipal waste in landfills. (CARB 2017).

California's Building Energy Efficiency Standards are updated on an approximately three-year cycle. The 2019 standards improved upon the 2016 standards for new construction of, and additions and alterations to, residential, commercial, and industrial buildings. The 2019 standards went into effect on January 1, 2020 (CEC 2019).

Since the Title 24 standards require energy conservation features in new construction (e.g., high-efficiency lighting, high-efficiency heating, ventilating, and air-conditioning (HVAC) systems, thermal insulation, double-glazed windows, water-conserving plumbing fixtures, etc.), they indirectly regulate and reduce GHG emissions.

Using CalEEMod, directly on-site and off-site GHG emissions were estimated for construction and operation, and indirect off-site GHG emissions were estimated to account for electric power used by the proposed project, water conveyance, and solid waste disposal.

3.7 Results of Greenhouse Gas Emissions Analysis

The SMAQMD does not have an adopted threshold of significance for construction-related GHG emissions; however, the air district recommends the quantification and disclosure of construction-generated GHG emissions. The SMAQMD project-level operational threshold of significance for GHG emissions is the project generation of 1,100 metric tons of CO₂e per year during operations (bright-line numeric threshold); or the project generation of 4.6 metric tons of CO₂e per service population (employees + residents) per year during operations (efficiency-based threshold); or compliance with a Qualified GHG Reduction Strategy. However, it is noted that this threshold is based, in part, on the GHG-reducing target established for the year 2020 under AB 32, but the Project would be implemented after the year 2020. Statewide goals for GHG reductions in the years beyond 2020 were codified into state law with the passage of SB 32, which as described previously mandates that California achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. This equates to 40 percent below the statewide GHG reduction target for the year 2020.

Therefore, Project GHG emissions are quantified and compared to the thresholds issued by the California Air Pollution Control Officers Association (CAPCOA), which is an association of air pollution control officers from all 35 local air quality agencies throughout California, including the SMAQMD. CAPCOA recommends a significant threshold of 900 metric tons annually. This threshold is based on a capture rate of 90 percent



of land use development projects, which in turn translates into a 90 percent capture rate of all GHG emissions. The 900 metric ton threshold, the lowest promulgated in any region in the state, is considered by CAPCOA to be low enough to capture a substantial fraction of future projects that will be constructed to accommodate future (the year 2050) statewide population and economic growth while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions.

Tables 5 and 6 indicate unmitigated and mitigated GHG emissions. To show compliance with SMAQMD’s use of BPS to show significance, the project would implement applicable and feasible reduction measures.

Table 5
Construction Greenhouse Gas Emissions Summary and Significance Evaluation

| Greenhouse Gases | Unmitigated | Mitigated | Threshold | Significance |
|------------------|-------------|-----------|-----------|--------------|
| | MT/yr | MT/yr | MT/yr | |
| CO2 | 58.33 | 58.33 | N/A | N/A |
| CH4 | 0.018 | 0.018 | N/A | N/A |
| N2O | 0.00032 | 0.00032 | N/A | N/A |
| CO2e | 58.86 | 58.86 | 1,100 | LTS |

Source: CalEEMod version 2020.4.0

Table 6
Operational Greenhouse Gas Emissions Summary and Significance Evaluation

| Greenhouse Gases | Unmitigated | Mitigated | Threshold | Significance |
|------------------|-------------|-----------|-----------|--------------|
| | MT/yr | MT/yr | MT/yr | |
| CO2 | 435.44 | 435.44 | N/A | N/A |
| CH4 | 0.16 | 0.16 | N/A | N/A |
| N2O | 0.04 | 0.04 | N/A | N/A |
| CO2e | 450.39 | 450.39 | BMPs | LTS |

Source: CalEEMod version 2020.4.0

PROJECTED IMPACT: Less Than Significant

RECOMMENDED MITIGATION: None Required

4. Limitations

The scope of services performed to complete this assessment is limited in nature. Site conditions can vary with time; therefore, this assessment is not intended to predict future site conditions. Because of the nature of this assessment, site history has been developed based solely upon information provided by the Client or during the review of available regulatory files on this, and nearby sites. This report is not a complete risk assessment, and the scope of services does not include a complete determination of the



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extent of, nor the environmental or public health impact of, known or suspected hazardous materials or wastes.

The information and conclusions contained in this report are based upon work performed by trained professional and technical staff by generally accepted engineering and scientific practices at the time the work was performed. The conclusions and recommendations presented herein represent the best judgment of Soar Environmental staff and are based upon the information obtained from field reconnaissance and data review. Due to the nature of this investigation, Soar Environmental cannot warrant undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be construed as legal advice.

Should additional information become available that differs significantly from our understanding of conditions presented in this report, we request that this information be brought to our attention so that we may reassess the conclusions provided herein.



5. References

Air Quality and GHG References

SMAQMD (Sacramento Metropolitan Air Quality Management District). 2020. Sacramento Metropolitan Air Quality Management District CEQA Guide.

California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. Website (<https://ww3.arb.ca.gov/cc/scopingplan/scopingplan.htm>) accessed August 26, 2021.

California Emissions Estimation Model® (CalEEMod). 2020. Version 2020.4.0. Website (<http://www.caleemod.com/>) accessed August 26, 2021.

California Energy Commission (CEC). 2019. Building Energy Efficiency Program. Website (<http://www.energy.ca.gov/title24/>) accessed August 26, 2021.



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Appendix A
CalEEMod Outputs





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Prasad Gas Station - Sacramento County, Annual

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

**Prasad Gas Station
Sacramento County, Annual**

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|------------------------------|------|----------|-------------|--------------------|------------|
| Convenience Market (24 hour) | 2.00 | 1000sqft | 0.05 | 2,000.00 | 0 |
| Parking Lot | 0.23 | Acre | 0.23 | 10,018.80 | 0 |
| Gasoline/Service Station | 4.00 | Pump | 0.01 | 564.70 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------------|---------------------------------------|--------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 3.5 | Precipitation Freq (Days) | 58 |
| Climate Zone | 6 | | | Operational Year | 2026 |
| 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 -

Construction Phase -

| Table Name | Column Name | Default Value | New Value |
|------------|-------------|---------------|-----------|
|------------|-------------|---------------|-----------|

2.0 Emissions Summary

Prasad Gas Station - Sacramento County, Annual

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

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|-----------|--|--|
| 1 | 1-1-2024 | 3-31-2024 | 0.2201 | 0.2201 |
| 2 | 4-1-2024 | 6-30-2024 | 0.1560 | 0.1560 |
| | | Highest | 0.2201 | 0.2201 |

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 | 0.0120 | 0.0000 | 8.0000e-005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.0000 | 1.6000e-004 |
| Energy | 1.7000e-004 | 1.5100e-003 | 1.2700e-003 | 1.0000e-005 | | 1.1000e-004 | 1.1000e-004 | | 1.1000e-004 | 1.1000e-004 | 0.0000 | 7.2171 | 7.2171 | 5.5000e-004 | 9.0000e-005 | 7.2582 |
| Mobile | 0.6784 | 0.5082 | 3.7311 | 4.6000e-003 | 0.4536 | 4.5000e-003 | 0.4581 | 0.1213 | 4.1900e-003 | 0.1254 | 0.0000 | 426.2593 | 426.2593 | 0.0615 | 0.0365 | 438.6604 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.6584 | 0.0000 | 1.6584 | 0.0980 | 0.0000 | 4.1087 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0712 | 0.2330 | 0.3042 | 2.7000e-004 | 1.6000e-004 | 0.3578 |
| Total | 0.6906 | 0.5097 | 3.7324 | 4.6100e-003 | 0.4536 | 4.6100e-003 | 0.4582 | 0.1213 | 4.3000e-003 | 0.1256 | 1.7297 | 433.7095 | 435.4391 | 0.1603 | 0.0367 | 450.3853 |

Prasad Gas Station - Sacramento County, Annual

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

2.2 Overall Operational

Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.0120 | 0.0000 | 8.0000e-005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.0000 | 1.6000e-004 |
| Energy | 1.7000e-004 | 1.5100e-003 | 1.2700e-003 | 1.0000e-005 | | 1.1000e-004 | 1.1000e-004 | | 1.1000e-004 | 1.1000e-004 | 0.0000 | 7.2171 | 7.2171 | 5.5000e-004 | 9.0000e-005 | 7.2582 |
| Mobile | 0.6784 | 0.5082 | 3.7311 | 4.6000e-003 | 0.4536 | 4.5000e-003 | 0.4581 | 0.1213 | 4.1900e-003 | 0.1254 | 0.0000 | 426.2593 | 426.2593 | 0.0615 | 0.0365 | 438.6604 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.6584 | 0.0000 | 1.6584 | 0.0980 | 0.0000 | 4.1087 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0712 | 0.2330 | 0.3042 | 2.7000e-004 | 1.6000e-004 | 0.3578 |
| Total | 0.6906 | 0.5097 | 3.7324 | 4.6100e-003 | 0.4536 | 4.6100e-003 | 0.4582 | 0.1213 | 4.3000e-003 | 0.1256 | 1.7297 | 433.7095 | 435.4391 | 0.1603 | 0.0367 | 450.3853 |

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

3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1 | Site Preparation | Site Preparation | 1/1/2024 | 1/1/2024 | 5 | 1 | |
| 2 | Grading | Grading | 1/2/2024 | 1/3/2024 | 5 | 2 | |
| 3 | Building Construction | Building Construction | 1/4/2024 | 5/22/2024 | 5 | 100 | |

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| | | | | | | |
|---|-----------------------|-----------------------|-----------|-----------|---|---|
| 4 | Paving | Paving | 5/23/2024 | 5/29/2024 | 5 | 5 |
| 5 | Architectural Coating | Architectural Coating | 5/30/2024 | 6/5/2024 | 5 | 5 |

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.23

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,847; Non-Residential Outdoor: 1,282; Striped Parking Area: 601 (Architectural Coating – sqft)

OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Cement and Mortar Mixers | 4 | 6.00 | 9 | 0.56 |
| Building Construction | Cranes | 1 | 4.00 | 231 | 0.29 |
| Building Construction | Forklifts | 2 | 6.00 | 89 | 0.20 |
| Grading | Graders | 1 | 6.00 | 187 | 0.41 |
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Paving | Pavers | 1 | 7.00 | 130 | 0.42 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Grading | Rubber Tired Dozers | 1 | 6.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Grading | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Paving | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |

Trips and VMT

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| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Site Preparation | 2 | 5.00 | 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 | 5 | 5.00 | 2.00 | 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 Site Preparation - 2024

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 | 2.5000e-004 | 2.8000e-003 | 1.9500e-003 | 0.0000 | | 1.0000e-004 | 1.0000e-004 | | 9.0000e-005 | 9.0000e-005 | 0.0000 | 0.4274 | 0.4274 | 1.4000e-004 | 0.0000 | 0.4309 |
| Total | 2.5000e-004 | 2.8000e-003 | 1.9500e-003 | 0.0000 | 2.7000e-004 | 1.0000e-004 | 3.7000e-004 | 3.0000e-005 | 9.0000e-005 | 1.2000e-004 | 0.0000 | 0.4274 | 0.4274 | 1.4000e-004 | 0.0000 | 0.4309 |

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3.2 Site Preparation - 2024

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 | 5.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0141 | 0.0141 | 0.0000 | 0.0000 | 0.0142 |
| Total | 1.0000e-005 | 0.0000 | 5.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0141 | 0.0141 | 0.0000 | 0.0000 | 0.0142 |

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 | 2.5000e-004 | 2.8000e-003 | 1.9500e-003 | 0.0000 | | 1.0000e-004 | 1.0000e-004 | | 9.0000e-005 | 9.0000e-005 | 0.0000 | 0.4274 | 0.4274 | 1.4000e-004 | 0.0000 | 0.4309 |
| Total | 2.5000e-004 | 2.8000e-003 | 1.9500e-003 | 0.0000 | 2.7000e-004 | 1.0000e-004 | 3.7000e-004 | 3.0000e-005 | 9.0000e-005 | 1.2000e-004 | 0.0000 | 0.4274 | 0.4274 | 1.4000e-004 | 0.0000 | 0.4309 |

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3.2 Site Preparation - 2024

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 | 5.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0141 | 0.0141 | 0.0000 | 0.0000 | 0.0142 |
| Total | 1.0000e-005 | 0.0000 | 5.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0141 | 0.0141 | 0.0000 | 0.0000 | 0.0142 |

3.3 Grading - 2024

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 | | | | | 5.3100e-003 | 0.0000 | 5.3100e-003 | 2.5700e-003 | 0.0000 | 2.5700e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 9.1000e-004 | 9.7300e-003 | 5.5500e-003 | 1.0000e-005 | | 4.0000e-004 | 4.0000e-004 | | 3.7000e-004 | 3.7000e-004 | 0.0000 | 1.2380 | 1.2380 | 4.0000e-004 | 0.0000 | 1.2480 |
| Total | 9.1000e-004 | 9.7300e-003 | 5.5500e-003 | 1.0000e-005 | 5.3100e-003 | 4.0000e-004 | 5.7100e-003 | 2.5700e-003 | 3.7000e-004 | 2.9400e-003 | 0.0000 | 1.2380 | 1.2380 | 4.0000e-004 | 0.0000 | 1.2480 |

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3.3 Grading - 2024

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 | 2.0000e-005 | 1.0000e-005 | 1.7000e-004 | 0.0000 | 6.0000e-005 | 0.0000 | 6.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0450 | 0.0450 | 0.0000 | 0.0000 | 0.0454 |
| Total | 2.0000e-005 | 1.0000e-005 | 1.7000e-004 | 0.0000 | 6.0000e-005 | 0.0000 | 6.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0450 | 0.0450 | 0.0000 | 0.0000 | 0.0454 |

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 | | | | | 5.3100e-003 | 0.0000 | 5.3100e-003 | 2.5700e-003 | 0.0000 | 2.5700e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 9.1000e-004 | 9.7300e-003 | 5.5500e-003 | 1.0000e-005 | | 4.0000e-004 | 4.0000e-004 | | 3.7000e-004 | 3.7000e-004 | 0.0000 | 1.2380 | 1.2380 | 4.0000e-004 | 0.0000 | 1.2480 |
| Total | 9.1000e-004 | 9.7300e-003 | 5.5500e-003 | 1.0000e-005 | 5.3100e-003 | 4.0000e-004 | 5.7100e-003 | 2.5700e-003 | 3.7000e-004 | 2.9400e-003 | 0.0000 | 1.2380 | 1.2380 | 4.0000e-004 | 0.0000 | 1.2480 |

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3.3 Grading - 2024

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 | 2.0000e-005 | 1.0000e-005 | 1.7000e-004 | 0.0000 | 6.0000e-005 | 0.0000 | 6.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0450 | 0.0450 | 0.0000 | 0.0000 | 0.0454 |
| Total | 2.0000e-005 | 1.0000e-005 | 1.7000e-004 | 0.0000 | 6.0000e-005 | 0.0000 | 6.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0450 | 0.0450 | 0.0000 | 0.0000 | 0.0454 |

3.4 Building Construction - 2024

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 | 0.0298 | 0.2987 | 0.3534 | 5.7000e-004 | | 0.0141 | 0.0141 | | 0.0130 | 0.0130 | 0.0000 | 50.1212 | 50.1212 | 0.0162 | 0.0000 | 50.5265 |
| Total | 0.0298 | 0.2987 | 0.3534 | 5.7000e-004 | | 0.0141 | 0.0141 | | 0.0130 | 0.0130 | 0.0000 | 50.1212 | 50.1212 | 0.0162 | 0.0000 | 50.5265 |

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3.4 Building Construction - 2024

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 | 1.2000e-004 | 4.7800e-003 | 1.4200e-003 | 2.0000e-005 | 5.9000e-004 | 3.0000e-005 | 6.1000e-004 | 1.7000e-004 | 2.0000e-005 | 1.9000e-004 | 0.0000 | 1.8195 | 1.8195 | 4.0000e-005 | 2.7000e-004 | 1.9003 |
| Worker | 6.7000e-004 | 3.9000e-004 | 5.4000e-003 | 2.0000e-005 | 1.8400e-003 | 1.0000e-005 | 1.8500e-003 | 4.9000e-004 | 1.0000e-005 | 5.0000e-004 | 0.0000 | 1.4072 | 1.4072 | 4.0000e-005 | 4.0000e-005 | 1.4199 |
| Total | 7.9000e-004 | 5.1700e-003 | 6.8200e-003 | 4.0000e-005 | 2.4300e-003 | 4.0000e-005 | 2.4600e-003 | 6.6000e-004 | 3.0000e-005 | 6.9000e-004 | 0.0000 | 3.2267 | 3.2267 | 8.0000e-005 | 3.1000e-004 | 3.3203 |

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 | 0.0298 | 0.2987 | 0.3534 | 5.7000e-004 | | 0.0141 | 0.0141 | | 0.0130 | 0.0130 | 0.0000 | 50.1211 | 50.1211 | 0.0162 | 0.0000 | 50.5264 |
| Total | 0.0298 | 0.2987 | 0.3534 | 5.7000e-004 | | 0.0141 | 0.0141 | | 0.0130 | 0.0130 | 0.0000 | 50.1211 | 50.1211 | 0.0162 | 0.0000 | 50.5264 |

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3.4 Building Construction - 2024

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 | 1.2000e-004 | 4.7800e-003 | 1.4200e-003 | 2.0000e-005 | 5.9000e-004 | 3.0000e-005 | 6.1000e-004 | 1.7000e-004 | 2.0000e-005 | 1.9000e-004 | 0.0000 | 1.8195 | 1.8195 | 4.0000e-005 | 2.7000e-004 | 1.9003 |
| Worker | 6.7000e-004 | 3.9000e-004 | 5.4000e-003 | 2.0000e-005 | 1.8400e-003 | 1.0000e-005 | 1.8500e-003 | 4.9000e-004 | 1.0000e-005 | 5.0000e-004 | 0.0000 | 1.4072 | 1.4072 | 4.0000e-005 | 4.0000e-005 | 1.4199 |
| Total | 7.9000e-004 | 5.1700e-003 | 6.8200e-003 | 4.0000e-005 | 2.4300e-003 | 4.0000e-005 | 2.4600e-003 | 6.6000e-004 | 3.0000e-005 | 6.9000e-004 | 0.0000 | 3.2267 | 3.2267 | 8.0000e-005 | 3.1000e-004 | 3.3203 |

3.5 Paving - 2024

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 | 1.4800e-003 | 0.0131 | 0.0176 | 3.0000e-005 | | 6.1000e-004 | 6.1000e-004 | | 5.7000e-004 | 5.7000e-004 | 0.0000 | 2.3502 | 2.3502 | 6.8000e-004 | 0.0000 | 2.3673 |
| Paving | 3.0000e-004 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 1.7800e-003 | 0.0131 | 0.0176 | 3.0000e-005 | | 6.1000e-004 | 6.1000e-004 | | 5.7000e-004 | 5.7000e-004 | 0.0000 | 2.3502 | 2.3502 | 6.8000e-004 | 0.0000 | 2.3673 |

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3.5 Paving - 2024

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 | 1.2000e-004 | 7.0000e-005 | 9.7000e-004 | 0.0000 | 3.3000e-004 | 0.0000 | 3.3000e-004 | 9.0000e-005 | 0.0000 | 9.0000e-005 | 0.0000 | 0.2533 | 0.2533 | 1.0000e-005 | 1.0000e-005 | 0.2556 |
| Total | 1.2000e-004 | 7.0000e-005 | 9.7000e-004 | 0.0000 | 3.3000e-004 | 0.0000 | 3.3000e-004 | 9.0000e-005 | 0.0000 | 9.0000e-005 | 0.0000 | 0.2533 | 0.2533 | 1.0000e-005 | 1.0000e-005 | 0.2556 |

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 | 1.4800e-003 | 0.0131 | 0.0176 | 3.0000e-005 | | 6.1000e-004 | 6.1000e-004 | | 5.7000e-004 | 5.7000e-004 | 0.0000 | 2.3502 | 2.3502 | 6.8000e-004 | 0.0000 | 2.3673 |
| Paving | 3.0000e-004 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 1.7800e-003 | 0.0131 | 0.0176 | 3.0000e-005 | | 6.1000e-004 | 6.1000e-004 | | 5.7000e-004 | 5.7000e-004 | 0.0000 | 2.3502 | 2.3502 | 6.8000e-004 | 0.0000 | 2.3673 |

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3.5 Paving - 2024

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 | 1.2000e-004 | 7.0000e-005 | 9.7000e-004 | 0.0000 | 3.3000e-004 | 0.0000 | 3.3000e-004 | 9.0000e-005 | 0.0000 | 9.0000e-005 | 0.0000 | 0.2533 | 0.2533 | 1.0000e-005 | 1.0000e-005 | 0.2556 |
| Total | 1.2000e-004 | 7.0000e-005 | 9.7000e-004 | 0.0000 | 3.3000e-004 | 0.0000 | 3.3000e-004 | 9.0000e-005 | 0.0000 | 9.0000e-005 | 0.0000 | 0.2533 | 0.2533 | 1.0000e-005 | 1.0000e-005 | 0.2556 |

3.6 Architectural Coating - 2024

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 | 0.0133 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.5000e-004 | 3.0500e-003 | 4.5300e-003 | 1.0000e-005 | | 1.5000e-004 | 1.5000e-004 | | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.6383 | 0.6383 | 4.0000e-005 | 0.0000 | 0.6392 |
| Total | 0.0137 | 3.0500e-003 | 4.5300e-003 | 1.0000e-005 | | 1.5000e-004 | 1.5000e-004 | | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.6383 | 0.6383 | 4.0000e-005 | 0.0000 | 0.6392 |

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3.6 Architectural Coating - 2024

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 | 5.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0141 | 0.0141 | 0.0000 | 0.0000 | 0.0142 |
| Total | 1.0000e-005 | 0.0000 | 5.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0141 | 0.0141 | 0.0000 | 0.0000 | 0.0142 |

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 | 0.0133 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.5000e-004 | 3.0500e-003 | 4.5300e-003 | 1.0000e-005 | | 1.5000e-004 | 1.5000e-004 | | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.6383 | 0.6383 | 4.0000e-005 | 0.0000 | 0.6392 |
| Total | 0.0137 | 3.0500e-003 | 4.5300e-003 | 1.0000e-005 | | 1.5000e-004 | 1.5000e-004 | | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.6383 | 0.6383 | 4.0000e-005 | 0.0000 | 0.6392 |

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3.6 Architectural Coating - 2024

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 | 5.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0141 | 0.0141 | 0.0000 | 0.0000 | 0.0142 |
| Total | 1.0000e-005 | 0.0000 | 5.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0141 | 0.0141 | 0.0000 | 0.0000 | 0.0142 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|----------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.6784 | 0.5082 | 3.7311 | 4.6000e-003 | 0.4536 | 4.5000e-003 | 0.4581 | 0.1213 | 4.1900e-003 | 0.1254 | 0.0000 | 426.2593 | 426.2593 | 0.0615 | 0.0365 | 438.6604 |
| Unmitigated | 0.6784 | 0.5082 | 3.7311 | 4.6000e-003 | 0.4536 | 4.5000e-003 | 0.4581 | 0.1213 | 4.1900e-003 | 0.1254 | 0.0000 | 426.2593 | 426.2593 | 0.0615 | 0.0365 | 438.6604 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|------------------------------|-------------------------|-----------------|-----------------|------------------|------------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Convenience Market (24 hour) | 1,524.56 | 2,168.34 | 1802.34 | 928,451 | 928,451 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Gasoline/Service Station | 688.04 | 728.68 | 667.52 | 295,853 | 295,853 |
| Total | 2,212.60 | 2,897.02 | 2,469.86 | 1,224,304 | 1,224,304 |

4.3 Trip Type Information

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|------------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Convenience Market (24 hour) | 10.00 | 5.00 | 6.50 | 0.90 | 80.10 | 19.00 | 24 | 15 | 61 |
| Parking Lot | 10.00 | 5.00 | 6.50 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Gasoline/Service Station | 10.00 | 5.00 | 6.50 | 2.00 | 79.00 | 19.00 | 14 | 27 | 59 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Convenience Market (24 hour) | 0.550065 | 0.056538 | 0.183073 | 0.126916 | 0.023794 | 0.005777 | 0.013314 | 0.009484 | 0.000878 | 0.000597 | 0.025554 | 0.000937 | 0.003071 |

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| | | | | | | | | | | | | | |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Parking Lot | 0.550065 | 0.056538 | 0.183073 | 0.126916 | 0.023794 | 0.005777 | 0.013314 | 0.009484 | 0.000878 | 0.000597 | 0.025554 | 0.000937 | 0.003071 |
| Gasoline/Service Station | 0.550065 | 0.056538 | 0.183073 | 0.126916 | 0.023794 | 0.005777 | 0.013314 | 0.009484 | 0.000878 | 0.000597 | 0.025554 | 0.000937 | 0.003071 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|--------|
| | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 5.5720 | 5.5720 | 5.1000e-004 | 6.0000e-005 | 5.6034 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 5.5720 | 5.5720 | 5.1000e-004 | 6.0000e-005 | 5.6034 |
| NaturalGas Mitigated | 1.7000e-004 | 1.5100e-003 | 1.2700e-003 | 1.0000e-005 | | 1.1000e-004 | 1.1000e-004 | | 1.1000e-004 | 1.1000e-004 | 0.0000 | 1.6450 | 1.6450 | 3.0000e-005 | 3.0000e-005 | 1.6548 |
| NaturalGas Unmitigated | 1.7000e-004 | 1.5100e-003 | 1.2700e-003 | 1.0000e-005 | | 1.1000e-004 | 1.1000e-004 | | 1.1000e-004 | 1.1000e-004 | 0.0000 | 1.6450 | 1.6450 | 3.0000e-005 | 3.0000e-005 | 1.6548 |

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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 | | | | | |
| Convenience Market (24 hour) | 10740 | 6.0000e-005 | 5.3000e-004 | 4.4000e-004 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | 0.0000 | 0.5731 | 0.5731 | 1.0000e-005 | 1.0000e-005 | 0.5765 |
| Gasoline/Service Station | 20086.4 | 1.1000e-004 | 9.8000e-004 | 8.3000e-004 | 1.0000e-005 | | 7.0000e-005 | 7.0000e-005 | | 7.0000e-005 | 7.0000e-005 | 0.0000 | 1.0719 | 1.0719 | 2.0000e-005 | 2.0000e-005 | 1.0783 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 1.7000e-004 | 1.5100e-003 | 1.2700e-003 | 1.0000e-005 | | 1.1000e-004 | 1.1000e-004 | | 1.1000e-004 | 1.1000e-004 | 0.0000 | 1.6450 | 1.6450 | 3.0000e-005 | 3.0000e-005 | 1.6548 |

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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

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 | | | | | |
| Convenience Market (24 hour) | 10740 | 6.0000e-005 | 5.3000e-004 | 4.4000e-004 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | 0.0000 | 0.5731 | 0.5731 | 1.0000e-005 | 1.0000e-005 | 0.5765 |
| Gasoline/Service Station | 20086.4 | 1.1000e-004 | 9.8000e-004 | 8.3000e-004 | 1.0000e-005 | | 7.0000e-005 | 7.0000e-005 | | 7.0000e-005 | 7.0000e-005 | 0.0000 | 1.0719 | 1.0719 | 2.0000e-005 | 2.0000e-005 | 1.0783 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 1.7000e-004 | 1.5100e-003 | 1.2700e-003 | 1.0000e-005 | | 1.1000e-004 | 1.1000e-004 | | 1.1000e-004 | 1.1000e-004 | 0.0000 | 1.6450 | 1.6450 | 3.0000e-005 | 3.0000e-005 | 1.6548 |

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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 | | | |
| Convenience Market (24 hour) | 22440 | 3.6437 | 3.4000e-004 | 4.0000e-005 | 3.6643 |
| Gasoline/Service Station | 8368.85 | 1.3589 | 1.3000e-004 | 2.0000e-005 | 1.3666 |
| Parking Lot | 3506.58 | 0.5694 | 5.0000e-005 | 1.0000e-005 | 0.5726 |
| Total | | 5.5720 | 5.2000e-004 | 7.0000e-005 | 5.6034 |

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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

Mitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|------------------------------|-----------------|---------------|--------------------|--------------------|---------------|
| Land Use | kWh/yr | MT/yr | | | |
| Convenience Market (24 hour) | 22440 | 3.6437 | 3.4000e-004 | 4.0000e-005 | 3.6643 |
| Gasoline/Service Station | 8368.85 | 1.3589 | 1.3000e-004 | 2.0000e-005 | 1.3666 |
| Parking Lot | 3506.58 | 0.5694 | 5.0000e-005 | 1.0000e-005 | 0.5726 |
| Total | | 5.5720 | 5.2000e-004 | 7.0000e-005 | 5.6034 |

6.0 Area Detail

6.1 Mitigation Measures Area

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| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|---------|--------|-------------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|--------|-------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.0120 | 0.0000 | 8.0000e-005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.0000 | 1.6000e-004 |
| Unmitigated | 0.0120 | 0.0000 | 8.0000e-005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.0000 | 1.6000e-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 | 1.3300e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0107 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 1.0000e-005 | 0.0000 | 8.0000e-005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.0000 | 1.6000e-004 |
| Total | 0.0120 | 0.0000 | 8.0000e-005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.0000 | 1.6000e-004 |

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6.2 Area by SubCategory

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 1.3300e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0107 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 1.0000e-005 | 0.0000 | 8.0000e-005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.0000 | 1.6000e-004 |
| Total | 0.0120 | 0.0000 | 8.0000e-005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.0000 | 1.6000e-004 |

7.0 Water Detail

7.1 Mitigation Measures Water

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

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|-------------|-------------|--------|
| Category | MT/yr | | | |
| Mitigated | 0.3042 | 2.7000e-004 | 1.6000e-004 | 0.3578 |
| Unmitigated | 0.3042 | 2.7000e-004 | 1.6000e-004 | 0.3578 |

7.2 Water by Land Use

Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|------------------------------|-----------------------|---------------|--------------------|--------------------|---------------|
| Land Use | Mgal | MT/yr | | | |
| Convenience Market (24 hour) | 0.148145 / 0.0907986 | 0.2239 | 2.0000e-004 | 1.2000e-004 | 0.2633 |
| Gasoline/Service Station | 0.0531276 / 0.0325621 | 0.0803 | 7.0000e-005 | 4.0000e-005 | 0.0944 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 0.3042 | 2.7000e-004 | 1.6000e-004 | 0.3578 |

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7.2 Water by Land Use

Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|------------------------------|-----------------------|---------------|--------------------|--------------------|---------------|
| Land Use | Mgal | MT/yr | | | |
| Convenience Market (24 hour) | 0.148145 / 0.0907986 | 0.2239 | 2.0000e-004 | 1.2000e-004 | 0.2633 |
| Gasoline/Service Station | 0.0531276 / 0.0325621 | 0.0803 | 7.0000e-005 | 4.0000e-005 | 0.0944 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 0.3042 | 2.7000e-004 | 1.6000e-004 | 0.3578 |

8.0 Waste Detail

8.1 Mitigation Measures Waste

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

Category/Year

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|--------|--------|--------|
| | MT/yr | | | |
| Mitigated | 1.6584 | 0.0980 | 0.0000 | 4.1087 |
| Unmitigated | 1.6584 | 0.0980 | 0.0000 | 4.1087 |

8.2 Waste by Land Use

Unmitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|------------------------------|----------------|---------------|---------------|---------------|---------------|
| Land Use | tons | MT/yr | | | |
| Convenience Market (24 hour) | 6.01 | 1.2200 | 0.0721 | 0.0000 | 3.0224 |
| Gasoline/Service Station | 2.16 | 0.4385 | 0.0259 | 0.0000 | 1.0863 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 1.6584 | 0.0980 | 0.0000 | 4.1087 |

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8.2 Waste by Land Use

Mitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|------------------------------|----------------|---------------|---------------|---------------|---------------|
| Land Use | tons | MT/yr | | | |
| Convenience Market (24 hour) | 6.01 | 1.2200 | 0.0721 | 0.0000 | 3.0224 |
| Gasoline/Service Station | 2.16 | 0.4385 | 0.0259 | 0.0000 | 1.0863 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 1.6584 | 0.0980 | 0.0000 | 4.1087 |

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 |
|----------------|--------|
|----------------|--------|

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11.0 Vegetation
