GLOBAL CLIMATE CHANGE EVALUATION

CAR WASH AT EXXONMOBIL & CIRCLE K MAJOR USE PERMIT PROJECT VALLEY CENTER, CALIFORNIA RECORD ID PDS2022-MUP-22-003

Submitted to:

County of San Diego Planning & Development Services 5510 Overland Avenue, Suite 310 San Diego, CA 92123

Prepared for:

6 Carat Enterprises, Inc. 270 N El Camino Real Suite 523 Encinitas, CA 92024

Prepared by:

BlueScape Environmental James A. Westbrook County-approved Air Quality Consultant 16870 W. Bernardo Drive, Suite 400 San Diego, California 92127



June 22, 2023

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Appendix A Greenhouse Gas CalEEMod Emission Calculations

Acronym	Description
AB	Assembly Bill
ACC	Advanced Clean Cars
ADT	Average Daily Trips
BAAQMD	Bay Area Air Quality Management District
BAU	Business-as-Usual
°C	Degrees Celsius
CAAP	Climate Adaptation Advisory Panel
CalEEMod	California Emissions Estimator Model
CalEMA	California Emergency Management Agency
CalEPA	California Environmental Protection Agency
CAFE	Corporate Average Fuel Economy
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAS	Climate Adaptation Strategy
CAT	Climate Action Team
CCAA	California Clean Air Act
CCAR	California Climate Action Registry
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH ₄	Methane
CNRA	California Natural Resources Agency
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
COS	Conservation and Open Space
EIR	Environmental Impact Report
EMFAC2017	EMission FACtor 2017 Model
EO	Executive Order
EPA	Environmental Protection Agency
EPIC	Energy Policy Initiatives Center
EV	Electric Vehicle
EVCS	Electric Vehicle Charging Station
°F	Degrees Fahrenheit
GCC	Global Climate Change
GCM	Global Climate Model
GHG	Greenhouse Gas
GWP	Global Warming Potential
HFCs	Hydrofluorocarbons
HVAC	Heating, Ventilation & Air Conditioning
IPCC	Intergovernmental Panel on Climate Change
LCFS	Low Carbon Fuel Standard
LEV	Low Emission Vehicle
LMA	Local Mobility Analysis
LSE	Load Serving Entity
MMT	Million Metric Tons
MT	Metric Tons
MUP	Major Use Permit
N ₂ O	Nitrous Oxide

GLOSSARY OF TERMS AND ACRONYMS

Car Wash at ExxonMobil & Circle K MUP Project

NOE	Notice of Exemption
OPR	State Office of Planning and Research
PFCs	Perfluorocarbons
PHEV	Plug-in Hybrid Vehicle
POU	Publicly Owned Utility
RAQS	Regional Air Quality Strategy
RCP	Representative Concentration Pathway
RPS	Renewable Portfolio Standard
RTS/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SAFE	Safer Affordable Fuel-Efficient
SANDAG	San Diego Association of Governments
SB	Senate Bill
SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas & Electric
SF ₆	Sulfur Hexafluoride
SIP	State Implementation Plan
TCM	Transportation Control Measures
UNFCCC	United Nations Framework Convention on Climate Change
USEPA	U.S. Environmental Protection Agency
VMT	Vehicle Miles Traveled
w/o	Without
ZEV	Zero-Emissions Vehicle

EXECUTIVE SUMMARY

This report presents an assessment of potential greenhouse gas (GHG) impacts associated with the proposed Car Wash at ExxonMobil & Circle K Major Use Permit (MUP) Project (Project) in Valley Center, California. The Project is within the jurisdiction of the Department of Planning and Development Services in the County of San Diego (County) and the San Diego Air Pollution Control District (SDAPCD). The evaluation addresses the potential for GHG emissions during construction and after full buildout of the Project.

The Project is located at Valley Center Road and Miller Road within the Valley Center Community of San Diego County. The Project proposes an update to a previouslyapproved project¹ consisting of a 3,022 square foot convenience store and 1,250 square foot restaurant. Under the MUP a 4,257 square foot convenience store with a 3,300 square foot car wash will now be developed, and the restaurant removed from development. The Project would be built out in 2023, which would be the first year of operations.

On November 2, 2012, the County filed a notice of exemption (NOE) for the previously-approved project stating that the County had found the project to be exempt from a California Environmental Quality Act (CEQA) impact review under the G 15183 Exemption: *Project is Consistent with the Community Plan, General Plan, or Zoning* (County of San Diego 2012).

The proposed Project would result in emissions of GHGs for both the construction phase and operational phase of the Project. A comparison of GHG emissions from construction and operation of the previously-approved project that included a smaller convenience store and a fast-food restaurant to the GHG emissions from the current proposed Project under the MUP shows that emissions of GHGs would be substantially reduced. Therefore, when compared to the previously-approved project, the proposed Project would not:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

The GHG analysis for this Project was performed following the County's *Guidelines for Determining Significance: Climate Change* (County of San Diego 2018).

¹ Previous Project E.I.R. Number 3910 08-01-008, Approved by the County of San Diego Planning & Development Services on October 31, 2012.

1.0 INTRODUCTION

1.1 Purpose of the Report

This report presents an assessment of potential GHG impacts associated with the proposed Car Wash at ExxonMobil & Circle K MUP Project in Valley Center, California. The Project is within the jurisdiction of the Department of Planning and Development Services in the County of San Diego. The evaluation addresses the potential for GHG emissions during construction and after full buildout of the proposed Project. In this evaluation, the construction and operational GHG emissions for the convenience store and fast-food restaurant in the previously-approved project are compared to the construction and operational GHG emissions for the larger convenience store and car wash instead of the restaurant.

This GHG report includes an evaluation of existing conditions in the Project vicinity, an assessment of potential impacts associated with Project construction, and an evaluation of Project operational impacts.

1.2 Project Location and Description

The Project is located at Valley Center Road and Miller Road within the Valley Center Community of San Diego County. A vicinity map is provided in Figure 1. Construction of the previously-approved project is currently underway.

The Project is located at Valley Center Road and Miller Road within the Valley Center Community of San Diego County. The Project proposes an update to a previouslyapproved project consisting of a 3,022 square foot convenience store and 1,250 square foot restaurant. Under the MUP, a 4,257 square foot convenience store with a 3,300 square foot car wash will now be developed, and the restaurant removed from development. The Project would be built out in 2023, which will be the first year of operations. A schematic site plan is provided in Figure 2.

On November 2, 2012, the County filed a NOE for the previously-approved project stating that the County had found the project to be exempt from a CEQA impact review under the G 15183 Exemption: *Project is Consistent with the Community Plan, General Plan, or Zoning* (County of San Diego 2012).



FIGURE 1: PROJECT LOCATION AND VICINITY



FIGURE 2: PROJECT SITE PLAN

Global Climate Change Evaluation

2.0 GREENHOUSE GAS REGULATORY SETTING

2.1 General Principles and Existing Conditions

Global climate change (GCC) refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O), which are known as GHGs. These gases allow solar radiation (sunlight) into the Earth's atmosphere, but prevent radiative heat from escaping, thus warming the Earth's atmosphere. Gases that trap heat in the atmosphere are often called GHGs, analogous to a greenhouse. The accumulation of GHGs in the atmosphere regulates the Earth's temperature. Without carbon dioxide, Earth's surface would be some 33 degrees Celsius (°C) [59 degrees Fahrenheit (°F)] cooler. (NASA 2022). Emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere.

GCC may result from natural factors, natural processes, and/or human activities that change the composition of the atmosphere and alter the surface and features of land. Scientific consensus indicates that global climate change is largely attributable to human activity. Historical records indicate that global climate changes have occurred in the past due to natural phenomena (such as during previous ice ages). Some data indicate that the current global conditions differ from past climate changes in rate and magnitude. The State of California has been at the forefront of developing solutions to address potential anthropogenic impacts to GCC.

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The IPCC concluded that a stabilization of GHGs at 400 to 450 ppm CO_2 equivalent concentration is required to keep global mean warming below 3.6° F (2° C), which is assumed to be necessary to avoid dangerous climate change (AEP 2007).

State law defines GHGs as any of the following compounds: CO_2 , CH_4 , N_2O , hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF₆) (California Health and Safety Code Section 38505(g).) CO_2 , followed by CH_4 and N_2O , are the most common GHGs that result from human activity.

2.2 Sources and Global Warming Potentials of GHG

As discussed further below, the sources of GHG emissions, global warming potentials (GWPs), and atmospheric lifetime of GHGs are all important variables to be considered in the process of calculating carbon dioxide equivalent (CO₂e) for discretionary land use projects that require a climate change analysis.

The California Air Resources Board (CARB) compiled a statewide inventory of anthropogenic GHG emissions and sinks that includes estimates for CO₂, CH₄, N₂O,

 SF_6 , HFCs, and PFCs, covering the years 1990 to 2004 (CARB 2007). The current inventory covers the years 2000 to 2020 (CARB 2022a); both are summarized in Table 1. Data sources used to calculate this GHG inventory include California and federal agencies, international organizations, and industry associations. The calculation methodologies are consistent with guidance from the IPCC. The 1990 emissions level is the sum total of sources and sinks from all sectors and categories in the inventory.

TABLE 1 STATE OF CALIFORNIA GHG EMISSIONS BY SECTOR								
Total 1990Percent ofTotal 2020Percent ofEmissionsTotal 1990EmissionsTotal 2020Sector(MMTCO2e)Emissions(MMTCO2e)Emissions								
Agriculture	23.4	5%	31.6	8.6%				
Commercial	14.4	3%	13.5	3.6%				
Electricity Generation	110.6	26%	59.5	16.1%				
Industrial	103.0	24%	73.3	19.9%				
Residential	29.7	7%	25.3	6.8%				
Transportation	150.7	35%	135.8	36.8%				
Recycling and Waste			8.9	2.4%				
High GWP Gases			21.3	5.8%				

Source: CARB 2007, CARB 2022a.

When accounting for GHGs, all types of GHG emissions are expressed in terms of CO_2 equivalents and are typically quantified in metric tons (MT) or millions of metric tons (MMT).

GHGs have varying GWPs. The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the "cumulative radiative forcing effect of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas" (USEPA 2022). The reference gas for GWP is CO_2 ; therefore, CO_2 has a GWP of 1. The other main GHGs that have been attributed to human activity include CH_4 , which has a GWP of 25, and N_2O , which has a GWP of 298 (CARB 2019).² Table 2 presents the GWP and atmospheric lifetimes of the GHGs that are regulated by the state of California.

² It should be noted that CalEEMod 2020.4.0 uses the 2007 IPCC AR4 GWPs, which is consistent with the 2000-2019 CARB emission inventory. This report has been updated to reflect these updated GWPs.

TABLE 2 GLOBAL WARMING POTENTIALS AND ATMOSPHERIC LIFETIMES OF GHGS						
GHG	100-Year Global Formula Warming Potential		Atmospheric Lifetime (Years)			
Carbon Dioxide	CO ₂	1	Variable			
Methane	CH ₄	25	12			
Nitrous Oxide	N ₂ O	298	114			
Sulfur Hexafluoride	SF ₆	22,800	3,200			
Hydrofluorocarbons	HFCs	124 to 14,800	1 to 270			
Perfluorocarbons	PFCs	7,390 to 12,200	2,600 to 50,000			
Nitrogen Trifluoride	NF ₃	17,200	740			

Source: CARB 2019

Human-caused sources of CO_2 include combustion of fossil fuels (coal, oil, natural gas and gasoline) and wood. Data from ice cores indicate that CO_2 concentrations remained steady prior to the current period for approximately 10,000 years. Concentrations of CO_2 have increased in the atmosphere since the industrial revolution.

 CH_4 is the main component of natural gas and also arises naturally from anaerobic decay of organic matter. Human-caused sources of natural gas include landfills, fermentation of manure, and cattle farming. Human-caused sources of N₂O include combustion of fossil fuels and industrial processes such as production of nylon and nitric acid.

Other GHGs are present in trace amounts in the atmosphere and are generated from various industrial or other uses.

In addition to the State of California GHG Inventory, a more specific regional GHG inventory and forecast was prepared by the University of San Diego Energy Policy Initiatives Center (EPIC) and published by the San Diego Association of Governments (SANDAG 2021a). This County GHG Inventory and Forecast is a detailed inventory that takes into account the unique characteristics of the region in calculating emissions.

Areas where feasible reductions can occur and the strategies for achieving those reductions are outlined in the report. A summary of the various sectors that contributed to GHG emissions in San Diego County for the year 2016 and are projected to contribute to emissions in 2025 and 2030 are provided in Table 3.

According to the report, a majority of the region's emissions are attributable to onroad transportation, with the next largest source of GHG emissions attributable to electricity generation. Similarly, a majority of the emissions resulting from land development projects will be attributable to on-road transportation emissions.

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According to the report, the emission reductions for on-road transportation will be achieved in a variety of ways, including through regulations aimed at increasing fuel efficiency standards and programs aimed at increasing rideshares, alternative fuels, numbers of Zero-Emissions Vehicles (ZEVs), and electric vehicle (EV) charging programs. These regulations are outside the control of Project applicants.

TABLE 3 SAN DIEGO COUNTY GHG EMISSIONS INVENTORY AND PROJECTIONS						
Emissions Category	2016 Total	2025 Total	2030 Total			
Passenger Cars/Light-Duty Vehicles (No SAFE Rule Impact)	10.5	7.8	6.9			
Electricity	5.3	3.4	1.9			
Natural Gas	3.1	3.3	3.4			
Industrial	2.1	2.2	2.3			
Heavy-Duty Trucks and Vehicles	1.8	1.7	1.7			
Other Fuels	1.1	1.4	1.4			
Off-Road Transportation	0.62	0.72	0.8			
Solid Waste	0.59	0.62	0.6			
Water	0.24	0.28	0.2			
Aviation	0.21	0.29	0.3			
Rail	0.11	0.17	0.2			
Wastewater	0.07	0.08	0.1			
Agriculture	0.05	0.06	0.1			
Marine Vessels	0.05	0.06	0.1			
Soil Management	0.05	0.04	0.0			
Total: (No SAFE Rule Impact)	Total: (No SAFE Rule Impact) 25.9 22.1 20.0					

Source: SANDAG 2021a

Similar to on-road emissions, the report indicated that the necessary emission reductions for electricity generation will be achieved in a variety of ways, including through implementation of the renewable portfolio standard (RPS), cleaner electricity purchases by San Diego Gas & Electric, and implementation of direct-access Electric Service Providers with increased renewables. These measures are also outside the control of Project applicants.

2.3 Regulatory Framework

All levels of government have some responsibility for the protection of air quality, and each level (Federal, State, and regional/local) has specific responsibilities relating to air quality regulation. GHG emissions and the regulation of GHGs is a relatively new component of air quality.

2.3.1 National and International Efforts

GCC is being addressed at both the international and federal levels. In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis for human-induced climate change, its potential impacts, and options for adaptation and mitigation. The most recent reports of the IPCC have emphasized the scientific consensus that real and measurable changes to the climate are occurring, that they are caused by human activity, and that significant adverse impacts on the environment, the economy, and human health and welfare are unavoidable.

On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Framework Convention on Climate Change (UNFCCC). Under the Convention, governments agreed to gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of GCC. More recently, the United States Supreme Court declared in the court case of MASSACHUSETTES V. EPA (2007) that the United States Environmental Protection Agency (USEPA) does have the ability to regulate GHG emissions. In addition to the national and international efforts described above, many local jurisdictions have adopted climate change policies and programs.

The USEPA is responsible for implementing federal policy to address global climate change. The federal government's early efforts have focused on public-private partnerships to reduce GHG intensity through energy efficiency, renewable energy, methane and other non- CO_2 gases, agricultural practices, and implementation of technologies to achieve GHG reductions.

The USEPA is required to regulate carbon dioxide and other GHGs as pollutants under Section 202(a)(1) of the federal Clean Air Act. The first step in implementing its authority was the Mandatory Reporting Rule that required inventory data collection commencing on January 1, 2010 with first reports due March 2011. Effective January 2, 2011, the USEPA required new and existing sources of GHG emissions of 75,000 tons per year to obtain a permit under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit Program.

The main federal regulatory program for automobiles is the Corporate Average Fuel Economy (CAFE) program, which has been in place since 1975. Under previous administrations, CAFE was the primary means of limiting mobile source carbon

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emissions. Rules finalized in 2012 put in place binding standards through Model Year 2021 and offered estimated standards through 2024. The federal light-duty vehicle standards were developed in two phases that harmonized with California standards through 2016 (Phase 1) and 2025 (Phase 2) and developed the first ever federal GHG standards for medium-duty and heavy-duty vehicles. At the time, the USEPA estimated that the new standards in this rule would reduce CO_2 emissions by approximately 270 MMT and save 530 million barrels of oil over the life of vehicles sold during the 2014 through 2018 model years.

USEPA has been engaged in research into approaches to reduce the U.S. contribution to climate change. Areas of climate research include economic analyses of regulatory policy instruments (e.g., emissions trading, estimation of GHG reduction benefits, the role of uncertainty, and modeling the economic impacts of ocean acidification). In addition, many U.S. States and companies are putting in place their own commitments to reduce global climate change by enacting local climate action plans, policies, and standards.

On August 16, 2022 President Biden signed the Inflation Reduction Act of 2022. This regulation has important climate change components, expected to lower energy costs, increase cleaner production, and reduce carbon emissions by roughly 40% by 2030 (WH 2022). Specific provisions of the regulation include financing and expediting deployment of clean energy technologies, by extending Production Tax Credits and Investment Tax Credits, providing \$27 billion for the Greenhouse Gas Reduction Fund and \$40 billion in loan authority to guarantee loans for innovative clean energy projects; by revitalizing American manufacturing to build the clean energy economy which includes up to \$250 billion in new loan authority for Energy Infrastucture Reinvestment Financing; investing in reliable clean energy in rural America and on tribal lands; incentivizing and supporting deployment of clean vehicles and use of cleaner transportation fuels; expanding leadership in industrial decarbonization and carbon management; investing in clean hydrogen; and other initiatives.

2.3.2 State Regulations and Standards

The following subsections describe regulations and standards that have been adopted by the State of California to address GCC issues.

In 2005, former Governor Schwarzenegger issued Executive Order (EO) S-3-05, establishing statewide GHG emissions reduction targets. EO S-3-05 states that by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent of 1990 levels (CalEPA 2006). In response to EO S-3-05, CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the "2006 CAT Report") (CalEPA 2006). The 2006 CAT Report recommended various strategies that the state could pursue to reduce GHG emissions. These strategies could be implemented by various state agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the state agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel

trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture, etc.

Assembly Bill 32, the California Global Warming Solutions Act of 2006. In September 2006, Governor Schwarzenegger signed California Assembly Bill (AB) 32, the global warming bill, into law. AB 32 directs CARB to do the following:

- Make publicly available a list of discrete early action GHG emission reduction measures that can be implemented prior to the adoption of the statewide GHG limit and the measures required to achieve compliance with the statewide limit.
- Make publicly available a GHG inventory for the year 1990 and determine target levels for 2020.
- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures.
- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that will achieve the statewide GHG emissions limit by 2020, to become operative on January 1, 2012, at the latest. The emission reduction measures may include direct emission reduction measures, alternative compliance mechanisms, and potential monetary and non-monetary incentives that reduce GHG emissions from any sources or categories of sources that CARB finds necessary to achieve the statewide GHG emissions limit.
- Monitor compliance with and enforce any emission reduction measure adopted pursuant to AB 32.

AB 32 required that by January 1, 2008, CARB determine what the statewide GHG emissions level was in 1990 and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. CARB adopted its Scoping Plan in December 2008, which provided estimates of the 1990 GHG emissions level and identified sectors for the reduction of GHG emissions. The CARB published a final Scoping Plan in 2022 (CARB 2022b). In the original Scoping Plan, the CARB estimated that the 1990 GHG emissions level was 427 MMT net CO_2e (CARB 2008). In the 2022 scoping plan, CARB has targeted a 85% reduction in CO_2e emissions below 1990 levels by 2045 (CARB 2022b).

Senate Bill 97. Senate Bill (SB) 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directs the State Office of Planning and Research (OPR) to develop draft CEQA guidelines "for the mitigation of GHG emissions or the effects of GHG emissions" by July 1, 2009 and directs the Resources Agency to certify and adopt the CEQA guidelines by January 1, 2010.

The OPR published a technical advisory on CEQA and Climate Change on June 19, 2008. The guidance did not include a suggested threshold. The OPR does recommend that CEQA analyses include the following components:

• Identify GHG emissions

- Determine Significance
- Mitigate Impacts

In April 2009, the OPR published its proposed revisions to CEQA to address GHG emissions. The amendments to CEQA indicate the following:

- Climate action plans and other GHG reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the GHG emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies or recommended by experts.
- New amendments include guidelines for determining methods to mitigate the effects of GHG emissions in Appendix F of the CEQA Guidelines.
- OPR is clear to state that "to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation."
- OPR emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.
- Environmental impact reports (EIRs) must specifically consider a project's energy use and energy efficiency potential.

On July 3, 2009, CNRA published proposed amendment of regulations based on OPR's proposed revisions to CEQA to address GHG emissions. On that date, CNRA commenced the Administrative Procedure Act rulemaking process for certifying and adopting these amendments pursuant to Public Resources Code section 21083.05. Having reviewed and considered all comments received, on December 30, 2009, the Natural Resources Agency adopted the proposed amendments to the state CEQA guidelines in the California Code of Regulations (CCR). The amendments were formally adopted on March 18, 2010.

Senate Bill 32 and Assembly Bill 197. SB 32 and AB 197(enacted in 2016) are companion bills that set new statewide GHG reduction targets, make changes to CARB's membership, increase legislative oversight of CARB's climate change–based activities and expand dissemination of GHG and other air quality–related emissions data to enhance transparency and accountability. More specifically, SB 32 codified

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the 2030 emissions reduction goal of Executive Order B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies which is comprised of at least three members of the Senate and three members of the Assembly that provide ongoing oversight over implementation of the state's climate policies. AB 197 added two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

Executive Order S-3-05. Executive Order S-3-05, signed by Governor Schwarzenegger on June 1, 2005, calls for a reduction in GHG emissions to 1990 levels by 2020 and for an 80 percent reduction in GHG emissions by 2050. Executive Order S-3-05 also calls for the California Environmental Protection Agency (CalEPA) to prepare biennial science reports on the potential impact of continued GCC on certain sectors of the California economy. The first of these reports, "Our Changing Climate: Assessing Risks to California", and its supporting document "Scenarios of Climate Change in California: An Overview" were published by the California Climate Change Center in 2006.

Executive Order S-21-09. Executive Order S-21-09 was enacted by the Governor on September 15, 2009. Executive Order S-21-09 requires that the CARB, under its AB 32 authority, adopt a regulation by July 31, 2010 that sets a 33 percent renewable energy target as established in Executive Order S-14-08. Under Executive Order S-21-09, CARB will work with the Public Utilities Commission and CEC to encourage the creation and use of renewable energy sources and will regulate all California utilities. The CARB will also consult with the Independent System Operator and other load balancing authorities on the impacts on reliability, renewable integration requirements, and interactions with wholesale power markets in carrying out the provisions of the Executive Order. The order requires CARB to establish highest priority for those resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health.

Executive Order B-30-15. Executive Order B-30-15 was enacted by the Governor on April 29, 2015. Executive Order B-30-15 establishes an interim GHG emission reduction goal for the state of California to reduce GHG emissions to 40 percent below 1990 levels by the year 2030. This Executive Order directs all state agencies with jurisdiction over GHG-emitting sources to implement measures designed to achieve the new interim 2030 goal, as well as the pre-existing, long-term 2050 goal identified in Executive Order S-3-05 to reduce GHG emissions to 80 percent below 1990 levels by the year 2050. The Executive Order directs CARB to update its Scoping Plan to address the 2030 goal. It is anticipated that CARB will develop statewide inventory projection data for 2030 and commence efforts to identify reduction strategies capable of securing emission reductions that allow for achievement of the new interim goal for 2030.

California Code of Regulations Title 24. Although not originally intended to reduce GHG emissions, CCR Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. California Green Building Standards (Title 24) Part 11 became effective in 2001 in response to continued efforts to reduce GHG emissions associated with energy consumption. CCR Title 24, Part 11 now requires that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. One focus of CCR Title 24, Part 11 is water conservation measures, which reduce GHG emissions by reducing electrical consumption associated with pumping and treating water. CCR Title 24, Part 11 has approximately 52 nonresidential mandatory measures and an additional 130 provisions for optional use. Some key mandatory measures for commercial occupancies include specified parking for clean air vehicles, a 20 percent reduction of potable water use within buildings, a 50 percent construction waste diversion from landfills, use of building finish materials that emit low levels of volatile organic compounds, and commissioning for new, nonresidential buildings over 10,000 square feet. The most recent Title 24 Standards were adopted in 2022 and the proposed Project will meet these standards.

State Standards Addressing Vehicular Emissions. California AB 1493 (Pavley) enacted on July 22, 2002, required the CARB to develop and adopt regulations that reduce GHG emitted by passenger vehicles and light duty trucks. Regulations adopted by CARB would apply to 2009 and later model year vehicles. CARB estimated that the regulation would reduce climate change emissions from light duty passenger vehicle fleet by an estimated 18% in 2020 and by 27% in 2030 (AEP 2007). Once implemented, emissions from new light-duty vehicles are expected to be reduced in San Diego County by 21 percent by 2020. CARB has adopted amendments to the "Payley" regulations that reduce GHG emissions in new passenger vehicles from 2009 through 2016. The amendments, approved by the Board on September 24, 2009, are part of California's commitment toward a nation-wide program to reduce new passenger vehicle GHGs from 2012 through 2016. CARB's September amendments cemented California's enforcement of the Pavley rule starting in 2009 while providing vehicle manufacturers with new compliance flexibility. The amendments prepared California to harmonize its rules with the federal rules for passenger vehicles. It was expected that the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016, all while improving fuel efficiency.

The ZEV and Low Emission Vehicle (LEV) programs of California's Advanced Clean Cars (ACC) regulations, originally enacted in 2012 for model years 2015 to 2025 for light-duty and medium-duty vehicles, have been effective policies for creating and growing the market for electric vehicles and reducing road transport GHG and criteria pollutant emission. California adopted the new Advanced Clean Cars II regulations (ACC II) in August 2022. The ACC II sets annual ZEV and plug-in hybrid vehicle (PHEV) sales requirements from model years 2026 to 2035 (ZEV program) and

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increasingly more stringent exhaust and evaporative emission standards (LEV program) to ensure automakers gradually phase out new sales of internal combustion engine vehicles.

Executive Order S-01-07. Executive Order S-01-07 was enacted by the Governor on January 18, 2007. Essentially, the order mandates the following: 1) that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020; and 2) that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California. It is assumed that the effects of the LCFS would be a 10% reduction in GHG emissions from fuel use by 2020. On April 23, 2009, CARB adopted regulations to implement the LCFS.

Senate Bill 375. Senate Bill 375 requires that regions within the state which have a metropolitan planning organization must adopt a sustainable communities strategy as part of their regional transportation plans. The strategy must be designed to achieve certain goals for the reduction of GHG emissions. The bill finds that GHG from autos and light trucks can be substantially reduced by new vehicle technology, but even so "it will be necessary to achieve significant additional GHG reductions from changed land use patterns and improved transportation. Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 provides that new CEQA provisions be enacted to "encourage developers to submit applications and local governments to make land use decisions that will help the state achieve its goals under AB 32," and that "current planning models and analytical techniques used for making transportation infrastructure decisions and for air quality planning should be able to assess the effects of policy choices, such as residential development patterns, expanded transit service and accessibility, the walkability of communities, and the use of economic incentives and disincentives."

On June 30, 2010, CARB staff issued the *Draft Regional Greenhouse Gas Emission Reduction Targets For Automobiles And Light Trucks Pursuant To Senate Bill 375* (CARB 2010) with an *Updated Final Staff Report* in February 2018 (CARB 2018). With respect to the SANDAG region, within which the Project site is located, reduction targets of -15% for 2020 and -19% for 2035, beginning October 1, 2018. .

SB 375 (codified as the Sustainable Communities and Climate Protection Act of 2008) mandates that metropolitan planning organizations, such as the SANDAG, prepare a Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) that integrates land use, housing, and transportation planning to create more sustainable, walkable, transit-oriented development. In compliance with AB 32 and SB 375, SANDAG prepared an RTP/SCS and also certified a programmatic EIR (SANDAG 2021b).

Senate Bill 100. SB 100 –The 100 Percent Clean Energy Act of 2018.SB 100 was passed in late 2018 and calls for the 100 percent of total retail sales of electricity in California to originate from eligible renewable energy resources and zero-carbon resources by December 31, 2045. The intention was to extend and expand policies of the California Renewables Portfolio Standard Program [Article 16 (commencing with Section 399.11) of Chapter 2.3 of Part 1 of Division 1 of the Public Utilities Code],

Car Wash at ExxonMobil & Circle K MUP Project

and to codify the policies established pursuant to Section 454.53 or the Public Utilities Code, and that both be included in long-term planning. A benefit seen by the legislator of this act includes meeting the state's climate change goals by reducing emissions of GHGs associated with electrical generation (CEC 2018a).

Senate Bill X1-2. SB X1-2–California Renewable Energy Resources Act. In April 2011 California's Governor Brown signed SB X1-2, known as the California Renewable Energy Resources Act, into law, which extended California's RPS mandate to 33% by 2020. In addition, this new RPS law applied to all electricity retailers (or load serving entities, LSEs) in the state—including publicly owned utilities (POUs) such as Palo Alto. SB X1-2 directed the California Energy Commission (CEC) to adopt regulations specifying procedures for enforcement of a Renewables Portfolio Standards for POUs. The CEC adopted its final RPS regulations, which became effective on October 1, 2013 (CEC 2011). San Diego Gas and Electric (SDG&E) will provide electricity for the Project and must comply with SB X1-2, to reduce GHG intensity factors for residential electricity consumers.

Assembly Bill 1279 and Senate Bill 1020. On September 16, 2022, Governor Newsom approved AB 1279, The California Climate Crisis Act and SB 1020, The Clean Energy, Jobs, and Affordability Act. AB 1279 codified the carbon neutrality target as 85 percent below 1990 levels by 2045. SB 1020 requires CARB to prepare and approve a scoping plan and to update the scoping plan at least once every 5 years. CARB approved the 2022 Final Scoping Plan for achieving carbon neutrality in December 2022. The 2022 Scoping Plan identifies strategies for achieving the states' GHG emission reduction targets and calls for measures such as all new commercial buildings to have all electric appliances by 2029 (CARB 2022b).

2.3.3 Local Regulations and Standards

The County has adopted its General Plan Update (County of San Diego 2011), which provides smart growth and land use planning principles designed to reduce vehicle miles traveled (VMT) and result in a reduction in GHG emissions. As discussed in the General Plan Update, climate change and GHG reduction policies are addressed in plans and programs in multiple elements of the General Plan. The strategies for reduction of GHG emissions in the General Plan Update are as follows:

- Strategy A-1: Reduce vehicle trips generated, gasoline/energy consumption, and GHG emissions
- Strategy A-2: Reduce non-renewable electrical and natural gas energy consumption and generation (energy efficiency)
- Strategy A-3: Increase generation and use of renewable energy sources
- Strategy A-4: Reduce water consumption
- Strategy A-5: Reduce and maximize reuse of solid wastes
- Strategy A-6: Promote carbon dioxide consuming landscapes
- Strategy A-7: Maximize preservation of open spaces, natural areas, and agricultural lands

The General Plan Update also includes climate adaptation strategies to deal with potential adverse effects of climate change. The climate adaptation strategies include the following:

- Strategy B-1: Reduce risk from wildfire, flooding, and other hazards resulting from climate change
- Strategy B-2: Conserve and improve water supply due to shortages from climate change
- Strategy B-3: Promote agricultural lands for local food production
- Strategy B-4: Provide education and leadership

The County has also implemented a number of outreach programs such as the Green Building Program, lawn mower trade-in program, and reduction of solid waste by recycling to reduce air quality impacts as well as GHG emissions. The County also amended its Management of Solid Waste, Recyclable Materials, Organic Waste, Construction and Demolition Debris Ordinance (Ordinance Number 10729) to provide responsible solid waste management and provide for regulation of recyclable materials in unincorporated areas of the County.

The County's General Plan includes its Conservation and Open Space (COS) Element, with policies that are designed to reduce the emissions of criteria air quality pollutants, emissions of GHG, and energy use in buildings and infrastructure, while promoting the use of renewable energy sources, conservation, and other methods of efficiency.

- General Plan Goals COS-1 and COS-2, designed to promote an interconnected preserve system and sustainability of the natural environment
- General Plan Goal COS-14, Sustainable Land Development
- General Plan Goal COS-15, Sustainable Architecture and Buildings
- General Plan Goal COS-16, Sustainable Mobility
- General Plan Goal COS-17, Sustainable Solid Waste Management
- General Plan Goal COS-18, Sustainable Energy
- General Plan Goal COS-19, Sustainable Water Supply

A project's adherence to the County's General Plan can be determined through demonstrating consistency with General Plan land use assumption and policies. If a project would generate fewer GHG emissions than the maximum allowable buildout of the site under the General Plan land use designations, the project would be consistent with the estimated GHG emissions for that site. Further consistency with the General Plan can be demonstrated through compliance with applicable General Plan policies.

The San Diego Regional Air Quality Strategy (RAQS) was developed pursuant to California Clean Air Act (CCAA) requirements. The RAQS was initially adopted in 1991

and was updated in 1995, 1998, 2001, 2004, 2009, 2016, and, most recently, in 2022 (SDAPCD 2023).

The RAQS has a number of programs and initiatives that will have the effect of reducing GHGs. Incentive Programs include those that exist already and will continue, or new expected programs, such as the Carl Moyer Memorial Air Quality Attainment Program, the Proposition 1B Goods Movement Emission Reduction Program, the Portside Improvement and Relief Program, and others. For mobile sources, the SDAPCD is evaluating a possible Indirect Source Rule that would further reduce transportation emissions around ports, warehouses and distribution centers. The RAOS includes implementation of six Transportation Control Measures (TCMs) that are consistent with the San Diego Forward: The 2021 Regional Plan adopted by SANDAG. These include transit improvements, vanpools, high-occupancy vehicle lanes, park-and-ride-facilities, bicycle facilities, and traffic signal improvements. The ozone control strategy further includes reducing demand for fossil fuels, support for transition to ZEVs, greater use of on-site solar and wind resources, promoting energy efficiency in new and existing buildings, expansion of community choice energy programs, switching from natural gas-fueled appliances to zero-emission electric appliances and decarbonization of the regional energy system. Several possible stationary source control measures considered by the RAQS may also have possible GHG-reduction benefits.

The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in the County, to estimate future emissions and then determine strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends as well as land use plans developed by the cities and the county as part of the development of the individual General Plans. As such, projects that propose development consistent with the growth anticipated by the general plans would be consistent with the General Plan, the project would likewise be consistent with the RAQS. If a project proposes development that is greater than that anticipated in the General Plan and SANDAG's growth projections, the project might conflict with the RAQS and State Implementation Plan (SIP); and thus, have a potentially significant impact on air quality.

The RAQS fulfills the CEQA goal of informing decision makers of the environmental efforts of the project under consideration at a stage early enough to show that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to clean air goals in the RAQS. Only new or amended general plan elements, specific plans, and major projects need to undergo a consistency review. This is because the RAQS is based on projections from local general plans. Projects that are consistent with the local general plan or do not trigger the San Diego Association of Government's intergovernmental review criteria are considered consistent with the RAQS.

3.0 POTENTIAL GREENHOUSE GAS IMPACTS TO PROJECT SITE

3.1 Existing Conditions

The Project site is located in Valley Center within unincorporated San Diego County. Construction has already begun on the approved elements of the previouslyapproved project. There are currently no structures requiring demolition prior to construction of the Project and grading of the site has already been completed. Any carbon that was stored in the native soil has been accounted for in the previouslyapproved project's GHG analysis. The proposed Project does not change carbon sequestration at the site. For this reason, a carbon sequestration GHG analysis is not included in this study.

3.2 Typical Adverse Effects

California's Fourth Climate Change Assessment (CEC 2018b) uses a range of emissions scenarios developed by the IPCC to project a series of Representative Concentration Pathways (RCPs) which are defined in terms of their total radiative forcing (Watts per square meter) by 2100 (i.e., the net balance of radiation into and out of Earth's surface due to human emissions of GHGs from all sources) that may occur in California during the 21st century.

The Fourth Assessment uses two RCPs from the IPCC Assessment Report on Climate Change. The higher of the two RCPs represents accumulating GHG concentrations under a higher emissions pathway (RCP 8.5), commonly understood as a business-as-usual (BAU) scenario that would result in atmospheric CO_2 concentrations exceeding 900 parts per million (ppm) by 2100, more than triple the level present in the atmosphere before human emissions began to accumulate. The more moderate GHG concentration pathway (RCP 4.5), a scenario where GHG emissions rise until mid-21st century and then decline, results in a CO_2 concentration of about 550 ppm by 2100.

Global climate models (GCMs) use different RCPs to project future climate conditions. A group of experts selected by California's Department of Water Resources identified 10 GCMs from a set of more than 30 available as being the most suitable for California water resource climate change studies. The Fourth Assessment uses these 10 GCMs and the two RCPs discussed above to simulate California's historical and projected temperatures, precipitation, and other climate outcomes such as relative humidity and soil moisture. The outputs of these models provide a set of common climate scenarios used throughout the studies in the Fourth Assessment.

The Cal-Adapt Local Climate Change Snapshot Tool (Cal-Adapt 2021) presents an analysis of the future projected climate changes in a local 6km x 6km grid resolution under each RCP scenario; users may enter the location of interest, and a snapshot report is generated.

Substantial temperature increases would result in a variety of impacts to the people, economy, and environment of California. These impacts would result from a projected increase in extreme conditions, with the severity of the impacts depending upon

actual future emissions of GHGs and associated warming. Some of these impacts predicted in the Climate Change Assessment and output by the Cal-Adapt Snapshot tool are described below.

Public Health. Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation (see Figure 3). If global background O_3 levels increase as is predicted in some scenarios, it may become impossible to meet local air quality standards. An increase in wildfires could also occur, and the corresponding increase in the release of pollutants including PM_{2.5} could further compromise air quality. This increase in ozone and PM_{2.5} may also contribute to morbidity and mortality.

Potential health effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems (e.g., heat rash and heat stroke). Under RCP 4.5 (a medium-emissions scenario), the end-century annual average maximum temperature change from baseline is projected to be 5.0° F, with 18 more extreme heat days. Under RCP 8.5 (a high-emissions scenario), this is projected to be an increase of 8.2° F, with 39 more extreme heat days.

In addition, climate sensitive diseases (such as malaria, dengue fever, yellow fever, and encephalitis) may increase, such as those spread by mosquitoes and other disease-carrying insects. Potential public health impacts from climate change would be global in nature rather than site-specific. That being said, because the Project site is not located in an area that is subject to climate sensitive diseases (such as the tropics), it is unlikely that risks associated with these diseases would increase substantially.



FIGURE 3: ANNUAL AVERAGE MAXIMUM TEMPERATURE

Water Resources. A vast network of reservoirs and aqueducts capture and transport water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada mountain snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages. In addition, if temperatures continue to rise more precipitation would fall as rain instead of snow, further reducing the Sierra Nevada spring snowpack to half of the historical median under RCP 4.5, and less than one third under RCP 8.5. The State's water resources are also at risk from rising sea levels. An influx of seawater would degrade California's estuaries, wetlands, and groundwater aquifers.

According to the Cal-Adapt report, California's climate varies between wet and dry years. Research suggests that for much of the state, wet years will become wetter, and the dry years will become drier. Dry years are also likely to be followed by dry years, increasing the risk of drought. While California does not see the average annual precipitation changing significantly in the next 50-75 years, precipitation will likely be delivered in more intense storms and within a shorter wet season. Local annual precipitation is estimated to decrease by 0.5 inches under RCP 4.5, and 1.4 inches under RCP 8.5 (Cal-Adapt 2021).

Impacts to water resources could affect the Project site through decreased availability of water in southern California overall. Decreased availability could lead to higher prices and water rationing. However, due to the scientific and factual uncertainties

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regarding the effects of climate change at a regional level, it is too speculative to quantify the effect of this impact.

Agriculture. Increased GHG and associated increases in temperature are expected to cause widespread changes to the agricultural industry, reducing the quantity and quality of agricultural products statewide. Significant reductions in available water supply to support agriculture would also impact production. Crop growth and development will change as will the intensity and frequency of pests and diseases.

This potential effect of climate change would not impact the proposed Project because the Project does not involve agricultural uses.

Ecosystems/Habitats. Continued global warming will likely shift the ranges of existing invasive plants and weeds, thus alternating competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Continued global warming is also likely to increase the populations of and types of pests. Continued global warming would also affect natural ecosystems and biological habitats throughout the State.

Due to the scientific and factual uncertainties regarding the effects of climate change at a regional and site-specific level, particularly as to sensitive biological resources, it is too speculative to assess the effect of this impact on the Project site.

Wildland Fires. Global warming is expected to increase the risk of wildfire and alter the distribution and character of natural vegetation. State-wide modeling results under RCP 8.5 show a 77% increase in mean area burned by the end of the century, with extreme wildfires (i.e. fires larger than 24,710 acres) would occur 50% more frequently. Locally, the average area projected to be at risk of burning in a year would be an increase of 19.8 to 20.8 acres in mid-century, and 0.6 to 3.3 acres by end-century.

The Project site generally has a low potential for fire risks due to the type of on-site native vegetation and its location in a relatively developed area.

Sea Level Rising and Coastal Flooding. Rising sea levels, more intense coastal storms, and warmer water temperatures will increasing threaten the State's coastal regions. Sea level is anticipated to rise 3 to 6.6 feet, with the possibility of exceeding 9 feet by 2100 under RCP 8.5. A sea level risk of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten levees and inland water systems, and disrupt wetlands and natural habitats.

Because the site is not located in a coastal area, it is unlikely to be affected by rising sea levels.

3.3 California Climate Adaptation Strategy

As part of its climate change planning process, CNRA prepared its California Climate Adaptation Strategy in 2009 to summarize the best-known science on climate change

impacts in California, with the goal of assessing vulnerability to climate change impacts. The Climate Adaptation Strategy also outlines possible solutions that can be implemented within and across state agencies to promote resiliency.

The original California Climate Adaptation Strategy (CAS) took into account the longterm, complex, and uncertain nature of climate change and established a proactive foundation for an ongoing adaptation process. The strategy made preliminary recommendations as a first step in addressing responses to impacts of global climate change within the state.

In 2014 and 2018, the CNRA prepared updates to its CAS, entitled *Safeguarding California*. AB 1482, passed in 2015, required the state to issue a statewide climate adaptation strategy every three years. In 2021, the CNRA updated its CAS (CNRA 2021), revising the focus areas, by region, to priorities and actions as recommended by state agencies and members of the public who commented on the draft strategy.

Previous state adaptation strategies served as inventories of sector-specific actions developed by relevant agencies every three years. To create a more integrated and adaptive approach, that breaks down siloes, draws connections between sectors, and provides flexibility to enable updates and adjustments to keep pace with rapid climate change, the updated Strategy brings together climate actions from numerous state plans and strategies.

The updated Strategy elevates six key priorities that must drive all resilience actions in California:

- Strengthen Protections for Climate Vulnerable Communities
- Bolster Public Health and Safety to Protect Against Increasing Climate Risks
- Build a Climate Resilient Economy
- Accelerate Nature-Based Climate Solutions and Strengthen Climate Resilience of Natural Systems
- Make Decisions Based on the Best Available Climate Science
- Partner and Collaborate to Leverage Resources

As part of the California Adaptation Strategy, the state has developed a series of recommendations for adapting to increasing temperatures. In 2013, the state released "Preparing California for Extreme Heat Guidance and Recommendations". In April 2022, an updated version titled "Protecting Californians From Extreme Heat: A State Action Plan to Build Community Resilience" was released (CNRA 2022). Actions in the plan are organized into four tracks: (A) Build Public Awareness and Notification; (B) Strengthen Community Services and Response; (C) Increase Resilience of Our Built Environment; and (D) Utilize Nature-Based Solutions.

4.0 CLIMATE CHANGE SIGNIFICANCE CRITERIA

According to Appendix G of the CEQA Guidelines, the following criteria are considered to establish a significance threshold for GCC impacts:

Would the Project:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

4.1 BAAQMD CEQA Thresholds for Evaluating GHG Impacts

Based on the specific characteristics of this Project, current guidance provided by the Bay Area Air Quality Management District (BAAQMD) was used to evaluate GHG emissions. For land use development projects, the BAAQMD recommends using the approach endorsed by the California Supreme Court in *Center for Biological Diversity* v. Department of Fish & Wildlife (2015) (62 Cal.4th 204), which evaluates a project based on its effect on California's efforts to meet the state's long-term climate goals. As the Supreme Court held in that case, a project that would be consistent with meeting those goals can be found to have a less than significant impact on climate change under CEQA. If a project would contribute its "fair share" of what would be required to achieve those long-term climate goals, then a reviewing agency can find that the impact would not be significant because the project would help to solve the problem of global climate change (62 Cal.4th 220-223). If a land use project incorporates each of the design elements necessary for it to be carbon neutral by 2045, then it would contribute its portion of what is needed to achieve the state's climate goals and would help to solve the cumulative problem. It can therefore be found to make a less than cumulatively-considerable climate impact. Because this guidance supports how a project would contribute its "fair share" of the statewide long-term GHG reduction goals, it is not specific to the BAAQMD region and can also be applied in the San Diego region. BAAQMD's Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plan (Justification Report), adopted April 2022, will be utilized (BAAQMD 2022). The information provided in the Justification Report is intended to provide the substantial evidence that lead agencies need to support their determinations about significance using these thresholds.

The Justification Report analyzes what would be required of new land use development projects to achieve California's long-term climate goal of carbon neutrality by 2045. A new land use development project being built today needs to incorporate the following design elements to do its "fair share" of implementing the goal of carbon neutrality by 2045 as mandated by AB 1279:

1) Projects must include, at a minimum, the following project design elements:

a) Buildings:

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- i) The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
- ii) The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
- b) Transportation:
 - Achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted SB 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:
 - 1. Residential projects: 15 percent below the existing VMT per capita.
 - 2. Office projects: 15 percent below the existing VMT per employee.
 - 3. Retail projects: no net increase in existing VMT.
 - ii) Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

4.1.1 Building Energy Use

Energy use emissions are generated by activities within buildings that utilize electricity and natural gas as energy sources. GHGs are emitted during the generation of electricity from fossil fuels off-site in power plants. These emissions are considered indirect but are calculated in association with a building's overall operation. Natural gas usage emits GHGs directly when it is burned for space heating, cooking, hot water heating and similar uses, whereas electricity usage emits GHGs indirectly to the extent that it is generated by burning carbon-based fuels.

4.1.2 Transportation

GHG emissions from vehicles come from the combustion of fossil fuels in vehicle engines. Decarbonization of the transportation infrastructure serving land use development will come from shifting the motor vehicle fleet to EVs, coupled with a shift to carbon-free electricity to power those vehicles. Land use projects cannot directly control whether and how fast these shifts are implemented, but they can, and do, have an important indirect influence on California's transition to a zerocarbon transportation system. The Justification Report states that "Motor vehicle transportation does not need to be eliminated entirely in order for the land use sector to achieve carbon neutrality, as carbon-free vehicle technology can be used (e.g., EVs powered by carbon-free electricity sources). But for that goal to be realistically implemented by 2045, California will need to reduce its per-capita VMT. How land use development is designed and sited can have a significant influence on how much VMT the project would generate." New land use development can influence transportation-related emissions in two areas related to how it is designed and built. First, new land use projects need to provide sufficient electric vehicle EV charging infrastructure to serve the needs of project users who would be driving EVs. Second, new land use projects can influence transportation-related GHG emissions by reducing the amount of VMT associated with the project.

To address BAAQMD threshold (1)(b)(ii), the Project would need to meet or exceed the CALGreen Tier 2 EV requirements listed in Chapter 5, Nonresidential Mandatory Measures. Section 5.105.5.3 states that projects with 26 – 50 parking spaces must make eight (8) of those spaces EV Capable spaces, with at least two (2) of those spaces with an EV Charging Station (EVCS).

The OPR has provided thresholds for evaluating transportation impacts based on VMT in a Technical Advisory (OPR 2018) for CEQA. The OPR recommend a 15% reduction for VMT. VMT is a metric that takes the number of vehicle trips generated and the length/distance of those trips. VMT is a function of population or employment and is expressed as VMT per resident or VMT per employee. The Transportation Advisory further defines the VMT project screening methodology. The County of San Diego requires that all land developments conduct VMT analysis unless the project meets any of the listed screening criteria provided by the County.

5.0 GREENHOUSE GAS INVENTORY

GHG emissions associated with the proposed Project were estimated separately for five categories of emissions: (1) construction, (2) area, (3) mobile, (4) waste, and (5) water. The land use types modeled in the California Emissions Estimator Model (CalEEMod) for the previously-approved project were "Convenience Market with Gas Pumps" and "Fast Food Restaurant w/o Drive Thru." The land use types modeled in CalEEMod for the proposed Project were "Convenience Market with Gas Pumps" and "Automobile Care Center" which is the best land-use type that CaleEEMod offers for a car wash. The complete emissions inventory is summarized below and CalEEMod output is included in Appendix A.

5.1 Existing Greenhouse Gas Emissions

As discussed in Section 3.1, the site is currently being constructed under the previously-approved project and has already completed the grading phase of construction. GHG emissions associated with construction and operation of the convenience store/restaurant in the previously-approved project and of the convenience store/car wash in the proposed Project were evaluated with the CalEEMod Model, Version 2020.4.0 (CAPCOA 2021). For this study, GHG emissions are analyzed for both the previously-approved project and for the proposed Project, then compared to each other to determine if emissions increase or decrease due to the updated land use elements.

5.2 Construction Greenhouse Gas Emissions

Construction GHG emissions include emissions from heavy construction equipment, truck traffic, and worker trips. Emissions for the previously-approved project and for the proposed Project were calculated using CalEEMod, based on the anticipated

construction schedule to full buildout. Because CalEEMod is designed to identify the maximum daily construction emissions, the total construction emissions are overestimated by assuming each piece of equipment would operate 8 hours per day for the duration of construction. Table 4 presents a summary of the construction phases assumed for the Project and for the previously-approved project.

TABLE 4 CONSTRUCTION SCHEDULE AND PHASING							
Phase	e Phase Name Phase Type Start Date End Date						
1	Demolition	Demolition	10/3/22	10/14/22			
2	Site Preparation	Site Preparation	10/15/2022	10/17/2022			
3	Grading	Grading	10/18/2022	10/19/2022			
4	Building Construction	Building Construction	10/20/2022	3/8/2023			
5	Paving	Paving	3/9/2023	3/15/2023			
6	Architectural Coating	Architectural Coating	3/16/2023	3/22/2023			

Table 5 shows the annual GHG construction emissions calculated using CalEEMod, for the previously-approved project and for the proposed Project. CalEEMod model outputs are provided in Appendix A.

TABLE 5 CONSTRUCTION GHG EMISSIONS						
Year	Previously-Approved Project	Proposed Project				
	MT CO ₂ e/year					
2022	34.3	34.5				
2023	28.2	28.3				
Total CO ₂ e Emissions	62.5 62.8					
Amortized Over 30 Years	2.08	2.09				

GHG emissions associated with construction would only slightly increase by 0.3 metric tons of CO_2e emissions between the previously-approved project and the proposed Project. Amortized over 30 years, construction of the proposed Project would contribute +0.01 metric tons per year of CO_2e emissions more than the previously-approved project. These emissions were added to the operational GHG emissions in Section 5.3 to evaluate the significance of the two project scenarios when operational and construction GHG emissions (amortized over 30 years) are combined.

5.3 Operational Greenhouse Gas Emissions

Project operational emissions for the first year of operations (2023) were estimated using CalEEMod, as detailed at the beginning of Section 5.0. Trip distances are based

on the CalEEMod model for a the land uses of the previously-approved project and the proposed Project.

Area Source Emissions. CalEEMod calculates emissions associated with area sources, including landscaping equipment and maintenance.

Energy Use Emissions. Energy use generates GHGs through emissions from power plants that generate electricity as well as emissions from natural gas usage at the Project site.

CalEEMod includes energy intensity factors for utilities that are based on Power Utility Protocol reports submitted to the California Climate Action Registry (CCAR) or from the Local Government Operations Protocol. Implementation of the RPS will affect indirect GHG emissions associated with electricity use for the proposed Project because electricity will be purchased from SDG&E. The CalEEMod model, version 2020.4.0, incorporates the 2019 requirements of Title 24, which will yield a conservative emission estimate, since the Project will utilize the 2022 building standards.

Water. Water use and energy use are often closely linked. The provision of potable water to commercial users consumes large amounts of energy associated with five stages: source and conveyance, treatment, distribution, end use, and wastewater treatment. GHG emissions from water use were calculated based on the CalEEMod model, assuming default uses.

Solid Waste. The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, transportation of waste, and disposal. Solid waste generation rates were estimated from CalEEMod, and GHG emissions from solid waste management were estimated using the model, assuming landfilling of solid waste with flaring.

The 2022 building standards for construction waste reduction, disposal, and recycling include diversion to recycle or salvage 65% of nonhazardous construction and demolition waste generated at any site. In addition, the Solid Waste Ordinance, updated June 4, 2021 by the County, incorporates state laws regarding recycling and organics recycling (SB 1383). It was assumed that the proposed Project will arrange for recycling of designated recyclable materials and organic materials, to achieve 65% waste reduction.

Transportation. Several regulatory initiatives have been passed to reduce emissions from on-road vehicles, as discussed in Section 2.3. CalEEMod 2020.4.0 uses EMFAC2017 emission factors, which incorporate the regulatory initiatives mentioned above..

Trip generation rates for the previously-approved project and the proposed Project were obtained from the Traffic Impact Study (Darnell 2022). Because trip generation rates for the convenience market and car wash were combined in the traffic study, the total trip rates entered into CalEEMod were assigned to the convenience market land use, with no trip rates assigned to the car wash. Trip lengths for the Project

were based on default CalEEMod urban trip lengths, because the Project provides local retail uses in the Valley Center community.

The results of the GHG analysis for full buildout conditions are presented in Tables 6 and 7 for the previously-approved project and for the proposed Project. Table 8 provides a comparison of the previously-approved project's modeled operational emissions to the proposed Project's modeled operational emissions. CalEEMod outputs are presented in Appendix A.

TABLE 6 ANNUAL OPERATIONAL GHG EMISSIONS – PREVIOUSLY-APPROVED PROJECT						
	Α	nnual Emissions	s, Metric tons/	'year		
Emission Source	CO ₂	CH₄	N ₂ O	CO ₂ e		
Area	0.0003	0	0	0.0003		
Energy	32.6	0.001	0.0004	32.7		
Mobile	505	0.06	0.03	516		
Waste	1.02	0.06	0	2.53		
Water	2.26	0.02	0.0004	2.84		
	555					
Total Construction	2.08					
	Tota	l Net GHG Emise	sions, MT/yr	557		

TABLE 7 ANNUAL OPERATIONAL GHG EMISSIONS – PROPOSED PROJECT						
	A	nnual Emission	s, Metric tons/	'year		
Emission Source	CO ₂	CH₄	N ₂ O	CO ₂ e		
Area	0.0003	0	0	0.0004		
Energy	21.9	0.001	0.0002	22.0		
Mobile	241	0.04	0.02	248		
Waste	0.90	0.05	0	2.22		
Water	2.47	0.02	0.0004	2.98		
	275					
Total Constructi	2.09					
	Total Net GHG Emissions, MT/yr					

TABLE 8	
COMPARISON OF ANNUAL ESTIMATED GHG EMISSIONS –	
PREVIOUSLY-APPROVED PROJECT AND PROPOSED PROJECT	
Total GHG Emissions, Previously-Approved Project (metric tons/yr)	557
Total GHG Emissions, Proposed Project (metric tons/yr)	278
Total Net GHG Emissions (metric tons/yr)	-279

Table 8 shows that the annual GHG emissions would be reduced by approximately one half due to the proposed modifications to the previously-approved project. This

analysis demonstrated that the convenience store and car wash land use will generate fewer GHG emissions compared to the previously-approved project and as such, GHG emissions are considered less than significant.

6.0 CONSISTENCY WITH APPLICABLE PLANS

With respect to the second significance criterion, the proposed Project will be consistent with applicable plans, policies, and regulations discussed in Section 2.3.

The CARB 2022 Scoping Plan lays out strategies with the goal for the state of California to achieve carbon neutrality by 2045 or earlier (CARB 2022b). Appendix D to the Scoping Plan lays out strategies that local governments can put in place in an effort to work toward this goal (CARB 2022c). However, since BAAQMD's thresholds are applied in this analysis, then there is no need to use Appendix D of the Scoping Plan, which mirrors BAAQMD's thresholds. BAAQMD's thresholds are consistent with the 2022 Scoping Plan Appendix D Local Actions. Because the Project is implementing the project design features recommended by BAAQMD, it is demonstrating consistency with the 2022 Scoping Plan.

6.1 BAAQMD Building Energy Use Compliance

The Project would result in GHG emissions from energy used in the convenience store and car wash buildings. The facility would be designed to run on all electric energy sources, without the use of natural gas or propane fuels. The 2022 Scoping Plan calls for all new commercial buildings to have all electric appliances by 2029 (CARB 2022b). By designing the Project to fully utilize electric energy within the convenience store and car wash, the Project would not conflict with the ultimate implementation of the 2022 Scoping Plan.

California's energy code is designed to reduce wasteful and unnecessary energy consumption in newly constructed and existing buildings. Every three years the new building code implements and promotes more energy efficient buildings using the latest research and design criteria for systems like lighting, heating, ventilation & air conditioning (HVAC) systems, duct sealing and insulation, thermostat features, water-efficient plumbing fixtures, and preparation for solar power. By continually requiring more energy efficient building practices, emissions from electricity and natural gas have been incrementally reduced. By implementing the latest building standards, a building constructed in 2023 will yield less energy-related emissions than a building constructed in previous years.

Construction and operation of the Project is not expected to result in the wasteful or inefficient use of energy. All new construction would be required to comply with the energy code in effect at the time of construction, which ensures efficient building construction. Additional measures such as no natural gas usage, efficient indoor/outdoor lighting, and recycling would be employed by the Project. GHG emissions associated with electricity use would be eliminated as California decarbonizes the electrical generation infrastructure as committed to by 2045 through SB 100, the 100 percent Clean Energy Act of 2018. Therefore, the Project

would contribute its "fair share" of what is required to achieve carbon neutrality of buildings by 2045. As such, the construction and operation of the Project is not expected to result in the wasteful or inefficient use of energy, and impacts would be less than significant.

6.2 BAAQMD Transportation Compliance

The 2022 CALGreen went into effect on January 1, 2023, and the Project would be subject to these requirements. The Project would meet the 2022 CALGreen Tier 2 mandatory requirements for EV Capable parking spaces detailed in Table 5.106.5.3.1 of the 2022 California Green Building Standards Code (Title 24, Part 11, CALGreen). CALGreen requires eight (8) EV Capable parking spaces, including two (2) EV Capable parking spaces provided with an EVCS for projects with 26 - 50 total parking spaces. Section 5.106.5.3 includes exceptions for projects where it may not be feasible to install the required number of EVCSs, evaluated on a case-by-case basis. The Project currently proposes the installation of one (1) EVCS but will comply with these requirements if they are found to be feasible. Therefore, the Project would meet the 2022 CalGreen Tier 2 mandatory requirement of providing sufficient clean vehicle parking infrastructure.

Based on the Local Mobility Analysis (LMA) report, prepared by Darnell & Associates, dated March 22, 2022, a comparison of the number of daily trips generated from the previously-approved project and the new proposed Project is provided. The previously-approved project, with a convenience store and fast-food restaurant, would yield 1,752 net new daily trips as compared to the proposed Project design, with a convenience store and car wash, would yield 1,215 net new daily trips. Although the LMA report did not include a VMT analysis, the default VMT values modeled for the two project scenarios were 1,419,749 miles/year for the convenience store and fast-food restaurant and 651,753 miles/year for the proposed convenience store and car wash. As such, the proposed Project will yield reductions of 31% Average Daily Trips (ADT) and 54% VMT, when compared to the previously-approved development type. Therefore, the proposed Project will be in compliance with the BAAQMD requirement of no net increase in existing VMT for retail projects. Therefore, no significant VMT impacts would occur and no traffic mitigation will be required. The Project's less than significant impact related to VMT demonstrates that the Project would not make a cumulatively considerable contribution to GHG emissions. Therefore, the Project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment, and impacts would be less than significant.

SANDAG completed and adopted its SCS, San Diego Forward, in December 2021. CARB's targets for the SANDAG region call for a 7 percent reduction in GHG emissions per capita from automobiles and light-duty trucks compared to 2005 levels by 2020, and a 13 percent reduction by 2035. As stated above, using the traffic comparisons between the proposed Project and the previously approved project, the proposed Project will yield reductions of 31% ADT and 54% VMT, when compared to the previously-approved project. This reduction alone shows that the Project will be consistent with the County's General Plan policies that are designed to reduce GHG
emissions through implementation of the measures identified above. The Project would therefore be consistent with each applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

California has implemented clean vehicle regulations, defined under the ACC Regulations which have continually reduced the emissions associated with the transportation sector. The CEC estimated that in 2022, 17.7% of all new cars sold in California were zero emission vehicles (CEC 2023). The Project will comply with the CALGreen requirement to incorporate clean vehicle parking spaces, for the facility. In addition, the proposed Project will generate less VMT and as such, lower GHG emissions than the previously approved project.

7.0 CONCLUSIONS

Based on the significance criteria defined within the BAAQMD CEQA thresholds for evaluating GHG impacts, compliance with the building energy standards and transportation criteria will be achieved for the Project. The Project will not include natural gas appliances or natural gas plumbing and will not result in any wasteful, inefficient, or unnecessary energy usage. In addition, the Project will meet the CalGreen Tier 2 requirements by designating the required EV Capable spaces and EVCS. The proposed Project will yield a reduction of 54% VMT, when compared to the previously approved development type. Therefore, the proposed Project will be in compliance with the BAAQMD requirement of no net increase in existing VMT for retail projects.

As an additional GHG metric, the Project would neither conflict nor interfere with the state's implementation of AB 1279's target of achieving carbon neutrality by 2045, consistent with the 2022 Scoping Plan. As BAAQMD's thresholds are tied to achieving carbon neutrality by 2045, the project would not conflict with the direction provided in the 2022 Scoping Plan. Estimated emissions of GHGs from the construction and operation of the proposed Project would be reduced by approximately one half of the estimated emissions from the previously-approved project, and therefore, the Project would result in **less than significant cumulative GHG impacts**.

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9.0 LIST OF PREPARERS, PERSONS, AND ORGANIZATIONS CONTACTED

Preparer:

James Westbrook BlueScape Environmental 16870 West Bernardo Drive, Suite 400 San Diego, CA 92127

Contacts:

County of San Diego Planning and Development Services 5510 Overland Avenue San Diego, CA 92123

APPENDIX A

GREENHOUSE GAS CALEEMOD EMISSION CALCULATIONS

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

6 Carat Convenience Store and Restaurant

San Diego Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant w/o Drive Thru	1.25	1000sqft	0.03	1,250.00	0
Convenience Market with Gas Pumps	16.00	Pump	0.05	3,022.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity ((Ib/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Convenience store size 3,022 SF

Architectural Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100

g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Vehicle Trips - Trip generation rates from Darnell & Associates, March 2022. 446 trips/day for fast food, 1306 trips/day for fueling station w/ c-store.

Area Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Construction Off-road Equipment Mitigation -

Area Mitigation - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Waste Mitigation -

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

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	LandUseSquareFeet	2,258.80	3,022.00
tblVehicleTrips	ST_TR	322.50	81.63
tblVehicleTrips	ST_TR	696.00	356.80
tblVehicleTrips	SU_TR	322.50	81.63
tblVehicleTrips	SU_TR	500.00	356.80
tblVehicleTrips	WD_TR	322.50	81.63
tblVehicleTrips	WD_TR	346.23	356.80

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 (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	day							lb/c	lay		
2022	1.1065	12.0198	7.7283	0.0147	5.3777	0.5177	5.8953	2.5860	0.4762	3.0622	0.0000	1,425.436 4	1,425.436 4	0.4432	3.5400e- 003	1,436.984 2
2023	4.1518	6.4632	7.4529	0.0126	0.1479	0.3206	0.4129	0.0392	0.2949	0.2991	0.0000	1,168.147 3	1,168.147 3	0.3581	3.3800e- 003	1,176.763 1
Maximum	4.1518	12.0198	7.7283	0.0147	5.3777	0.5177	5.8953	2.5860	0.4762	3.0622	0.0000	1,425.436 4	1,425.436 4	0.4432	3.5400e- 003	1,436.984 2

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/d	day							lb/c	lay		
2022	1.1065	12.0198	7.7283	0.0147	2.1374	0.5177	2.6550	1.0192	0.4762	1.4954	0.0000	1,425.436 4	1,425.436 4	0.4432	3.5400e- 003	1,436.984 2
2023	4.1518	6.4632	7.4529	0.0126	0.1479	0.3206	0.4129	0.0392	0.2949	0.2991	0.0000	1,168.147 3	1,168.147 3	0.3581	3.3800e- 003	1,176.763 1
Maximum	4.1518	12.0198	7.7283	0.0147	2.1374	0.5177	2.6550	1.0192	0.4762	1.4954	0.0000	1,425.436 4	1,425.436 4	0.4432	3.5400e- 003	1,436.984 2

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

	ROG	NOx	со	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	58.64	0.00	51.37	59.68	0.00	46.61	0.00	0.00	0.00	0.00	0.00	0.00

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

	ROG	NOx	СО	SO2	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/e	day							lb/c	day		
Area	0.0970	2.0000e- 005	1.7600e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 003
Energy	6.6300e- 003	0.0602	0.0506	3.6000e- 004		4.5800e- 003	4.5800e- 003		4.5800e- 003	4.5800e- 003		72.2752	72.2752	1.3900e- 003	1.3300e- 003	72.7047
Mobile	3.4404	2.2997	19.2358	0.0311	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,169.220 9	3,169.220 9	0.3432	0.1978	3,236.735 3
Total	3.5441	2.3600	19.2882	0.0315	2.9888	0.0319	3.0206	0.7962	0.0300	0.8262		3,241.499 9	3,241.499 9	0.3446	0.1991	3,309.444 0

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/d	day		
Area	0.0970	2.0000e- 005	1.7600e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 003
Energy	6.6300e- 003	0.0602	0.0506	3.6000e- 004		4.5800e- 003	4.5800e- 003		4.5800e- 003	4.5800e- 003		72.2752	72.2752	1.3900e- 003	1.3300e- 003	72.7047
Mobile	3.4404	2.2997	19.2358	0.0311	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,169.220 9	3,169.220 9	0.3432	0.1978	3,236.735 3
Total	3.5441	2.3600	19.2882	0.0315	2.9888	0.0319	3.0206	0.7962	0.0300	0.8262		3,241.499 9	3,241.499 9	0.3446	0.1991	3,309.444 0

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

	ROG	NOx	со	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	10/3/2022	10/14/2022	5	10	
2	Site Preparation	Site Preparation	10/15/2022	10/17/2022	5	1	
3	Grading	Grading	10/18/2022	10/19/2022	5	2	
4	Building Construction	Building Construction	10/20/2022	3/8/2023	5	100	
5	Paving	Paving	3/9/2023	3/15/2023	5	5	
6	Architectural Coating	Architectural Coating	3/16/2023	3/22/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 6,408; Non-Residential Outdoor: 2,136; Striped Parking Area: 0 (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	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	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	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	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	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	1.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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/e	day							lb/c	day		
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225		1,147.902 5	1,147.902 5	0.2119		1,153.200 1
Total	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225		1,147.902 5	1,147.902 5	0.2119		1,153.200 1

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/e	day							lb/d	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	0.0292	0.0190	0.2589	7.5000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		75.7708	75.7708	2.1900e- 003	1.9700e- 003	76.4114
Total	0.0292	0.0190	0.2589	7.5000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		75.7708	75.7708	2.1900e- 003	1.9700e- 003	76.4114

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/e	day							lb/d	lay		
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375	1 1 1	0.3225	0.3225	0.0000	1,147.902 5	1,147.902 5	0.2119		1,153.200 1
Total	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225	0.0000	1,147.902 5	1,147.902 5	0.2119		1,153.200 1

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/e	day							lb/d	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	0.0292	0.0190	0.2589	7.5000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		75.7708	75.7708	2.1900e- 003	1.9700e- 003	76.4114
Total	0.0292	0.0190	0.2589	7.5000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		75.7708	75.7708	2.1900e- 003	1.9700e- 003	76.4114

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/o	day							lb/d	day		
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e- 003		0.2573	0.2573		0.2367	0.2367		942.5179	942.5179	0.3048		950.1386
Total	0.5797	6.9332	3.9597	9.7300e- 003	0.5303	0.2573	0.7876	0.0573	0.2367	0.2940		942.5179	942.5179	0.3048		950.1386

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	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/e	day							lb/d	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	0.0146	9.5000e- 003	0.1295	3.7000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		37.8854	37.8854	1.0900e- 003	9.8000e- 004	38.2057
Total	0.0146	9.5000e- 003	0.1295	3.7000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		37.8854	37.8854	1.0900e- 003	9.8000e- 004	38.2057

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/o	day							lb/c	day		
Fugitive Dust		1 1 1			0.2068	0.0000	0.2068	0.0223	0.0000	0.0223			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e- 003		0.2573	0.2573		0.2367	0.2367	0.0000	942.5179	942.5179	0.3048		950.1386
Total	0.5797	6.9332	3.9597	9.7300e- 003	0.2068	0.2573	0.4641	0.0223	0.2367	0.2591	0.0000	942.5179	942.5179	0.3048		950.1386

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	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/e	day							lb/d	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	0.0146	9.5000e- 003	0.1295	3.7000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		37.8854	37.8854	1.0900e- 003	9.8000e- 004	38.2057
Total	0.0146	9.5000e- 003	0.1295	3.7000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		37.8854	37.8854	1.0900e- 003	9.8000e- 004	38.2057

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	СО	SO2	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/e	day							lb/c	lay		
Fugitive Dust		, , ,			5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759		1,364.819 8	1,364.819 8	0.4414		1,375.855 1
Total	1.0832	12.0046	5.9360	0.0141	5.3119	0.5173	5.8292	2.5686	0.4759	3.0445		1,364.819 8	1,364.819 8	0.4414		1,375.855 1

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/e	day							lb/d	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	0.0234	0.0152	0.2071	6.0000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		60.6166	60.6166	1.7500e- 003	1.5700e- 003	61.1291
Total	0.0234	0.0152	0.2071	6.0000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		60.6166	60.6166	1.7500e- 003	1.5700e- 003	61.1291

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	СО	SO2	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/o	day							lb/c	lay		
Fugitive Dust		, , ,			2.0717	0.0000	2.0717	1.0017	0.0000	1.0017			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759	0.0000	1,364.819 8	1,364.819 8	0.4414		1,375.855 1
Total	1.0832	12.0046	5.9360	0.0141	2.0717	0.5173	2.5889	1.0017	0.4759	1.4776	0.0000	1,364.819 8	1,364.819 8	0.4414		1,375.855 1

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	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/e	day							lb/d	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	0.0234	0.0152	0.2071	6.0000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		60.6166	60.6166	1.7500e- 003	1.5700e- 003	61.1291
Total	0.0234	0.0152	0.2071	6.0000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		60.6166	60.6166	1.7500e- 003	1.5700e- 003	61.1291

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/e	day							lb/c	lay		
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719	1 1 1	0.3422	0.3422		1,103.939 3	1,103.939 3	0.3570		1,112.865 2
Total	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422		1,103.939 3	1,103.939 3	0.3570		1,112.865 2

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/e	day							lb/d	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	2.2300e- 003	0.0532	0.0178	2.1000e- 004	6.7700e- 003	5.8000e- 004	7.3500e- 003	1.9500e- 003	5.5000e- 004	2.5000e- 003		22.9826	22.9826	7.0000e- 004	3.3400e- 003	23.9941
Worker	2.9200e- 003	1.9000e- 003	0.0259	7.0000e- 005	8.2100e- 003	5.0000e- 005	8.2600e- 003	2.1800e- 003	4.0000e- 005	2.2200e- 003		7.5771	7.5771	2.2000e- 004	2.0000e- 004	7.6411
Total	5.1500e- 003	0.0551	0.0437	2.8000e- 004	0.0150	6.3000e- 004	0.0156	4.1300e- 003	5.9000e- 004	4.7200e- 003		30.5596	30.5596	9.2000e- 004	3.5400e- 003	31.6353

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/e	day							lb/d	day		
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719	1 1 1	0.3422	0.3422	0.0000	1,103.939 3	1,103.939 3	0.3570		1,112.865 2
Total	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422	0.0000	1,103.939 3	1,103.939 3	0.3570		1,112.865 2

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	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/e	day							lb/d	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	2.2300e- 003	0.0532	0.0178	2.1000e- 004	6.7700e- 003	5.8000e- 004	7.3500e- 003	1.9500e- 003	5.5000e- 004	2.5000e- 003		22.9826	22.9826	7.0000e- 004	3.3400e- 003	23.9941
Worker	2.9200e- 003	1.9000e- 003	0.0259	7.0000e- 005	8.2100e- 003	5.0000e- 005	8.2600e- 003	2.1800e- 003	4.0000e- 005	2.2200e- 003		7.5771	7.5771	2.2000e- 004	2.0000e- 004	7.6411
Total	5.1500e- 003	0.0551	0.0437	2.8000e- 004	0.0150	6.3000e- 004	0.0156	4.1300e- 003	5.9000e- 004	4.7200e- 003		30.5596	30.5596	9.2000e- 004	3.5400e- 003	31.6353

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/o	day							lb/d	lay		
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	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/e	day							lb/d	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	1.1900e- 003	0.0429	0.0155	2.0000e- 004	6.7700e- 003	2.6000e- 004	7.0300e- 003	1.9500e- 003	2.5000e- 004	2.2000e- 003		22.1047	22.1047	6.7000e- 004	3.2000e- 003	23.0752
Worker	2.7300e- 003	1.7000e- 003	0.0240	7.0000e- 005	8.2100e- 003	4.0000e- 005	8.2600e- 003	2.1800e- 003	4.0000e- 005	2.2200e- 003		7.3366	7.3366	2.0000e- 004	1.8000e- 004	7.3961
Total	3.9200e- 003	0.0446	0.0395	2.7000e- 004	0.0150	3.0000e- 004	0.0153	4.1300e- 003	2.9000e- 004	4.4200e- 003		29.4413	29.4413	8.7000e- 004	3.3800e- 003	30.4713

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	СО	SO2	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/o	day							lb/d	day		
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	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/e	day							lb/d	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	1.1900e- 003	0.0429	0.0155	2.0000e- 004	6.7700e- 003	2.6000e- 004	7.0300e- 003	1.9500e- 003	2.5000e- 004	2.2000e- 003		22.1047	22.1047	6.7000e- 004	3.2000e- 003	23.0752
Worker	2.7300e- 003	1.7000e- 003	0.0240	7.0000e- 005	8.2100e- 003	4.0000e- 005	8.2600e- 003	2.1800e- 003	4.0000e- 005	2.2200e- 003		7.3366	7.3366	2.0000e- 004	1.8000e- 004	7.3961
Total	3.9200e- 003	0.0446	0.0395	2.7000e- 004	0.0150	3.0000e- 004	0.0153	4.1300e- 003	2.9000e- 004	4.4200e- 003		29.4413	29.4413	8.7000e- 004	3.3800e- 003	30.4713

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/e	day							lb/c	lay		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643	1	0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000	1 1 1 1 1 1				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 1

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	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/e	day							lb/d	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	0.0492	0.0306	0.4320	1.3100e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		132.0595	132.0595	3.5800e- 003	3.2900e- 003	133.1300
Total	0.0492	0.0306	0.4320	1.3100e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		132.0595	132.0595	3.5800e- 003	3.2900e- 003	133.1300

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/o	day							lb/c	lay		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643	1	0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000	1 1 1 1 1 1				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 1

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	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/e	day							lb/d	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	0.0492	0.0306	0.4320	1.3100e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		132.0595	132.0595	3.5800e- 003	3.2900e- 003	133.1300
Total	0.0492	0.0306	0.4320	1.3100e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		132.0595	132.0595	3.5800e- 003	3.2900e- 003	133.1300

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/e	day							lb/d	day		
Archit. Coating	3.9601					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	4.1518	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	СО	SO2	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/e	day							lb/c	lay		
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	0.0000	0.0000	0.0000	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

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/e	day							lb/d	day		
Archit. Coating	3.9601	, , ,	, , ,			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	4.1518	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	СО	SO2	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/e	day							lb/c	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	0.0000	0.0000	0.0000	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

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/d	day		
Mitigated	3.4404	2.2997	19.2358	0.0311	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,169.220 9	3,169.220 9	0.3432	0.1978	3,236.735 3
Unmitigated	3.4404	2.2997	19.2358	0.0311	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,169.220 9	3,169.220 9	0.3432	0.1978	3,236.735 3

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market with Gas Pumps	1,306.00	1,306.00	1306.00	700,544	700,544
Fast Food Restaurant w/o Drive Thru	446.00	446.00	446.00	719,205	719,205
Total	1,752.00	1,752.00	1,752.00	1,419,749	1,419,749

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant w/o Drive	9.50	7.30	7.30	1.50	79.50	19.00	51	37	12

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
Convenience Market with Gas Pumps	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164
Fast Food Restaurant w/o Drive Thru	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164

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/d	day		
NaturalGas Mitigated	6.6300e- 003	0.0602	0.0506	3.6000e- 004		4.5800e- 003	4.5800e- 003		4.5800e- 003	4.5800e- 003		72.2752	72.2752	1.3900e- 003	1.3300e- 003	72.7047
NaturalGas Unmitigated	6.6300e- 003	0.0602	0.0506	3.6000e- 004		4.5800e- 003	4.5800e- 003		4.5800e- 003	4.5800e- 003		72.2752	72.2752	1.3900e- 003	1.3300e- 003	72.7047

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

	NaturalGa s 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/e	day							lb/d	day		
Convenience Market with Gas Pumps	18.3804	2.0000e- 004	1.8000e- 003	1.5100e- 003	1.0000e- 005		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		2.1624	2.1624	4.0000e- 005	4.0000e- 005	2.1753
Fast Food Restaurant w/o Drive Thru	595.959	6.4300e- 003	0.0584	0.0491	3.5000e- 004		4.4400e- 003	4.4400e- 003	F 	4.4400e- 003	4.4400e- 003		70.1128	70.1128	1.3400e- 003	1.2900e- 003	70.5295
Total		6.6300e- 003	0.0602	0.0506	3.6000e- 004		4.5800e- 003	4.5800e- 003		4.5800e- 003	4.5800e- 003		72.2752	72.2752	1.3800e- 003	1.3300e- 003	72.7047

Mitigated

	NaturalGa s 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/d	day		
Convenience Market with Gas Pumps	0.0183804	2.0000e- 004	1.8000e- 003	1.5100e- 003	1.0000e- 005		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		2.1624	2.1624	4.0000e- 005	4.0000e- 005	2.1753
Fast Food Restaurant w/o Drive Thru	0.595959	6.4300e- 003	0.0584	0.0491	3.5000e- 004		4.4400e- 003	4.4400e- 003	F F F F F	4.4400e- 003	4.4400e- 003		70.1128	70.1128	1.3400e- 003	1.2900e- 003	70.5295
Total		6.6300e- 003	0.0602	0.0506	3.6000e- 004		4.5800e- 003	4.5800e- 003		4.5800e- 003	4.5800e- 003		72.2752	72.2752	1.3800e- 003	1.3300e- 003	72.7047

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

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	СО	SO2	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/d	day		
Mitigated	0.0970	2.0000e- 005	1.7600e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 003
Unmitigated	0.0970	2.0000e- 005	1.7600e- 003	0.0000	 , , , ,	1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 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

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/e	day							lb/d	day		
Architectural Coating	5.4200e- 003		1 1 1			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0914					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e- 004	2.0000e- 005	1.7600e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 003
Total	0.0970	2.0000e- 005	1.7600e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 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/e	day							lb/e	day		
Architectural Coating	5.4200e- 003		1 1 1			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0914					0.0000	0.0000		0.0000	0.0000		, , , , ,	0.0000			0.0000
Landscaping	1.6000e- 004	2.0000e- 005	1.7600e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 003
Total	0.0970	2.0000e- 005	1.7600e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 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

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type		
<u>Boilers</u>								
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type			
User Defined Equipment								
Equipment Type	Number							

11.0 Vegetation

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

6 Carat Convenience Store and Restaurant

San Diego Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant w/o Drive Thru	1.25	1000sqft	0.03	1,250.00	0
Convenience Market with Gas Pumps	16.00	Pump	0.05	3,022.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Convenience store size 3,022 SF

Architectural Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100

g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Vehicle Trips - Trip generation rates from Darnell & Associates, March 2022. 446 trips/day for fast food, 1306 trips/day for fueling station w/ c-store.

Area Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Construction Off-road Equipment Mitigation -

Area Mitigation - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Waste Mitigation -

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

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	LandUseSquareFeet	2,258.80	3,022.00
tblVehicleTrips	ST_TR	322.50	81.63
tblVehicleTrips	ST_TR	696.00	356.80
tblVehicleTrips	SU_TR	322.50	81.63
tblVehicleTrips	SU_TR	500.00	356.80
tblVehicleTrips	WD_TR	322.50	81.63
tblVehicleTrips	WD_TR	346.23	356.80

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 (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	day							lb/c	lay		
2022	1.1084	12.0217	7.7148	0.0147	5.3777	0.5177	5.8953	2.5860	0.4762	3.0622	0.0000	1,422.095 5	1,422.095 5	0.4433	3.5500e- 003	1,433.684 3
2023	4.1518	6.4652	7.4314	0.0125	0.1479	0.3206	0.4129	0.0392	0.2949	0.2991	0.0000	1,160.888 8	1,160.888 8	0.3581	3.5600e- 003	1,169.590 4
Maximum	4.1518	12.0217	7.7148	0.0147	5.3777	0.5177	5.8953	2.5860	0.4762	3.0622	0.0000	1,422.095 5	1,422.095 5	0.4433	3.5600e- 003	1,433.684 3

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/d	day							lb/c	lay		
2022	1.1084	12.0217	7.7148	0.0147	2.1374	0.5177	2.6550	1.0192	0.4762	1.4954	0.0000	1,422.095 5	1,422.095 5	0.4433	3.5500e- 003	1,433.684 3
2023	4.1518	6.4652	7.4314	0.0125	0.1479	0.3206	0.4129	0.0392	0.2949	0.2991	0.0000	1,160.888 8	1,160.888 8	0.3581	3.5600e- 003	1,169.590 4
Maximum	4.1518	12.0217	7.7148	0.0147	2.1374	0.5177	2.6550	1.0192	0.4762	1.4954	0.0000	1,422.095 5	1,422.095 5	0.4433	3.5600e- 003	1,433.684 3

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

	ROG	NOx	со	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	58.64	0.00	51.37	59.68	0.00	46.61	0.00	0.00	0.00	0.00	0.00	0.00

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

	ROG	NOx	CO	SO2	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/d	day		
Area	0.0970	2.0000e- 005	1.7600e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 003
Energy	6.6300e- 003	0.0602	0.0506	3.6000e- 004		4.5800e- 003	4.5800e- 003		4.5800e- 003	4.5800e- 003		72.2752	72.2752	1.3900e- 003	1.3300e- 003	72.7047
Mobile	3.2784	2.5123	21.1386	0.0299	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,042.345 4	3,042.345 4	0.3820	0.2111	3,114.809 8
Total	3.3821	2.5726	21.1910	0.0302	2.9888	0.0319	3.0207	0.7962	0.0300	0.8262		3,114.624 4	3,114.624 4	0.3834	0.2125	3,187.518 5

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/d	day		
Area	0.0970	2.0000e- 005	1.7600e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 003
Energy	6.6300e- 003	0.0602	0.0506	3.6000e- 004		4.5800e- 003	4.5800e- 003		4.5800e- 003	4.5800e- 003		72.2752	72.2752	1.3900e- 003	1.3300e- 003	72.7047
Mobile	3.2784	2.5123	21.1386	0.0299	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,042.345 4	3,042.345 4	0.3820	0.2111	3,114.809 8
Total	3.3821	2.5726	21.1910	0.0302	2.9888	0.0319	3.0207	0.7962	0.0300	0.8262		3,114.624 4	3,114.624 4	0.3834	0.2125	3,187.518 5

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

	ROG	NOx	со	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	10/3/2022	10/14/2022	5	10	
2	Site Preparation	Site Preparation	10/15/2022	10/17/2022	5	1	
3	Grading	Grading	10/18/2022	10/19/2022	5	2	
4	Building Construction	Building Construction	10/20/2022	3/8/2023	5	100	
5	Paving	Paving	3/9/2023	3/15/2023	5	5	
6	Architectural Coating	Architectural Coating	3/16/2023	3/22/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 6,408; Non-Residential Outdoor: 2,136; Striped Parking Area: 0 (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	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	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	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	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	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	1.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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	СО	SO2	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/e	day							lb/d	day		
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375	1 1 1	0.3225	0.3225		1,147.902 5	1,147.902 5	0.2119		1,153.200 1
Total	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225		1,147.902 5	1,147.902 5	0.2119		1,153.200 1

	ROG	NOx	СО	SO2	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/e	day							lb/d	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	0.0316	0.0214	0.2455	7.1000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		71.5946	71.5946	2.3300e- 003	2.1300e- 003	72.2866
Total	0.0316	0.0214	0.2455	7.1000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		71.5946	71.5946	2.3300e- 003	2.1300e- 003	72.2866

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/e	day							lb/d	day		
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375	1 1 1	0.3225	0.3225	0.0000	1,147.902 5	1,147.902 5	0.2119		1,153.200 1
Total	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225	0.0000	1,147.902 5	1,147.902 5	0.2119		1,153.200 1

	ROG	NOx	CO	SO2	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/e	day							lb/d	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	0.0316	0.0214	0.2455	7.1000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		71.5946	71.5946	2.3300e- 003	2.1300e- 003	72.2866
Total	0.0316	0.0214	0.2455	7.1000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		71.5946	71.5946	2.3300e- 003	2.1300e- 003	72.2866

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	СО	SO2	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/e	day							lb/d	day		
Fugitive Dust		1 1 1			0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e- 003		0.2573	0.2573		0.2367	0.2367		942.5179	942.5179	0.3048		950.1386
Total	0.5797	6.9332	3.9597	9.7300e- 003	0.5303	0.2573	0.7876	0.0573	0.2367	0.2940		942.5179	942.5179	0.3048		950.1386

	ROG	NOx	со	SO2	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/e	day							lb/d	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	0.0158	0.0107	0.1228	3.5000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		35.7973	35.7973	1.1600e- 003	1.0600e- 003	36.1433
Total	0.0158	0.0107	0.1228	3.5000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		35.7973	35.7973	1.1600e- 003	1.0600e- 003	36.1433

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/o	day							lb/d	lay		
Fugitive Dust		, , ,			0.2068	0.0000	0.2068	0.0223	0.0000	0.0223		1 1 1	0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e- 003		0.2573	0.2573		0.2367	0.2367	0.0000	942.5179	942.5179	0.3048		950.1386
Total	0.5797	6.9332	3.9597	9.7300e- 003	0.2068	0.2573	0.4641	0.0223	0.2367	0.2591	0.0000	942.5179	942.5179	0.3048		950.1386

	ROG	NOx	СО	SO2	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/e	day							lb/c	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	0.0158	0.0107	0.1228	3.5000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		35.7973	35.7973	1.1600e- 003	1.0600e- 003	36.1433
Total	0.0158	0.0107	0.1228	3.5000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		35.7973	35.7973	1.1600e- 003	1.0600e- 003	36.1433

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	СО	SO2	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/e	day							lb/c	lay		
Fugitive Dust		, , ,			5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759		1,364.819 8	1,364.819 8	0.4414		1,375.855 1
Total	1.0832	12.0046	5.9360	0.0141	5.3119	0.5173	5.8292	2.5686	0.4759	3.0445		1,364.819 8	1,364.819 8	0.4414		1,375.855 1

	ROG	NOx	со	SO2	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/e	day							lb/d	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	0.0253	0.0171	0.1964	5.7000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		57.2757	57.2757	1.8600e- 003	1.7000e- 003	57.8293
Total	0.0253	0.0171	0.1964	5.7000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		57.2757	57.2757	1.8600e- 003	1.7000e- 003	57.8293

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	СО	SO2	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/e	day							lb/c	lay		
Fugitive Dust		, , ,			2.0717	0.0000	2.0717	1.0017	0.0000	1.0017			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759	0.0000	1,364.819 8	1,364.819 8	0.4414		1,375.855 1
Total	1.0832	12.0046	5.9360	0.0141	2.0717	0.5173	2.5889	1.0017	0.4759	1.4776	0.0000	1,364.819 8	1,364.819 8	0.4414		1,375.855 1

	ROG	NOx	СО	SO2	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/e	day							lb/c	lay		
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	0.0253	0.0171	0.1964	5.7000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		57.2757	57.2757	1.8600e- 003	1.7000e- 003	57.8293
Total	0.0253	0.0171	0.1964	5.7000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		57.2757	57.2757	1.8600e- 003	1.7000e- 003	57.8293

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/e	day							lb/d	lay		
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719	1 1 1	0.3422	0.3422		1,103.939 3	1,103.939 3	0.3570		1,112.865 2
Total	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422		1,103.939 3	1,103.939 3	0.3570		1,112.865 2

	ROG	NOx	СО	SO2	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/e	day							lb/d	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	2.2100e- 003	0.0552	0.0183	2.1000e- 004	6.7700e- 003	5.8000e- 004	7.3500e- 003	1.9500e- 003	5.5000e- 004	2.5000e- 003		22.9944	22.9944	7.0000e- 004	3.3400e- 003	24.0073
Worker	3.1600e- 003	2.1400e- 003	0.0246	7.0000e- 005	8.2100e- 003	5.0000e- 005	8.2600e- 003	2.1800e- 003	4.0000e- 005	2.2200e- 003		7.1595	7.1595	2.3000e- 004	2.1000e- 004	7.2287
Total	5.3700e- 003	0.0573	0.0429	2.8000e- 004	0.0150	6.3000e- 004	0.0156	4.1300e- 003	5.9000e- 004	4.7200e- 003		30.1538	30.1538	9.3000e- 004	3.5500e- 003	31.2359

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/e	day							lb/d	day		
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719	1 1 1	0.3422	0.3422	0.0000	1,103.939 3	1,103.939 3	0.3570		1,112.865 2
Total	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422	0.0000	1,103.939 3	1,103.939 3	0.3570		1,112.865 2

	ROG	NOx	СО	SO2	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/e	day							lb/d	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	2.2100e- 003	0.0552	0.0183	2.1000e- 004	6.7700e- 003	5.8000e- 004	7.3500e- 003	1.9500e- 003	5.5000e- 004	2.5000e- 003		22.9944	22.9944	7.0000e- 004	3.3400e- 003	24.0073
Worker	3.1600e- 003	2.1400e- 003	0.0246	7.0000e- 005	8.2100e- 003	5.0000e- 005	8.2600e- 003	2.1800e- 003	4.0000e- 005	2.2200e- 003		7.1595	7.1595	2.3000e- 004	2.1000e- 004	7.2287
Total	5.3700e- 003	0.0573	0.0429	2.8000e- 004	0.0150	6.3000e- 004	0.0156	4.1300e- 003	5.9000e- 004	4.7200e- 003		30.1538	30.1538	9.3000e- 004	3.5500e- 003	31.2359

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/e	day							lb/d	lay		
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2

	ROG	NOx	CO	SO2	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/e	day							lb/d	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	1.1600e- 003	0.0447	0.0159	2.1000e- 004	6.7700e- 003	2.6000e- 004	7.0400e- 003	1.9500e- 003	2.5000e- 004	2.2000e- 003		22.1361	22.1361	6.7000e- 004	3.2100e- 003	23.1088
Worker	2.9600e- 003	1.9100e- 003	0.0228	7.0000e- 005	8.2100e- 003	4.0000e- 005	8.2600e- 003	2.1800e- 003	4.0000e- 005	2.2200e- 003		6.9334	6.9334	2.1000e- 004	2.0000e- 004	6.9976
Total	4.1200e- 003	0.0466	0.0387	2.8000e- 004	0.0150	3.0000e- 004	0.0153	4.1300e- 003	2.9000e- 004	4.4200e- 003		29.0695	29.0695	8.8000e- 004	3.4100e- 003	30.1064

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/e	day							lb/d	day		
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2

	ROG	NOx	CO	SO2	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/e	day							lb/d	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	1.1600e- 003	0.0447	0.0159	2.1000e- 004	6.7700e- 003	2.6000e- 004	7.0400e- 003	1.9500e- 003	2.5000e- 004	2.2000e- 003		22.1361	22.1361	6.7000e- 004	3.2100e- 003	23.1088
Worker	2.9600e- 003	1.9100e- 003	0.0228	7.0000e- 005	8.2100e- 003	4.0000e- 005	8.2600e- 003	2.1800e- 003	4.0000e- 005	2.2200e- 003		6.9334	6.9334	2.1000e- 004	2.0000e- 004	6.9976
Total	4.1200e- 003	0.0466	0.0387	2.8000e- 004	0.0150	3.0000e- 004	0.0153	4.1300e- 003	2.9000e- 004	4.4200e- 003		29.0695	29.0695	8.8000e- 004	3.4100e- 003	30.1064

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/e	day							lb/d	day		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000	1 1 1 1				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 1

	ROG	NOx	СО	SO2	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/e	day							lb/d	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	0.0533	0.0344	0.4105	1.2300e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		124.8010	124.8010	3.8100e- 003	3.5600e- 003	125.9573
Total	0.0533	0.0344	0.4105	1.2300e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		124.8010	124.8010	3.8100e- 003	3.5600e- 003	125.9573

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/e	day							lb/c	lay		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643	1	0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000	1 1 1 1 1 1				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 1

	ROG	NOx	CO	SO2	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/e	day							lb/d	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	0.0533	0.0344	0.4105	1.2300e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		124.8010	124.8010	3.8100e- 003	3.5600e- 003	125.9573
Total	0.0533	0.0344	0.4105	1.2300e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		124.8010	124.8010	3.8100e- 003	3.5600e- 003	125.9573

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/e	day							lb/d	day		
Archit. Coating	3.9601					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	4.1518	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

	ROG	NOx	СО	SO2	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/e	day							lb/c	lay		
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	0.0000	0.0000	0.0000	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

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	СО	SO2	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/e	day							lb/c	day		
Archit. Coating	3.9601					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	4.1518	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

	ROG	NOx	СО	SO2	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/e	day							lb/d	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	0.0000	0.0000	0.0000	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

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	СО	SO2	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/d	lay		
Mitigated	3.2784	2.5123	21.1386	0.0299	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,042.345 4	3,042.345 4	0.3820	0.2111	3,114.809 8
Unmitigated	3.2784	2.5123	21.1386	0.0299	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,042.345 4	3,042.345 4	0.3820	0.2111	3,114.809 8

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market with Gas Pumps	1,306.00	1,306.00	1306.00	700,544	700,544
Fast Food Restaurant w/o Drive Thru	446.00	446.00	446.00	719,205	719,205
Total	1,752.00	1,752.00	1,752.00	1,419,749	1,419,749

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant w/o Drive	9.50	7.30	7.30	1.50	79.50	19.00	51	37	12

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
Convenience Market with Gas Pumps	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164
Fast Food Restaurant w/o Drive Thru	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164

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/d	day		
NaturalGas Mitigated	6.6300e- 003	0.0602	0.0506	3.6000e- 004		4.5800e- 003	4.5800e- 003		4.5800e- 003	4.5800e- 003		72.2752	72.2752	1.3900e- 003	1.3300e- 003	72.7047
NaturalGas Unmitigated	6.6300e- 003	0.0602	0.0506	3.6000e- 004		4.5800e- 003	4.5800e- 003		4.5800e- 003	4.5800e- 003		72.2752	72.2752	1.3900e- 003	1.3300e- 003	72.7047

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

	NaturalGa s 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/o	day		
Convenience Market with Gas Pumps	18.3804	2.0000e- 004	1.8000e- 003	1.5100e- 003	1.0000e- 005		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		2.1624	2.1624	4.0000e- 005	4.0000e- 005	2.1753
Fast Food Restaurant w/o Drive Thru	595.959	6.4300e- 003	0.0584	0.0491	3.5000e- 004	 	4.4400e- 003	4.4400e- 003		4.4400e- 003	4.4400e- 003		70.1128	70.1128	1.3400e- 003	1.2900e- 003	70.5295
Total		6.6300e- 003	0.0602	0.0506	3.6000e- 004		4.5800e- 003	4.5800e- 003		4.5800e- 003	4.5800e- 003		72.2752	72.2752	1.3800e- 003	1.3300e- 003	72.7047

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	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/e	day							lb/c	day		
Convenience Market with Gas Pumps	0.0183804	2.0000e- 004	1.8000e- 003	1.5100e- 003	1.0000e- 005		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		2.1624	2.1624	4.0000e- 005	4.0000e- 005	2.1753
Fast Food Restaurant w/o Drive Thru	0.595959	6.4300e- 003	0.0584	0.0491	3.5000e- 004		4.4400e- 003	4.4400e- 003		4.4400e- 003	4.4400e- 003		70.1128	70.1128	1.3400e- 003	1.2900e- 003	70.5295
Total		6.6300e- 003	0.0602	0.0506	3.6000e- 004		4.5800e- 003	4.5800e- 003		4.5800e- 003	4.5800e- 003		72.2752	72.2752	1.3800e- 003	1.3300e- 003	72.7047

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

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	со	SO2	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/e	day		
Mitigated	0.0970	2.0000e- 005	1.7600e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 003
Unmitigated	0.0970	2.0000e- 005	1.7600e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 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

Unmitigated

	ROG	NOx	СО	SO2	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/e	day							lb/d	day		
Architectural Coating	5.4200e- 003	1 1 1	1 1 1			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0914					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e- 004	2.0000e- 005	1.7600e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 003
Total	0.0970	2.0000e- 005	1.7600e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 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	СО	SO2	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/o	day							lb/o	day		
Architectural Coating	5.4200e- 003					0.0000	0.0000		0.0000	0.0000		1 1 1	0.0000			0.0000
Consumer Products	0.0914					0.0000	0.0000		0.0000	0.0000		, , , , ,	0.0000			0.0000
Landscaping	1.6000e- 004	2.0000e- 005	1.7600e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 003
Total	0.0970	2.0000e- 005	1.7600e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		3.7800e- 003	3.7800e- 003	1.0000e- 005		4.0200e- 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

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						
Equipment Type	Number					

11.0 Vegetation

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

6 Carat Convenience Store and Car Wash

San Diego Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Convenience Market with Gas Pumps	16.00	Pump	0.05	4,257.00	0
Automobile Care Center	3.30	1000sqft	0.08	3,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (Ib/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Convenience store size 4,257 SF.

Architectural Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100

g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Vehicle Trips - Trip generation rates from Darnell & Associates, March 2022. 1215 trips/day for fueling station w/ c-store and car wash.

Area Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Construction Off-road Equipment Mitigation -

Area Mitigation - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Waste Mitigation -

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

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	LandUseSquareFeet	2,258.80	4,257.00
tblVehicleTrips	ST_TR	322.50	75.94
tblVehicleTrips	ST_TR	23.72	0.00
tblVehicleTrips	SU_TR	322.50	75.94
tblVehicleTrips	SU_TR	11.88	0.00
tblVehicleTrips	WD_TR	322.50	75.94
tblVehicleTrips	WD_TR	23.72	0.00

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 (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	day							lb/d	day		
2022	1.1065	12.0198	7.7283	0.0147	5.3777	0.5177	5.8953	2.5860	0.4762	3.0622	0.0000	1,425.436 4	1,425.436 4	0.4432	3.7300e- 003	1,436.984 2
2023	7.1975	6.4649	7.4529	0.0126	0.1479	0.3206	0.4129	0.0392	0.2950	0.3013	0.0000	1,168.147 3	1,168.147 3	0.3583	3.5700e- 003	1,176.763 1
Maximum	7.1975	12.0198	7.7283	0.0147	5.3777	0.5177	5.8953	2.5860	0.4762	3.0622	0.0000	1,425.436 4	1,425.436 4	0.4432	3.7300e- 003	1,436.984 2

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/e	day							lb/c	lay		
2022	1.1065	12.0198	7.7283	0.0147	2.1374	0.5177	2.6550	1.0192	0.4762	1.4954	0.0000	1,425.436 4	1,425.436 4	0.4432	3.7300e- 003	1,436.984 2
2023	7.1975	6.4649	7.4529	0.0126	0.1479	0.3206	0.4129	0.0392	0.2950	0.3013	0.0000	1,168.147 3	1,168.147 3	0.3583	3.5700e- 003	1,176.763 1
Maximum	7.1975	12.0198	7.7283	0.0147	2.1374	0.5177	2.6550	1.0192	0.4762	1.4954	0.0000	1,425.436 4	1,425.436 4	0.4432	3.7300e- 003	1,436.984 2

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

	ROG	NOx	со	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	58.64	0.00	51.37	59.68	0.00	46.58	0.00	0.00	0.00	0.00	0.00	0.00

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

	ROG	NOx	СО	SO2	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/e	day							lb/c	day		
Area	0.1715	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 003
Energy	1.4000e- 003	0.0128	0.0107	8.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004		15.2995	15.2995	2.9000e- 004	2.8000e- 004	15.3904
Mobile	2.2165	1.3017	10.7131	0.0149	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,513.238 8	1,513.238 8	0.2046	0.1142	1,552.376 8
Total	2.3894	1.3145	10.7258	0.0149	1.3720	0.0152	1.3872	0.3655	0.0142	0.3797		1,528.542 4	1,528.542 4	0.2049	0.1145	1,567.771 6

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/e	day		
Area	0.1715	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 003
Energy	1.4000e- 003	0.0128	0.0107	8.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004		15.2995	15.2995	2.9000e- 004	2.8000e- 004	15.3904
Mobile	2.2165	1.3017	10.7131	0.0149	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,513.238 8	1,513.238 8	0.2046	0.1142	1,552.376 8
Total	2.3894	1.3145	10.7258	0.0149	1.3720	0.0152	1.3872	0.3655	0.0142	0.3797		1,528.542 4	1,528.542 4	0.2049	0.1145	1,567.771 6

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

	ROG	NOx	СО	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	10/3/2022	10/14/2022	5	10	
2	Site Preparation	Site Preparation	10/15/2022	10/17/2022	5	1	
3	Grading	Grading	10/18/2022	10/19/2022	5	2	
4	Building Construction	Building Construction	10/20/2022	3/8/2023	5	100	
5	Paving	Paving	3/9/2023	3/15/2023	5	5	
6	Architectural Coating	Architectural Coating	3/16/2023	3/22/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,336; Non-Residential Outdoor: 3,779; Striped Parking Area: 0 (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	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	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	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	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	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	2.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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/e	day							lb/c	lay		
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375	1 1 1	0.3225	0.3225		1,147.902 5	1,147.902 5	0.2119		1,153.200 1
Total	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225		1,147.902 5	1,147.902 5	0.2119		1,153.200 1

	ROG	NOx	CO	SO2	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/d	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	0.0292	0.0190	0.2589	7.5000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		75.7708	75.7708	2.1900e- 003	1.9700e- 003	76.4114
Total	0.0292	0.0190	0.2589	7.5000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		75.7708	75.7708	2.1900e- 003	1.9700e- 003	76.4114

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	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375	- 	0.3225	0.3225	0.0000	1,147.902 5	1,147.902 5	0.2119		1,153.200 1	
Total	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225	0.0000	1,147.902 5	1,147.902 5	0.2119		1,153.200 1	

	ROG	NOx	CO	SO2	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/d	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	0.0292	0.0190	0.2589	7.5000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		75.7708	75.7708	2.1900e- 003	1.9700e- 003	76.4114
Total	0.0292	0.0190	0.2589	7.5000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		75.7708	75.7708	2.1900e- 003	1.9700e- 003	76.4114

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/e	day							lb/d	day		
Fugitive Dust		1 1 1			0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e- 003		0.2573	0.2573		0.2367	0.2367		942.5179	942.5179	0.3048		950.1386
Total	0.5797	6.9332	3.9597	9.7300e- 003	0.5303	0.2573	0.7876	0.0573	0.2367	0.2940		942.5179	942.5179	0.3048		950.1386

	ROG	NOx	CO	SO2	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/d	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	0.0146	9.5000e- 003	0.1295	3.7000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		37.8854	37.8854	1.0900e- 003	9.8000e- 004	38.2057
Total	0.0146	9.5000e- 003	0.1295	3.7000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		37.8854	37.8854	1.0900e- 003	9.8000e- 004	38.2057
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/e	day							lb/c	day		
Fugitive Dust			1 1 1		0.2068	0.0000	0.2068	0.0223	0.0000	0.0223			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e- 003		0.2573	0.2573		0.2367	0.2367	0.0000	942.5179	942.5179	0.3048		950.1386
Total	0.5797	6.9332	3.9597	9.7300e- 003	0.2068	0.2573	0.4641	0.0223	0.2367	0.2591	0.0000	942.5179	942.5179	0.3048		950.1386

	ROG	NOx	CO	SO2	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/d	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	0.0146	9.5000e- 003	0.1295	3.7000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		37.8854	37.8854	1.0900e- 003	9.8000e- 004	38.2057
Total	0.0146	9.5000e- 003	0.1295	3.7000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		37.8854	37.8854	1.0900e- 003	9.8000e- 004	38.2057

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/e	day							lb/d	lay		
Fugitive Dust		, , ,			5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759		1,364.819 8	1,364.819 8	0.4414		1,375.855 1
Total	1.0832	12.0046	5.9360	0.0141	5.3119	0.5173	5.8292	2.5686	0.4759	3.0445		1,364.819 8	1,364.819 8	0.4414		1,375.855 1

	ROG	NOx	CO	SO2	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/e	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	0.0234	0.0152	0.2071	6.0000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		60.6166	60.6166	1.7500e- 003	1.5700e- 003	61.1291
Total	0.0234	0.0152	0.2071	6.0000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		60.6166	60.6166	1.7500e- 003	1.5700e- 003	61.1291

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/e	day							lb/c	day		
Fugitive Dust		, , ,	1		2.0717	0.0000	2.0717	1.0017	0.0000	1.0017			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759	0.0000	1,364.819 8	1,364.819 8	0.4414		1,375.855 1
Total	1.0832	12.0046	5.9360	0.0141	2.0717	0.5173	2.5889	1.0017	0.4759	1.4776	0.0000	1,364.819 8	1,364.819 8	0.4414		1,375.855 1

	ROG	NOx	CO	SO2	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/d	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	0.0234	0.0152	0.2071	6.0000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		60.6166	60.6166	1.7500e- 003	1.5700e- 003	61.1291
Total	0.0234	0.0152	0.2071	6.0000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		60.6166	60.6166	1.7500e- 003	1.5700e- 003	61.1291

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/d	day		
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719	- 	0.3422	0.3422	-	1,103.939 3	1,103.939 3	0.3570		1,112.865 2
Total	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422		1,103.939 3	1,103.939 3	0.3570		1,112.865 2

	ROG	NOx	CO	SO2	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/d	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	2.2300e- 003	0.0532	0.0178	2.1000e- 004	6.7700e- 003	5.8000e- 004	7.3500e- 003	1.9500e- 003	5.5000e- 004	2.5000e- 003		22.9826	22.9826	7.0000e- 004	3.3400e- 003	23.9941
Worker	5.8400e- 003	3.8000e- 003	0.0518	1.5000e- 004	0.0164	9.0000e- 005	0.0165	4.3600e- 003	9.0000e- 005	4.4400e- 003		15.1542	15.1542	4.4000e- 004	3.9000e- 004	15.2823
Total	8.0700e- 003	0.0570	0.0696	3.6000e- 004	0.0232	6.7000e- 004	0.0239	6.3100e- 003	6.4000e- 004	6.9400e- 003		38.1367	38.1367	1.1400e- 003	3.7300e- 003	39.2764

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/e	day							lb/d	lay		
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719	1 1 1	0.3422	0.3422	0.0000	1,103.939 3	1,103.939 3	0.3570		1,112.865 2
Total	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422	0.0000	1,103.939 3	1,103.939 3	0.3570		1,112.865 2

	ROG	NOx	CO	SO2	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/e	day							lb/d	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	2.2300e- 003	0.0532	0.0178	2.1000e- 004	6.7700e- 003	5.8000e- 004	7.3500e- 003	1.9500e- 003	5.5000e- 004	2.5000e- 003		22.9826	22.9826	7.0000e- 004	3.3400e- 003	23.9941
Worker	5.8400e- 003	3.8000e- 003	0.0518	1.5000e- 004	0.0164	9.0000e- 005	0.0165	4.3600e- 003	9.0000e- 005	4.4400e- 003		15.1542	15.1542	4.4000e- 004	3.9000e- 004	15.2823
Total	8.0700e- 003	0.0570	0.0696	3.6000e- 004	0.0232	6.7000e- 004	0.0239	6.3100e- 003	6.4000e- 004	6.9400e- 003		38.1367	38.1367	1.1400e- 003	3.7300e- 003	39.2764

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/c	lay		
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2

	ROG	NOx	CO	SO2	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/e	day							lb/d	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	1.1900e- 003	0.0429	0.0155	2.0000e- 004	6.7700e- 003	2.6000e- 004	7.0300e- 003	1.9500e- 003	2.5000e- 004	2.2000e- 003		22.1047	22.1047	6.7000e- 004	3.2000e- 003	23.0752
Worker	5.4700e- 003	3.3900e- 003	0.0480	1.5000e- 004	0.0164	9.0000e- 005	0.0165	4.3600e- 003	8.0000e- 005	4.4400e- 003		14.6733	14.6733	4.0000e- 004	3.7000e- 004	14.7922
Total	6.6600e- 003	0.0463	0.0635	3.5000e- 004	0.0232	3.5000e- 004	0.0236	6.3100e- 003	3.3000e- 004	6.6400e- 003		36.7780	36.7780	1.0700e- 003	3.5700e- 003	37.8675

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/e	day							lb/d	lay		
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2

	ROG	NOx	CO	SO2	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/e	day							lb/d	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	1.1900e- 003	0.0429	0.0155	2.0000e- 004	6.7700e- 003	2.6000e- 004	7.0300e- 003	1.9500e- 003	2.5000e- 004	2.2000e- 003		22.1047	22.1047	6.7000e- 004	3.2000e- 003	23.0752
Worker	5.4700e- 003	3.3900e- 003	0.0480	1.5000e- 004	0.0164	9.0000e- 005	0.0165	4.3600e- 003	8.0000e- 005	4.4400e- 003		14.6733	14.6733	4.0000e- 004	3.7000e- 004	14.7922
Total	6.6600e- 003	0.0463	0.0635	3.5000e- 004	0.0232	3.5000e- 004	0.0236	6.3100e- 003	3.3000e- 004	6.6400e- 003		36.7780	36.7780	1.0700e- 003	3.5700e- 003	37.8675

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/e	day							lb/d	day		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643	1	0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000	1 1 1 1 1 1				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 1

	ROG	NOx	CO	SO2	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/e	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	0.0492	0.0306	0.4320	1.3100e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		132.0595	132.0595	3.5800e- 003	3.2900e- 003	133.1300
Total	0.0492	0.0306	0.4320	1.3100e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		132.0595	132.0595	3.5800e- 003	3.2900e- 003	133.1300

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	СО	SO2	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/e	day							lb/c	day		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000	1				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 1

	ROG	NOx	CO	SO2	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/d	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	0.0492	0.0306	0.4320	1.3100e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		132.0595	132.0595	3.5800e- 003	3.2900e- 003	133.1300
Total	0.0492	0.0306	0.4320	1.3100e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		132.0595	132.0595	3.5800e- 003	3.2900e- 003	133.1300

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/e	day							lb/d	lay		
Archit. Coating	7.0058		1 1 1			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	7.1975	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

	ROG	NOx	СО	SO2	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/e	day							lb/c	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	0.0000	0.0000	0.0000	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

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/e	day							lb/d	day		
Archit. Coating	7.0058	, , ,	1			0.0000	0.0000	, , ,	0.0000	0.0000		1 1 1	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	7.1975	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

	ROG	NOx	СО	SO2	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/c	lay		
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	0.0000	0.0000	0.0000	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

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	со	SO2	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/c	day		
Mitigated	2.2165	1.3017	10.7131	0.0149	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,513.238 8	1,513.238 8	0.2046	0.1142	1,552.376 8
Unmitigated	2.2165	1.3017	10.7131	0.0149	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,513.238 8	1,513.238 8	0.2046	0.1142	1,552.376 8

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market with Gas Pumps	1,215.04	1,215.04	1215.04	651,753	651,753
Automobile Care Center	0.00	0.00	0.00		
Total	1,215.04	1,215.04	1,215.04	651,753	651,753

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00	21	51	28

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
	Convenience Market with Gas Pumps	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164
ſ	Automobile Care Center	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164

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/e	day							lb/d	day		
NaturalGas Mitigated	1.4000e- 003	0.0128	0.0107	8.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004		15.2995	15.2995	2.9000e- 004	2.8000e- 004	15.3904
NaturalGas Unmitigated	1.4000e- 003	0.0128	0.0107	8.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004		15.2995	15.2995	2.9000e- 004	2.8000e- 004	15.3904

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

	NaturalGa s Use	ROG	NOx	СО	SO2	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/e	day		
Automobile Care Center	104.153	1.1200e- 003	0.0102	8.5800e- 003	6.0000e- 005	1 1 1	7.8000e- 004	7.8000e- 004		7.8000e- 004	7.8000e- 004		12.2533	12.2533	2.3000e- 004	2.2000e- 004	12.3262
Convenience Market with Gas Pumps	25.8919	2.8000e- 004	2.5400e- 003	2.1300e- 003	2.0000e- 005		1.9000e- 004	1.9000e- 004		1.9000e- 004	1.9000e- 004		3.0461	3.0461	6.0000e- 005	6.0000e- 005	3.0642
Total		1.4000e- 003	0.0128	0.0107	8.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004		15.2994	15.2994	2.9000e- 004	2.8000e- 004	15.3904

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	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/d	day							lb/c	lay		
Automobile Care Center	0.104153	1.1200e- 003	0.0102	8.5800e- 003	6.0000e- 005		7.8000e- 004	7.8000e- 004		7.8000e- 004	7.8000e- 004		12.2533	12.2533	2.3000e- 004	2.2000e- 004	12.3262
Convenience Market with Gas Pumps	0.0258919	2.8000e- 004	2.5400e- 003	2.1300e- 003	2.0000e- 005		1.9000e- 004	1.9000e- 004		1.9000e- 004	1.9000e- 004		3.0461	3.0461	6.0000e- 005	6.0000e- 005	3.0642
Total		1.4000e- 003	0.0128	0.0107	8.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004		15.2994	15.2994	2.9000e- 004	2.8000e- 004	15.3904

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

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	со	SO2	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/d	day							lb/d	day		
Mitigated	0.1715	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 003
Unmitigated	0.1715	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 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

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/e	day							lb/d	day		
Architectural Coating	9.6000e- 003		1 1 1			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1617					0.0000	0.0000		0.0000	0.0000		, , , , ,	0.0000			0.0000
Landscaping	1.8000e- 004	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 003
Total	0.1715	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 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	СО	SO2	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/e	day							lb/e	day		
Architectural Coating	9.6000e- 003	1 1 1				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1617					0.0000	0.0000		0.0000	0.0000		 - - -	0.0000			0.0000
Landscaping	1.8000e- 004	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 003
Total	0.1715	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 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

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						-
Equipment Type	Number					

11.0 Vegetation

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

6 Carat Convenience Store and Car Wash

San Diego Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Convenience Market with Gas Pumps	16.00	Pump	0.05	4,257.00	0
Automobile Care Center	3.30	1000sqft	0.08	3,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (Ib/MWhr)	539.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Convenience store size 4,257 SF.

Architectural Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100

g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Vehicle Trips - Trip generation rates from Darnell & Associates, March 2022. 1215 trips/day for fueling station w/ c-store and car wash.

Area Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Construction Off-road Equipment Mitigation -

Area Mitigation - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Waste Mitigation -

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

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	LandUseSquareFeet	2,258.80	4,257.00
tblVehicleTrips	ST_TR	322.50	75.94
tblVehicleTrips	ST_TR	23.72	0.00
tblVehicleTrips	SU_TR	322.50	75.94
tblVehicleTrips	SU_TR	11.88	0.00
tblVehicleTrips	WD_TR	322.50	75.94
tblVehicleTrips	WD_TR	23.72	0.00

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 (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/e	day							lb/c	lay		
2022	1.1084	12.0217	7.7148	0.0147	5.3777	0.5177	5.8953	2.5860	0.4762	3.0622	0.0000	1,422.095 5	1,422.095 5	0.4433	3.7700e- 003	1,433.684 3
2023	7.1975	6.4671	7.4314	0.0125	0.1479	0.3206	0.4129	0.0392	0.2950	0.3013	0.0000	1,160.888 8	1,160.888 8	0.3583	3.6100e- 003	1,169.590 4
Maximum	7.1975	12.0217	7.7148	0.0147	5.3777	0.5177	5.8953	2.5860	0.4762	3.0622	0.0000	1,422.095 5	1,422.095 5	0.4433	3.7700e- 003	1,433.684 3

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/e	day							lb/c	lay		
2022	1.1084	12.0217	7.7148	0.0147	2.1374	0.5177	2.6550	1.0192	0.4762	1.4954	0.0000	1,422.095 5	1,422.095 5	0.4433	3.7700e- 003	1,433.684 3
2023	7.1975	6.4671	7.4314	0.0125	0.1479	0.3206	0.4129	0.0392	0.2950	0.3013	0.0000	1,160.888 8	1,160.888 8	0.3583	3.6100e- 003	1,169.590 4
Maximum	7.1975	12.0217	7.7148	0.0147	2.1374	0.5177	2.6550	1.0192	0.4762	1.4954	0.0000	1,422.095 5	1,422.095 5	0.4433	3.7700e- 003	1,433.684 3

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

	ROG	NOx	со	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	58.64	0.00	51.37	59.68	0.00	46.58	0.00	0.00	0.00	0.00	0.00	0.00

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

	ROG	NOx	CO	SO2	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/c	day		
Area	0.1715	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 003
Energy	1.4000e- 003	0.0128	0.0107	8.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004		15.2995	15.2995	2.9000e- 004	2.8000e- 004	15.3904
Mobile	2.0992	1.4261	12.1086	0.0143	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,456.114 3	1,456.114 3	0.2314	0.1224	1,498.376 9
Total	2.2721	1.4389	12.1213	0.0144	1.3720	0.0152	1.3872	0.3655	0.0142	0.3797		1,471.417 9	1,471.417 9	0.2317	0.1227	1,513.771 8

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/d	day		
Area	0.1715	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 003
Energy	1.4000e- 003	0.0128	0.0107	8.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004		15.2995	15.2995	2.9000e- 004	2.8000e- 004	15.3904
Mobile	2.0992	1.4261	12.1086	0.0143	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,456.114 3	1,456.114 3	0.2314	0.1224	1,498.376 9
Total	2.2721	1.4389	12.1213	0.0144	1.3720	0.0152	1.3872	0.3655	0.0142	0.3797		1,471.417 9	1,471.417 9	0.2317	0.1227	1,513.771 8

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

	ROG	NOx	со	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	10/3/2022	10/14/2022	5	10	
2	Site Preparation	Site Preparation	10/15/2022	10/17/2022	5	1	
3	Grading	Grading	10/18/2022	10/19/2022	5	2	
4	Building Construction	Building Construction	10/20/2022	3/8/2023	5	100	
5	Paving	Paving	3/9/2023	3/15/2023	5	5	
6	Architectural Coating	Architectural Coating	3/16/2023	3/22/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,336; Non-Residential Outdoor: 3,779; Striped Parking Area: 0 (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	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	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	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	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	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	2.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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/e	day							lb/c	lay		
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225		1,147.902 5	1,147.902 5	0.2119		1,153.200 1
Total	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225		1,147.902 5	1,147.902 5	0.2119		1,153.200 1

	ROG	NOx	CO	SO2	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/e	day							lb/d	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	0.0316	0.0214	0.2455	7.1000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		71.5946	71.5946	2.3300e- 003	2.1300e- 003	72.2866
Total	0.0316	0.0214	0.2455	7.1000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		71.5946	71.5946	2.3300e- 003	2.1300e- 003	72.2866

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/e	day							lb/d	day		
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375	- 	0.3225	0.3225	0.0000	1,147.902 5	1,147.902 5	0.2119		1,153.200 1
Total	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225	0.0000	1,147.902 5	1,147.902 5	0.2119		1,153.200 1

	ROG	NOx	CO	SO2	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/e	day							lb/d	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	0.0316	0.0214	0.2455	7.1000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		71.5946	71.5946	2.3300e- 003	2.1300e- 003	72.2866
Total	0.0316	0.0214	0.2455	7.1000e- 004	0.0822	4.6000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		71.5946	71.5946	2.3300e- 003	2.1300e- 003	72.2866

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/e	day							lb/c	day		
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e- 003		0.2573	0.2573		0.2367	0.2367		942.5179	942.5179	0.3048		950.1386
Total	0.5797	6.9332	3.9597	9.7300e- 003	0.5303	0.2573	0.7876	0.0573	0.2367	0.2940		942.5179	942.5179	0.3048		950.1386

	ROG	NOx	CO	SO2	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/d	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	0.0158	0.0107	0.1228	3.5000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		35.7973	35.7973	1.1600e- 003	1.0600e- 003	36.1433
Total	0.0158	0.0107	0.1228	3.5000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		35.7973	35.7973	1.1600e- 003	1.0600e- 003	36.1433

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/e	day							lb/c	day		
Fugitive Dust			1 1 1		0.2068	0.0000	0.2068	0.0223	0.0000	0.0223			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e- 003		0.2573	0.2573		0.2367	0.2367	0.0000	942.5179	942.5179	0.3048		950.1386
Total	0.5797	6.9332	3.9597	9.7300e- 003	0.2068	0.2573	0.4641	0.0223	0.2367	0.2591	0.0000	942.5179	942.5179	0.3048		950.1386

	ROG	NOx	CO	SO2	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/e	day							lb/d	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	0.0158	0.0107	0.1228	3.5000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		35.7973	35.7973	1.1600e- 003	1.0600e- 003	36.1433
Total	0.0158	0.0107	0.1228	3.5000e- 004	0.0411	2.3000e- 004	0.0413	0.0109	2.1000e- 004	0.0111		35.7973	35.7973	1.1600e- 003	1.0600e- 003	36.1433

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/e	day							lb/d	lay		
Fugitive Dust		, , ,			5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759		1,364.819 8	1,364.819 8	0.4414		1,375.855 1
Total	1.0832	12.0046	5.9360	0.0141	5.3119	0.5173	5.8292	2.5686	0.4759	3.0445		1,364.819 8	1,364.819 8	0.4414		1,375.855 1

	ROG	NOx	CO	SO2	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/d	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	0.0253	0.0171	0.1964	5.7000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		57.2757	57.2757	1.8600e- 003	1.7000e- 003	57.8293
Total	0.0253	0.0171	0.1964	5.7000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		57.2757	57.2757	1.8600e- 003	1.7000e- 003	57.8293

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/e	day							lb/c	day		
Fugitive Dust		1 1 1	1 1 1		2.0717	0.0000	2.0717	1.0017	0.0000	1.0017			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759	0.0000	1,364.819 8	1,364.819 8	0.4414		1,375.855 1
Total	1.0832	12.0046	5.9360	0.0141	2.0717	0.5173	2.5889	1.0017	0.4759	1.4776	0.0000	1,364.819 8	1,364.819 8	0.4414		1,375.855 1

	ROG	NOx	CO	SO2	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/d	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	0.0253	0.0171	0.1964	5.7000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		57.2757	57.2757	1.8600e- 003	1.7000e- 003	57.8293
Total	0.0253	0.0171	0.1964	5.7000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		57.2757	57.2757	1.8600e- 003	1.7000e- 003	57.8293

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/d	day		
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422		1,103.939 3	1,103.939 3	0.3570		1,112.865 2
Total	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422		1,103.939 3	1,103.939 3	0.3570		1,112.865 2

	ROG	NOx	CO	SO2	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/				lb/d	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	2.2100e- 003	0.0552	0.0183	2.1000e- 004	6.7700e- 003	5.8000e- 004	7.3500e- 003	1.9500e- 003	5.5000e- 004	2.5000e- 003		22.9944	22.9944	7.0000e- 004	3.3400e- 003	24.0073
Worker	6.3100e- 003	4.2700e- 003	0.0491	1.4000e- 004	0.0164	9.0000e- 005	0.0165	4.3600e- 003	9.0000e- 005	4.4400e- 003		14.3189	14.3189	4.7000e- 004	4.3000e- 004	14.4573
Total	8.5200e- 003	0.0595	0.0674	3.5000e- 004	0.0232	6.7000e- 004	0.0239	6.3100e- 003	6.4000e- 004	6.9400e- 003		37.3133	37.3133	1.1700e- 003	3.7700e- 003	38.4646

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/e			lb/d	day							
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719	1 1 1	0.3422	0.3422	0.0000	1,103.939 3	1,103.939 3	0.3570		1,112.865 2
Total	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422	0.0000	1,103.939 3	1,103.939 3	0.3570		1,112.865 2

	ROG	NOx	CO	SO2	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/e				lb/d	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	2.2100e- 003	0.0552	0.0183	2.1000e- 004	6.7700e- 003	5.8000e- 004	7.3500e- 003	1.9500e- 003	5.5000e- 004	2.5000e- 003		22.9944	22.9944	7.0000e- 004	3.3400e- 003	24.0073
Worker	6.3100e- 003	4.2700e- 003	0.0491	1.4000e- 004	0.0164	9.0000e- 005	0.0165	4.3600e- 003	9.0000e- 005	4.4400e- 003		14.3189	14.3189	4.7000e- 004	4.3000e- 004	14.4573
Total	8.5200e- 003	0.0595	0.0674	3.5000e- 004	0.0232	6.7000e- 004	0.0239	6.3100e- 003	6.4000e- 004	6.9400e- 003		37.3133	37.3133	1.1700e- 003	3.7700e- 003	38.4646

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/e				lb/d	day						
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2

	ROG	NOx	CO	SO2	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/				lb/d	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	1.1600e- 003	0.0447	0.0159	2.1000e- 004	6.7700e- 003	2.6000e- 004	7.0400e- 003	1.9500e- 003	2.5000e- 004	2.2000e- 003		22.1361	22.1361	6.7000e- 004	3.2100e- 003	23.1088
Worker	5.9300e- 003	3.8200e- 003	0.0456	1.4000e- 004	0.0164	9.0000e- 005	0.0165	4.3600e- 003	8.0000e- 005	4.4400e- 003		13.8668	13.8668	4.2000e- 004	4.0000e- 004	13.9953
Total	7.0900e- 003	0.0485	0.0615	3.5000e- 004	0.0232	3.5000e- 004	0.0236	6.3100e- 003	3.3000e- 004	6.6400e- 003		36.0029	36.0029	1.0900e- 003	3.6100e- 003	37.1041

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/e			lb/d	day							
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2

	ROG	NOx	CO	SO2	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/e				lb/d	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	1.1600e- 003	0.0447	0.0159	2.1000e- 004	6.7700e- 003	2.6000e- 004	7.0400e- 003	1.9500e- 003	2.5000e- 004	2.2000e- 003		22.1361	22.1361	6.7000e- 004	3.2100e- 003	23.1088
Worker	5.9300e- 003	3.8200e- 003	0.0456	1.4000e- 004	0.0164	9.0000e- 005	0.0165	4.3600e- 003	8.0000e- 005	4.4400e- 003		13.8668	13.8668	4.2000e- 004	4.0000e- 004	13.9953
Total	7.0900e- 003	0.0485	0.0615	3.5000e- 004	0.0232	3.5000e- 004	0.0236	6.3100e- 003	3.3000e- 004	6.6400e- 003		36.0029	36.0029	1.0900e- 003	3.6100e- 003	37.1041

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/c	lay		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 1

	ROG	NOx	CO	SO2	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/				lb/d	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	0.0533	0.0344	0.4105	1.2300e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		124.8010	124.8010	3.8100e- 003	3.5600e- 003	125.9573
Total	0.0533	0.0344	0.4105	1.2300e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		124.8010	124.8010	3.8100e- 003	3.5600e- 003	125.9573
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/e	day							lb/c	lay		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000	1 1 1 1				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 1

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/d	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	0.0533	0.0344	0.4105	1.2300e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		124.8010	124.8010	3.8100e- 003	3.5600e- 003	125.9573
Total	0.0533	0.0344	0.4105	1.2300e- 003	0.1479	7.9000e- 004	0.1487	0.0392	7.3000e- 004	0.0400		124.8010	124.8010	3.8100e- 003	3.5600e- 003	125.9573

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/e	day							lb/d	lay		
Archit. Coating	7.0058		, , ,			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	7.1975	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/d	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	0.0000	0.0000	0.0000	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

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/e	day							lb/d	day		
Archit. Coating	7.0058	, , ,	1			0.0000	0.0000	, , ,	0.0000	0.0000		1 1 1	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	7.1975	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/c	lay		
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	0.0000	0.0000	0.0000	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

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	СО	SO2	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/c	lay		
Mitigated	2.0992	1.4261	12.1086	0.0143	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,456.114 3	1,456.114 3	0.2314	0.1224	1,498.376 9
Unmitigated	2.0992	1.4261	12.1086	0.0143	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,456.114 3	1,456.114 3	0.2314	0.1224	1,498.376 9

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market with Gas Pumps	1,215.04	1,215.04	1215.04	651,753	651,753
Automobile Care Center	0.00	0.00	0.00		
Total	1,215.04	1,215.04	1,215.04	651,753	651,753

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00	21	51	28

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
Convenience Market with Gas Pumps	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164
Automobile Care Center	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164

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/e	day							lb/d	day		
NaturalGas Mitigated	1.4000e- 003	0.0128	0.0107	8.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004		15.2995	15.2995	2.9000e- 004	2.8000e- 004	15.3904
NaturalGas Unmitigated	1.4000e- 003	0.0128	0.0107	8.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004		15.2995	15.2995	2.9000e- 004	2.8000e- 004	15.3904

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

	NaturalGa s Use	ROG	NOx	СО	SO2	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/e	day		
Automobile Care Center	104.153	1.1200e- 003	0.0102	8.5800e- 003	6.0000e- 005	1 1 1	7.8000e- 004	7.8000e- 004		7.8000e- 004	7.8000e- 004		12.2533	12.2533	2.3000e- 004	2.2000e- 004	12.3262
Convenience Market with Gas Pumps	25.8919	2.8000e- 004	2.5400e- 003	2.1300e- 003	2.0000e- 005		1.9000e- 004	1.9000e- 004		1.9000e- 004	1.9000e- 004		3.0461	3.0461	6.0000e- 005	6.0000e- 005	3.0642
Total		1.4000e- 003	0.0128	0.0107	8.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004		15.2994	15.2994	2.9000e- 004	2.8000e- 004	15.3904

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	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/d	day							lb/c	lay		
Automobile Care Center	0.104153	1.1200e- 003	0.0102	8.5800e- 003	6.0000e- 005		7.8000e- 004	7.8000e- 004		7.8000e- 004	7.8000e- 004		12.2533	12.2533	2.3000e- 004	2.2000e- 004	12.3262
Convenience Market with Gas Pumps	0.0258919	2.8000e- 004	2.5400e- 003	2.1300e- 003	2.0000e- 005		1.9000e- 004	1.9000e- 004		1.9000e- 004	1.9000e- 004		3.0461	3.0461	6.0000e- 005	6.0000e- 005	3.0642
Total		1.4000e- 003	0.0128	0.0107	8.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004		15.2994	15.2994	2.9000e- 004	2.8000e- 004	15.3904

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

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	со	SO2	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	0.1715	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 003
Unmitigated	0.1715	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 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

Unmitigated

	ROG	NOx	со	SO2	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/e	day		
Architectural Coating	9.6000e- 003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1617					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e- 004	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 003
Total	0.1715	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 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	СО	SO2	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	9.6000e- 003	1 1 1				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1617					0.0000	0.0000		0.0000	0.0000		 - - -	0.0000			0.0000
Landscaping	1.8000e- 004	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 003
Total	0.1715	2.0000e- 005	1.9700e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		4.2200e- 003	4.2200e- 003	1.0000e- 005		4.5000e- 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

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						-
Equipment Type	Number					

11.0 Vegetation