

Greenhouse Gas Emissions Assessment 222 East 4th Avenue Project

San Mateo, California

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September 2022

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LIST OF ATTACHMENTS

Attachment A – CalEEMod Output File for Greenhouse Gas Emissions

LIST OF ACRONYMS AND ABBREVIATIONS

Term	Description
°F	Degrees Fahrenheit
µg/m ³	Micrograms per cubic meter; ppm = parts per million
AB	Assembly Bill
ABAG	Association of Bay Area Governments
AEP	Association of Environmental Planners
AQMD	Air Quality Management District
CalEEMod	California Emissions Estimator Model
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board

LIST OF ACRONYMS AND ABBREVIATIONS

CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CH ₄	Methane
BAAQMD	Bay Area Air Quality Management District
CEQA	California Environmental Quality Act
City	City of San Mateo
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
County	San Mateo County
EO	Executive Order
GHG	Greenhouse gas
GWP	Global warming potential
IPCC	Intergovernmental Panel on Climate Change
ITE	Institute of Transportation Engineers'
MTCO ₂ e	Metric Tons of Carbon Dioxide Equivalents
N ₂ O	Nitrous oxide
Project	222 East 4 th Avenue Project
RTP	Regional Transportation Plan
SB	Senate Bill
SCS	Sustainable Communities Strategy
SFBAAB	San Francisco Bay Area Air Basin
SR	State Route
TDM	Transportation Demand Management
USEPA	U.S. Environmental Protection Agency
VMT	Vehicle Miles Traveled

1.0 INTRODUCTION

This report documents the results of a Greenhouse Gas (GHG) Emissions Assessment completed for the 222 East 4th Avenue Project (Project), located on 222 East 4th Avenue in the City of San Mateo (City), California. The Project includes the demolition of the existing building on site, an approximate 60,965 square foot supermarket, and the construction of a new five-story 155,052 square foot mixed-use office/residential/commercial building and associated features in the City of San Mateo (City), California. This assessment is based on the methodology recommended by the City of San Mateo and the Bay Area Air Quality Management District (BAAQMD) for project-level review and was prepared with consideration of the emissions reduction actions proposed by the Project. The purpose of this assessment is to estimate Project-generated GHG emissions attributable to the Project and to determine the level of impact the Project would have on the environment.

1.1 Project Location

The approximate 1.1-acre Project Site (APNs 034-176-050, 034-176-070, 034-176-080, 034-176-090) is bounded by East 4th Avenue to the northwest, South B Street to the northeast, East 5th Avenue to the southeast, and South Ellsworth Avenue to the southwest. The Project Site is designated as Downtown Retail Core under the City's Downtown Area Plan and is zoned CBD/R (Central Business District/Residential Overlay District – Mixed Use). The Downtown Area Plan generally describes the Downtown Retail Core designation as a good mix of ground floor retail uses that will contribute to foster retail vitality and downtown's pedestrian-oriented environment. The San Mateo Municipal Code states that the purpose of the CBD District is to encourage the development and re-use of existing downtown structures as a center for retail, cultural, entertainment, and community services uses. Pedestrian activity should be strongly encouraged at the ground floor level, while upper floor office and residential uses should be encouraged to promote active daytime and nighttime use of the downtown area. The Residential Overlay District requires that residential development on properties zoned CBD/R be subject to /R density standards.

1.2 Project Description

The Project proposes the demolition of the existing building on site, an approximate 60,965 square foot supermarket, and the construction of a new five-story 155,052 square foot mixed-use office/residential/commercial building. The Proposed Project includes 104,722 square-feet of office space, 17,658 square-feet of retail space (supermarket), 8,971 square-feet of residential space in the form of single bedroom apartments and studios. The retail space would be located on the ground floor of the proposed building, the office space would be spread throughout the first four floors, and the residential space would be split between the ground floor (i.e. residential lobby/elevator) and the fifth floor living areas. The residential space would consist of a total of 10 units made up of eight one-bedroom units and two studio units. The ground floor would also include 12,392 square-feet of covered parking area, and approximately 9,309 square-feet of shared use space (i.e., lobbies, utility rooms, etc.) split between the ground floor and fifth floor. The proposed building would include two outdoor terraces on the third level, one terrace on the fourth level, and a roof deck totaling 14,821 square-feet. The roof deck would include 1,724 square-feet of common usable open space for the proposed residential tenants. The Project would

also include an approximate 2,070 square-foot community open space and an approximate 1,450 square-foot outdoor dining space both located at the western corner of the Project Site, at the intersection of East 4th Avenue and South Ellsworth Avenue. The community open space and outdoor dining space would include landscaping and outdoor seating.

Site Access and Parking

Vehicle access to the Project Site would primarily be provided via a parking garage entrance on East 5th Avenue. From this garage entrance, vehicles would have access to covered parking on the ground floor and the two basement levels. The Project would include approximately 239 total physical parking spaces as well as approximately 50-60 valet parking spaces. Out of the 239 total parking spaces, approximately 36 spaces would include electric vehicle (EV) charging stations. The Project would also include a truck loading area along South B Street. The Project would also retain some existing uncovered surface parking spaces along East 4th Avenue and South Ellsworth Avenue.

The Project would also include bicycle storage rooms with capacity for 21 bikes and additional bike racks for 17 bikes. Pedestrian access to the ground floor of the proposed building would be provided via several entrances along East 4th Avenue, South B Street, and South Ellsworth Avenue.

Landscaping and Trees

There is one existing tree on-site and 38 street trees located around the perimeter of the Project Site. The Project would remove all 39 existing trees, none of which are considered Heritage Trees under the City's Protected Trees Ordinance (Municipal Code Chapter 13.40). The Project would plant approximately 37 new trees, resulting in a net decrease of two trees on-site. Landscaping would be provided around the perimeter of the proposed building, in the community open space, along the third-floor terrace, and along portions of the perimeter of the rooftop.

Off-Site Improvements

Off-site improvements include the following:

- Remove and replace curb, gutter, sidewalk, curb extensions, and ADA curb ramps along all frontages.
- Curb to curb pavement restoration (grind & overlay) and striping along all frontages including intersections.
- Street lighting along all frontages.
- Bike lane improvement along B street.
- Landscaping including, tree wells, street trees and Green Infrastructure along frontages.
- New 18" Storm Drain line installation along B, Ellsworth and portion of 4th and 5th Avenue.
- Utility connection
- Possible signal improvement

Green Building Measures

The Project would be designed for energy efficiency and water conservation in accordance with the 2019 California Green Building Standards Code (CALGreen). This includes mandatory installation of electric

vehicle charging stations, low-flow plumbing fixtures, and low-water use landscaping. In addition, photovoltaic panels would be installed on the rooftop. The Project would conform to the City's Reach Code (Municipal Code Chapter 23.24), which requires new mixed-use buildings to be all-electric (no natural gas infrastructure).

Construction

It is anticipated that the Project would be constructed over an approximate 20-month period. It is estimated that construction of the Project would require the export of approximately 25,828 cubic yards of soil material. Construction equipment would be staged on the Project Site, as necessary. Construction hours in the City of San Mateo are between 7:00 AM to 7:00 PM Monday through Friday, 9:00 AM to 5:00 PM on Saturdays, and 12:00 PM to 4:00 PM on Sundays and holidays.

2.0 GREENHOUSE GAS EMISSIONS

2.1 Greenhouse Gas Setting

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead trapped, resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are CO₂, methane (CH₄), and N₂O. Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic factors together (Intergovernmental Panel on Climate Change [IPCC] 2014).

Table 3-1 describes the primary GHGs attributed to global climate change, including their physical properties, primary sources, and contributions to the greenhouse effect.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH₄ traps over 25 times more heat per molecule than CO₂, and N₂O absorbs 298 times more heat per molecule than CO₂ (IPCC 2014). Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO₂e), which weight each gas by its global warming potential. Expressing GHG emissions in CO₂e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms. Of the total annual human-caused CO₂

emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO₂ emissions remains stored in the atmosphere (IPCC 2013).

Table 3-1. Greenhouse Gases	
Greenhouse Gas	Description
CO ₂	Carbon dioxide is a colorless, odorless gas. CO ₂ is emitted in a number of ways, both naturally and through human activities. The largest source of CO ₂ emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO ₂ emissions. The atmospheric lifetime of CO ₂ is variable because it is so readily exchanged in the atmosphere. ¹
CH ₄	Methane is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH ₄ to the atmosphere. Natural sources of CH ₄ include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH ₄ is about 12 years. ²
N ₂ O	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N ₂ O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N ₂ O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N ₂ O is approximately 120 years. ³

Sources: ¹USEPA 2016a, ²USEPA 2016b, ³USEPA 2016c

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; it is sufficient to say the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

2.1.1 Sources of Greenhouse Gas Emissions

In 2021, CARB released the 2021 edition of the California GHG inventory covering calendar year 2019 emissions. In 2019, California emitted 418.2 million gross metric tons of CO₂e including from imported electricity. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2019, accounting for approximately 40 percent of total GHG emissions in the State. When emissions from extracting, refining and moving transportation fuels in California are included, transportation is responsible for over 50 percent of statewide emissions in 2019. Continuing the downward trend from 2018, transportation emissions decreased 3.5 million metric tons of CO₂e in 2019,

only being outpaced by electricity, which reduced emissions by 4.3 million metric tons of CO₂e in 2019. Emissions from the electricity sector account for 14 percent of the inventory and have shown a substantial decrease in 2019 due to increases in renewables. California's industrial sector accounts for the second largest source of the State's GHG emissions in 2019, accounting for 21 percent (CARB 2021).

2.2 Regulatory Framework

2.2.1 State

2.2.1.1 Executive Orders S-3-05 and B-30-15

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the State. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

On April 20, 2015 Governor Brown signed EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's executive order aligns California's GHG reduction targets with those of leading international governments such as the European Union, which adopted the same target in October 2014. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2 degrees Celsius, the warming threshold at which major climate disruptions are projected, such as super droughts and rising sea levels.

2.2.1.2 Assembly Bill 32 Climate Change Scoping Plan and Updates

In 2006, the California legislature passed Assembly Bill (AB) 32 (Health and Safety Code § 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 required CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which outlined measures to meet the 2020 GHG reduction goals. California exceeded the target of reducing GHG emissions to 1990 levels by the year 2017.

The Scoping Plan is required by AB 32 to be updated at least every five years. The latest update, the 2017 Scoping Plan Update, addresses the 2030 target established by Senate Bill (SB) 32 as discussed below and establishes a proposed framework of action for California to meet a 40 percent reduction in GHG emissions by 2030 compared to 1990 levels. The key programs that the Scoping Plan Update builds on include increasing the use of renewable energy in the State, the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and reduction of methane emissions from agricultural and other wastes.

2.2.1.3 Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include § 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

2.2.1.4 Senate Bill 100 of 2018

In 2018, SB 100 was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

2.2.1.5 2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings

The Building and Efficiency Standards (Energy Standards) were first adopted and put into effect in 1978 and have been updated periodically in the intervening years. These standards are a unique California asset that have placed the State on the forefront of energy efficiency, sustainability, energy independence and climate change issues. The 2019 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2019 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The 2019 standards are a major step toward meeting Zero Net Energy. The most significant efficiency improvement to the residential Standards include the introduction of photovoltaic into the perspective package, improvements for attics, walls, water heating and lighting. Buildings permitted on or after January 1, 2020, must comply with the 2019 Standards.

In 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CalGreen Building Standard (CalGreen) and establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality. Like Part 6 of Title 24, the CalGreen standards are periodically updated, with increasing energy savings and efficiencies associated with each code update. CalGreen contains voluntary "Tier 1" and "Tier 2" standards that are not mandatory statewide but could be required by a City or County. These are 'reach' standards that can be adopted by local jurisdictions and may be incorporated as mandatory standards in future code cycles.

2.2.2 Local

2.2.2.1 Bay Area Air Quality Management District

To provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, BAAQMD CEQA Guidelines include guidance on assessing GHGs and climate change impacts as required under CEQA Section 15183.5(b). On April 20, 2022, the Draft Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans (2022) was adopted. This document presents a project-level operational threshold of significance for GHG emissions based on compliance with a Qualified GHG Reduction Strategy **or** adherence to a suite of BAAQMD performance standards for land uses projects directly related to building design, transportation and consistency with the CEQA Guidelines Section 15183.5(b).

2.2.2.2 The City of San Mateo (City) Climate Action Plan

The City adopted an updated CAP in April 2020, which updates and consolidated the various City's GHG reduction efforts based on the vision of San Mateo residents, businesses, and local government. The CAP provides the framework for San Mateo to reduce its community-wide GHG emissions in a manner consistent with state reduction targets and goals for 2030 and 2050. The CAP was prepared consistent with the California Environmental Quality Act (CEQA) Guidelines for Plans for the Reduction of Greenhouse Gas Emissions (CCR 15183.5). This allows the 2020 CAP to support (and possibly streamline) environmental review of GHG emissions related to future development projects within the City. The 2020 CAP is a direct update to the 2015 CAP. The 2020 CAP analyzes San Mateo's progress to date in meeting its GHG reduction targets and contains new information to achieve more significant and longer-term GHG reductions.

A CAP is a comprehensive strategy for a community to reduce emissions of GHGs, which, according to scientific consensus, are primarily responsible for causing climate change. The CAP identifies a strategy, reduction measures, and implementation actions the City will use to achieve targets consistent with state recommendations of 4.3 metric tons of CO₂e (MTCO₂e) per person by 2030 and 1.2 MTCO₂e per person by 2050. The City CAP includes five key pieces:

1. An inventory of the annual GHG emissions attributable to San Mateo based on the types of activities occurring within the community and guidance from various protocols and agencies.
2. A forecast of what GHG emissions are likely to look like in 2030 and 2050 based on expected population and economic growth as predicted in the City's General Plan; with the consideration of major CO₂e emission reduction policies.
3. A reduction target, which identifies goals for reducing GHG emissions by 2030 and 2050.
4. Reduction strategies, which describe the actions the community intends to take to achieve the reduction target. Each strategy identifies the amount of GHGs that will be reduced once the strategy is implemented. The CAP also estimates benefits of existing programs.

5. An implementation and monitoring program to track progress toward the reduction target and the status of the reduction strategies. A CAP consistency checklist for future development projects is included in the implementation program.

2.2.2.3 City CAP Consistency Checklist

As part of the CAP, the City developed a CAP consistency checklist for land use projects. The checklist is a streamlined tool that identifies the CAP's mandatory requirements and provides an opportunity for project applicants to demonstrate project consistency with GHG reduction measures and actions in the CAP. The checklist identifies a general development class and the strategies which must be implemented for the Project to be compliant with the CAP. The checklist is also an opportunity to identify additional Project characteristics that support the GHG reduction targets and programs in the CAP. If a project does not comply with the applicable mandatory GHG reduction measures, mitigation measures must be implemented to require compliance.

2.3 Greenhouse Gas Emissions Impact Assessment

2.3.1 Thresholds of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to GHG emissions if it would:

- 1) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
- 2) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases or

The Appendix G thresholds for GHG emissions do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or other performance-based standards." (14 CCR 15064.4(b)). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change." (14 CCR 15064.4(c)). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that “[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence” (14 CCR 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA’s requirements for cumulative impact analysis (see CEQA Guidelines Section 15130). As a note, the CEQA Guidelines were amended in response to Senate Bill 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines Section 15064(h)(3), a project’s incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a “water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions.” Put another way, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

The local air quality agency regulating the SFBAAB is the BAAQMD, the regional air pollution control officer for the basin. As previously stated, BAAQMD CEQA Guidelines include guidance on assessing GHGs and climate change impacts as required under CEQA Section 15183.5(b) and establish thresholds of significance for impacts related to GHG emissions. The City has determined, in its discretion, that the BAAQMD recommended GHG significance thresholds are based on substantial evidence to “attribute an appropriate share of GHG reductions necessary to reach statewide reduction goals to new land use development projects in the BAAQMD’s jurisdiction that are evaluated pursuant to CEQA” (BAAQMD 2017a). Therefore, the City uses the BAAQMD CEQA Guidelines to determine the level of impact from the project contributions of GHG emissions.

As previously described, BAAQMD’s Draft Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans presents a project-level operational threshold of significance for GHG emissions based on compliance with a Qualified GHG Reduction Strategy or adherence to a suite of BAAQMD performance standards for land uses projects directly related

to building design, transportation and consistency with the CEQA Guidelines Section 15183.5(b). The City CAP is a Qualified GHG Reduction Strategy. The 2020 City CAP is the most recent update after the 2015 CAP and is written to align with the goals of SB 32. The CAP addresses estimate emissions beyond 2020, as informed by the post-2020 GHG reduction targets of SB 32 and EO S-3-05. Specifically, the City set emission reduction goals of 15 percent below 2005 emissions levels by 2020, 4.3 MTCO₂e per person by 2030, and 1.2 MTCO₂e per person by 2050. Therefore, Project compliance with the CAP adequately establishes Project compliance with statewide GHG reduction goals for the year 2030 associated with SB 32, and with statewide GHG reduction goals for the years beyond 2030.

2.3.2 Methodology

Construction and operations of the Proposed Project are compared for consistency with the overall Citywide GHG-reduction program encapsulated in the City's 2020 CAP. Emissions were modeled using CalEEMod, version 2020.4.0. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Project construction generated GHG emissions were calculated using CalEEMod model defaults for San Mateo County. Operational GHG emissions were based on CalEEMod model defaults for San Mateo County coupled with land use data contained in the Project Site plans prepared by KSH Architects and Project traffic trip generation rates identified by Kittelson & Associates (2022). For the purposes of this analysis, projected operational emissions associated with proposed operations are compared to the existing baseline, an existing 60,965 square-foot supermarket.

2.3.3 Impact Analysis

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project Site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 3-2 illustrates the specific construction generated GHG emissions that would result from construction of the Project. Once construction is complete, the generation of these GHG emissions would cease.

Table 3-2. Construction-Related Greenhouse Gas Emissions	
Emissions Source	CO₂e (Metric Tons/ Year)
Construction Year 1	348
Construction Year 2	623
Construction Year 3	71
Total Construction Emissions	1,042

Source: CalEEMod version 2020.4.0. Refer to Attachment A for Model Data Outputs.

As shown in Table 3-2, Project construction would result in the generation of approximately 1,042 MTCO₂e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. Furthermore, GHG emissions generated by the construction sector have been

declining in recent years. For instance, construction equipment engine efficiency has continued to improve year after year. The first federal standards (Tier 1) for new off-road diesel engines were adopted in 1994 for engines over 50 horsepower (hp) and were phased in from 1996 to 2000. In 1996, a Statement of Principles pertaining to off-road diesel engines was signed between the USEPA, CARB, and engine makers (including Caterpillar, Cummins, Deere, Detroit Diesel, Deutz, Isuzu, Komatsu, Kubota, Mitsubishi, Navistar, New Holland, Wis-Con, and Yanmar). On August 27, 1998, the USEPA signed the final rule reflecting the provisions of the Statement of Principles. The 1998 regulation introduced Tier 1 standards for equipment under 50 hp and increasingly more stringent Tier 2 and Tier 3 standards for all equipment with phase-in schedules from 2000 to 2008. As a result, all off-road, diesel-fueled construction equipment manufactured in 2006 or later has been manufactured to Tier 3 standards. Tier 3 engine standards reduce precursor and subset GHG emissions such as nitrogen oxide by as much as 60 percent. On May 11, 2004, the USEPA signed the final rule introducing Tier 4 emission standards, which were phased in over the period of 2008-2015. The Tier 4 standards require that emissions of nitrogen oxide be further reduced by about 90 percent. All off-road, diesel-fueled construction equipment manufactured in 2015 or later will be manufactured to Tier 4 standards.

In addition, the California Energy Commission recently released the 2019 Building Energy Efficiency Standards contained in the California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code). Both the 2016 and 2019 updates to the Building Energy Efficiency Standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions, and alterations to existing buildings. For instance, effective January 1, 2017, owners/builders of construction projects have been required to divert (recycle) 65 percent of construction waste materials generated during the project construction phase. This requirement greatly reduces the generation of GHG emissions by reducing decomposition at landfills, which is a source of CH₄, and reducing demand for natural resources.

Long-term operational GHG emissions attributable to the Project are identified in Table 3-3

Table 3-3. Operational-Related Greenhouse Gas Emissions	
Emission Source	CO₂e (Metric Tons/ Year)
Proposed Project	
Area Source	0
Energy	0
Mobile	1,008
Waste	101
Water	24
Total	1,133
Existing Onsite Land Uses	
Area Source	0
Energy	134
Mobile	2,385
Waste	173
Water	10
Total	2,702
Difference	
Area Source	0
Energy	-134
Mobile	-1377
Waste	-72
Water	+14
Total	-1,569

Source: CalEEMod version 2020.4.0. Refer to Attachment A for Model Data Outputs.

Notes: Emission projections predominately based on CalEEMod model defaults for San Mateo County. Project emissions projections account for trip generation rates identified by Kittelson & Associates (2022), compliance with City Municipal Code Chapter 23.24, which prohibits the use of natural gas at the Project, and Peninsula Clean Energy CO₂e intensity factor of 0 pounds of CO₂e per electrical megawatt generated. Baseline emissions account for the current use of natural gas appliances.

As shown in Table 3-3, there would be a decrease in operational GHG emissions over the existing baseline of 1,569 MTCO₂e per year as a result of the Project.

2.3.3.1 *Generation of Greenhouse Gas Emissions Resulting in Conflicts with any Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases*

San Mateo Climate Action Plan

The City CAP (2020) is the most recent update to the prior 2015 City CAP. The CAP is a strategic planning document that identifies sources of GHG emissions within the city's boundaries, presents current and future emissions estimates, identifies a GHG reduction target for future years, and presents strategic programs, policies, and projects to reduce emissions from the energy, transportation, land use, water use, and waste sectors. The CAP includes GHG reduction measures in the form of GHG reduction programs, policies, projects, and strategies. The BAAQMD Qualified Greenhouse Gas Emissions Reduction Program criteria, in conjunction with the BAAQMD's CEQA Guidelines (2017a), guided the development of the emissions reduction program developed by the City. All three guidelines comply with the requirements of statewide GHG-reduction targets and achieve the goals of the Scoping Plan.

A Qualified Greenhouse Gas Emissions Reduction Program adopted by a local jurisdiction should include the elements below, as described in CEQA Guidelines Section 15183.5. The BAAQMD's CEQA Guidelines outline the methodology to determine whether a GHG reduction program meets these requirements.

- Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area.
- Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable.
- Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area.
- Specify measures or a group of measures, including performance standards, which substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.
- Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels.
- Be adopted in a public process following environmental review.

The City CAP meets BAAQMD guidelines as follows:

- The CAP quantifies citywide GHG emissions, both existing and projected over the specified time period. The CAP projects emissions for the years 2020, 2030, and 2050 based on growth assumptions from the California Department of Finance and ABAG and were approved by City staff. Relative to 2017 emissions, San Mateo's GHG emissions are expected to rise by more than 23 percent by 2050 if no action is taken.
- The CAP establishes a level, based on substantial evidence, below which the contribution of emissions from activities covered by the plan would not be cumulatively considerable.

- The CAP policy provisions reduce emissions to 15 percent below 2005 emissions levels by 2020.
- The CAP policy provisions reduce emissions to 4.3 MTCO₂e per person by 2030.
- The CAP policy provisions reduce emissions to 1.2 MTCO₂e per person by 2050.
- The CAP identifies and analyzes the emissions resulting from specific actions or categories of actions anticipated within the City.
- The CAP specifies measures or a group of measures, including performance standards.
- The CAP establishes a mechanism to monitor its progress toward achieving the level and to require amendment if the plan is not achieving specific levels.

The reduction measures contained in the CAP build on inventory results and key opportunities prioritized by City staff, members of the San Mateo Sustainability Commission, and members of the public. The CAP strategies consist of measures and actions that identify the steps the City will take to support reductions in GHG emissions. The City will achieve these reductions in GHG emissions through a mix of voluntary programs and new strategic standards. All standards presented in the CAP respond to the needs of development, avoiding unnecessary regulation, streamlining new development, and achieving more efficient use of resources.

The CAP specifically states, "A project-specific environmental document that relies on this CAP for its cumulative impact analysis must identify specific GHG reduction measures applicable to the project and demonstrate the project's incorporation of the measures. Project applicants and City staff will identify specific measures applicable to each project during project review. If applicable measures are not otherwise binding and enforceable, they must be incorporated as mitigation measures for the project."

A specific project proposal is considered consistent with the City CAP if it complies with the "required" GHG reduction measures in the adopted CAP. The required GHG reduction measures applicable to the Proposed Project, which the Project would comply with, include the following:

Reduction Measure BE 1: *All new development: The project does not have natural gas connections, and does not have any natural gas appliance or other equipment installed.* The Project does not have any natural gas connections and no natural gas appliances installed. The Project would conform to the City's Reach Code (Municipal Code Chapter 23.24), which also requires new mixed-use buildings to be all-electric (no natural gas infrastructure).

Reduction Measure RE 2: *All new developments with residential units: The project includes an on-site renewable energy system that meets or exceeds the minimum requirements of the California State Building Code:* The Project is required, per California state law, to meet the minimum requirements of the 2019 California State Building Code for Project approval. In addition, Section 23.24.030 of the City Municipal Code states "New residential buildings four stories or more shall provide a minimum of a 3-kilowatt photovoltaic system". The proposed building included in the Project would be required to comply with this provision of the Municipal Code. As described in the Planning Application for the Proposed Project, the roof will contain 1,000 square feet of 5 kilowatt solar panels.

Reduction Measure EE 3: *All new developments with residential units: The project includes trees that provide shade to residences:* Landscaping would be provided around the perimeter of the

proposed building, in the community open space, along the third-floor terrace, and along portions of the perimeter of the rooftop.

Reduction Measure CF 1(a): *All new development with dedicated offstreet parking: The project includes parking spaces with installed EV chargers or are pre-wired for EV chargers, consistent with state and any local regulations:* Out of the 239 total Project parking spaces, approximately 36 spaces would include electric vehicle (EV) charging stations.

Reduction Measure ST 6: *New developments of at least six multifamily units and/or 10,000 square feet of nonresidential space- Implement TDM strategies to comply with the appropriate trip reduction target identified in applicable area plans and San Mateo Citywide TDM Plan:* Transportation Demand Management (TDM) is a combination of services, incentives, facilities, and actions that reduce single-occupant vehicle trips to help relieve traffic congestion, parking demand, and air pollutants, including GHG emissions. The purpose of TDM is to promote more efficient utilization of existing transportation facilities, and to ensure that new developments are designed to maximize the potential for sustainable transportation usage. A part of the TDM Plan, the Project is proposing bicycle storage rooms with capacity for 21 bikes and additional bike racks for 17 bikes.

Additionally, the Project Site is located approximately 65 feet from a samTrans bus stop located at the corner of South Ellsworth and East 4th Avenue. This accessibility to mass transit would result in fewer vehicle trips and vehicle miles traveled (VMT) compared to the statewide average and encourage walking and non-automotive forms of transportation, thus resulting in the reduction of, transportation-related emissions. Further, the Project is also located within easy access to numerous restaurants, markets, and other services in the vicinity of the Project Site. These services are conveniently located for future residents of the Proposed Project, which will further reduce the number of vehicle trips. Additionally, the Project Site would be located within an area surrounded by other offsite nonresidential and residential uses. The Project includes bike storage, which would encourage residents to bike rather than drive, when feasible. Lastly it is noted, as shown in Table 3-3, there would be a decrease in operational GHG emissions of 1,569 MTCO₂e per year compared with the existing baseline.

Reduction Measure ST 7: *All new development: Be located along El Camino Real, within one-half mile of any Caltrain station, or in the Rail Corridor Transit Oriented Development or Hillsdale Station Area Plan areas:* The Project Site would be located less than one-half mile (0.3 mile) from the nearest Caltrain station (the San Mateo Station), located at 385 First Avenue.

Reduction Measure SW 1: All developments with multifamily units or nonresidential space: provide an area of sufficient space to store and allow access to a compost bin; the Project plans show access to composting.

Based on review of the Project Plans, the following applicable City CAP reduction measure requirements are not proposed by the Project:

WW 3: All new development: include a greywater system

All development in the City, including the Project, is required to adhere to all City-adopted policy provisions, including those contained in the adopted CAP. The Project applicant must complete a checklist

to confirm consistency with the CAP to the satisfaction of City staff. The City ensures all provisions of the CAP are incorporated into projects and their permits through development review and applications of conditions of approval as applicable. The Proposed Project would not produce enough greywater internally to feasibly be required to construct the needed infrastructure in downtown San Mateo. Therefore, the implementation of Reduction Measure WW 3 is considered infeasible for the Project until such time that the infrastructure for greywater exists in downtown San Mateo.

As demonstrated above, the Project does comply with all applicable and feasible reduction measures included in the CAP. As also demonstrated, there would be a decrease in operational GHG emissions of 1,569 MTCO₂e per year compared with the existing baseline.

BAAQMD Plan 2017 Clean Air Plan

The 2017 Clean Air Plan (BAAQMD 2017b) provides a regional strategy to protect public health and protect the climate. The 2017 Clean Air Plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious GHG reduction targets for 2030 and 2050 and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG emissions reduction targets. The 2017 Clean Air Plan includes a wide range of control measures designed to reduce emissions of CH₄ and other 'super GHGs' in the near term, and to decrease emissions of CO₂ by reducing fossil-fuel combustion.

The 2017 Clean Air Plan includes a diverse range of control measures designed to decrease GHG emissions. Consistency of the Proposed Project with 2017 Clean Air Plan is demonstrated by assessing whether the Project supports all of the Project-applicable Clean Air Plan control measures for GHG emissions. The GHG-related control strategies of the Clean Air Plan include *Mobile Source Measures*, *Transportation Control Measures* and *Energy and Climate Measures*.

Note, the *Land Use and Local Impact Measures* of the 2017 Clean Air Plan address the exposure of sensitive receptors to toxic air contaminants and is thereby not applicable to this impact discussion of GHG emissions. Additionally, the *Stationary Source Measures* in the Clean Air Plan such as those implemented to control emissions from metal melting facilities, cement kilns, refineries, and glass furnaces are not applicable to the Proposed Project.

Transportation and Mobile Source Control Measures

The BAAQMD identifies transportation and mobile source control measures as part of the Clean Air Plan to reduce emissions from these sources. The transportation control measures are designed to reduce emissions from motor vehicles by reducing vehicle trips and VMT in addition to vehicle idling and traffic congestion. The Proposed Project is consistent with the Clean Air Plan's transportation and mobile source control measures in that it is the redevelopment of an existing urban environment. The Project is considered "infill development" as it proposes to redevelop a build-out property and enhance the physical design of the urban environment. Under Public Resources Code (PRC) section 21061.3, an "infill site" is defined as a site that "has been previously developed for qualified urban uses." In turn, a "qualified urban use" is defined, pursuant to PRC section 21072, as "a residential, commercial, or public institutional, transit or transportation passenger facility, or retail use, or any combination of those uses." Additionally, the

Project Site is located in an “urbanized area,” which is defined under PRC section 21071 as “an incorporated city” that meets the criteria of having a population of at least 100,000 persons.

The Proposed Project would be located in close proximity to the San Mateo Caltrain station, which is located less than 0.3 mile to the northwest of the site at 385 First Avenue. At this location, Caltrain provides for local, limited and Baby Bullet service. There are two bus stops in close proximity to the Project Site, one on East 4th Street and South Ellsworth Avenue and the other on East 4th Avenue and North Delaware Street. The public transit accessibility would result in fewer vehicle trips and VMT compared to the statewide average and encourage walking and non-automotive forms of transportation, thus resulting in the reduction of, or no increase in, transportation-related emissions. The Project would also provide short-term and long-term bike storage.

Pedestrian access to the Project Site would be provided via sidewalks along East 4th Avenue Street and South Ellsworth Avenue. The Proposed Project would provide convenient accessibility to nearby retail shops, markets, offices and more. These places of commerce and employment are conveniently located for the future residents of the Proposed Project to access via walking, biking, or a short vehicle trip, which will further reduce VMT.

These aspects of the Project would result in the generation of a reduced amount of GHG emissions. According to the U.S. Environmental Protection Agency (USEPA), redevelopments (namely at brownfield sites such as the Project Site) produce 32 to 57 percent less emissions per capita relative to conventional developments (USEPA 2011); this is because the number of daily vehicle trips and daily VMT associated with the redevelopment tend to be lower compared with development on vacant land. As a result, the Proposed Project would not conflict with the identified transportation and mobile source control measures of the Clean Air Plan.

Land Use and Local Impact Measures

The BAAQMD Clean Air Plan includes *Land Use and Local Impact Measures* to ensure that planned growth is focused in a way that protects the people and environment from exposure of emissions associated with stationary and mobile sources and to promote mixed-use, compact development to reduce motor vehicle travel. The *Land Use and Local Impact Measures* identified by the BAAQMD are not specifically applicable to the Proposed Project as they relate to actions the BAAQMD will take to reduce impacts from goods movement and health risks in affected communities at the plan level. The measures also detail new regulatory actions the BAAQMD will undertake related to land use, including updates to the CEQA Air Quality Guidelines, and indirect source review.

However, the Proposed Project would be a redevelopment, infill Project in support of these measures. For instance, the Project can be identified for its “location efficiency.” Location efficiency describes the location of the Project relative to the type of urban landscape its proposed to fit within, such as an “urban area,” “compact infill,” or “suburban center.” The Project site represents an urban/compact infill location within an area of the city developed with residential and commercial uses. The Project site is served by existing public transportation as previously described; it is within an active urban center surrounded with many existing offsite office, commercial, and residential buildings. The Project would locate additional residential land uses in close proximity to existing offsite office, commercial, and residential uses.

Therefore, the Project would provide future Project residents with the potential work opportunities and commercial service options within the Site and in close proximity to the Site. Additionally, the Project would locate potential employment opportunities for residents already living in the vicinity. The location efficiency of the Project site would result in synergistic benefits that would reduce vehicle trips and VMT compared to the statewide average and would result in corresponding reduction of transportation related GHG emissions.

The Project would increase housing density in the vicinity over current conditions. Increased density reduces emissions associated with transportation as it reduces the distance people travel for work or services and provides a foundation for the implementation of other strategies to reduce GHG emissions.

Energy and Climate Control Measures

The Clean Air Plan also includes Energy and Climate Control Measures, which are designed to reduce ambient concentrations of emissions of CO₂. Implementation of these measures is intended to promote energy conservation and efficiency in buildings throughout the community, promote renewable forms of energy production, reduce the “urban heat island” effect by increasing reflectivity of roofs and parking lots, promote the planting of (low volatile organic compound-emitting) trees to reduce biogenic emissions, lower air temperatures, provide shade, and absorb air pollutants. The measures include voluntary approaches to reduce the heat-island effect by increasing shade in urban and suburban areas through the planting of trees. The Proposed Project would increase landscaping throughout the Project Site which would help reduce the urban heat-island effect.

The Project is consistent with the 2017 Clean Air Plan. The Proposed Project would conform to the Project-applicable control measures in the Clean Air Plan and would not disrupt or hinder the implementation of any other control measures.

ABAG Final Plan Bay Area 2050

ABAG’s Plan Bay Area is the RTP/SCS for the San Francisco Bay Area. Plan Bay Area establishes GHG emissions goals for automobiles and light-duty trucks, a potent source of GHG emissions attributable to land use development. As previously described, ABAG was tasked by CARB to achieve a 19 percent reduction of passenger car and light truck automotive GHG emissions by 2035 compared to 2005. Plan Bay Area 2050 establishes an overall mechanism to achieve these GHG targets for the Project region consistent with the target date of SB 32. According to ABAG, the San Francisco Bay Area will exceed the mandated GHG reduction target of 19 percent for 2035 by implementing Plan Bay Area.

The RTP/SCS contains thousands of individual transportation projects, including highway improvements, railway electrification, bicycle lanes, new transit hubs, and replacement bridges. These future investments seek to reduce traffic bottlenecks, improve the efficiency of the region’s network, and expand mobility choices. The RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding. In addition, the RTP/SCS is supported by a combination of transportation and land use strategies that help the region achieve state GHG emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, support the vital goods movement industry, and use resources more efficiently.

Plan Bay Area 2050's core strategy is "focused growth" in existing communities along the existing transportation network. This strategy allows the best "bang for the buck" in achieving key regional economic, environmental, and equity goals: it builds upon existing community characteristics, efficiently leverages existing infrastructure, and mitigates impacts on areas with less development. Plan Bay Area 2050's Growth Geographies identify a mix of locally identified Priority Development Areas, areas near high quality transit and areas of high opportunity as communities poised to accommodate additional growth. Priority Development Areas are defined as areas generally near existing job centers or frequent transit that are locally identified (i.e., identified by towns, cities or counties) for housing and job growth. Meanwhile, Plan Bay Area 2050 identifies areas outside of the existing urban footprint or in areas that are at a very high risk of wildfire as areas where additional construction should be deprioritized.

The Project Site is located in an area identified as the "San Mateo Downtown Priority Development Area" in Plan Bay Area 2050 (ABAG 2020). Therefore, Plan Bay Area 2050 considers the Project location to be included in an area near high-quality transit and within a communities poised to accommodate additional growth, and therefore encourages urban growth in the Project Area. Furthermore, the Project is proposed within a built environment (infill development). The Project will increase density and land use diversity in the vicinity over current conditions. Increased density, measured in terms of persons, jobs, or building square footage, as well as increased land use diversity, potentially reduces emissions associated with transportation as it reduces the distance people travel for work or services and provides a foundation for the implementation of other strategies such as enhanced transit services. The Project would increase the site density from 60,965 total square feet of retail space to 155,052 square-foot mixed use-residential-retail-office space.

For these reasons, the Project is consistent with Plan Bay Area. Based on the Project's proximity to public transportation, availability of bike storage space and proximity to retail stores, it can be assumed that regional mobile emissions will decrease in line with the goals of Plan Bay Area with implementation of the Proposed Project. Implementing ABAG's RTP/SCS will greatly reduce the regional GHG emissions from transportation, and the Proposed Project will not obstruct the achievement of Plan Bay Area's emission reduction targets.

3.0 REFERENCES

- ABAG. 2021. Bay Area 2050. https://www.planbayarea.org/sites/default/files/documents/2021-05/Draft_Plan_Bay_Area_2050_May2021_0.pdf
- _____. 2020. Bay Area 2050 GIS Data Catalog. <https://opendata.mtc.ca.gov/datasets/MTC::priority-development-areas-plan-bay-area-2050/about>
- BAAQMD. 2022. Draft Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans
- _____. 2017a. Bay Area Air Quality Management District CEQA Air Quality Guidelines.
- _____. 2017b. Bay Area Final 2017 Clean Air Plan.
- California Air Pollution Control Officers Association (CAPCOA). 2021. California Emissions Estimator Model (CalEEMod), version 2020.4.0.
- California Air Resources Board (CARB). 2021. California Greenhouse Gas Emission Inventory 2021 Edition. <https://ww2.arb.ca.gov/ghg-inventory-data>
- _____. 2008. Climate Change Scoping Plan Appendices (Appendix F).
- Crockett, Alexander G. 2011. Addressing the Significance of Greenhouse Gas Emissions Under CEQA: California's Search for Regulatory Certainty in an Uncertain World.
- Kittelson & Associates, Inc. 2022. San Mateo Draeger's Traffic Impact Analysis – Project Travel Demand Memo.
- KSH Architects. 2022. 222 E 4th Street Plans.
- Intergovernmental Panel on Climate Change (IPCC). 2014. Climate Change 2014 Synthesis Report: Approved Summary for Policymakers. <http://www.ipcc.ch/>.
- _____. 2013. Carbon and Other Biogeochemical Cycles. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. http://www.climatechange2013.org/images/report/WG1AR5_ALL_FINAL.pdf.
- U.S. Environmental Protection Agency (USEPA). 2016a. Climate Change – Greenhouse Gas Emissions: Carbon Dioxide. <http://www.epa.gov/climatechange/emissions/co2.html>.
- _____. 2016b. Methane. <https://www3.epa.gov/climatechange/ghgemissions/gases/ch4.html>.
- _____. 2016c. Nitrous Oxide. <https://www3.epa.gov/climatechange/ghgemissions/gases/n2o.html>.
- _____. 2011. Air and Water Quality Impacts of Brownfields Redevelopment. <https://www.epa.gov/sites/default/files/2015-09/documents/bfenvirontimpacts042811.pdf>

LIST OF ATTACHMENTS

Attachment A – CalEEMod Output File for Greenhouse Gas Emissions

CalEEMod Output Files – Greenhouse Gas Emissions

Draeger's Mixed Use Project - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Draeger's Mixed Use Project****San Mateo County, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Supermarket	17.60	1000sqft	0.60	17,600.00	0
General Office Building	104.72	1000sqft	0.50	104,720.00	0
Enclosed Parking with Elevator	86.24	1000sqft	0.00	86,240.00	0
Apartments Low Rise	8.97	Dwelling Unit	0.00	8,970.00	26
Parking Lot	12.39	1000sqft	0.00	12,390.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	70
Climate Zone	5			Operational Year	2024
Utility Company	Peninsula Clean Energy				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Ground floor supermarket and office, other components not a part of acreage

Construction Phase - Project description says it would take approximately 20 months for construction

Grading - Site is 1.1 acres

Woodstoves - No woodstoves or fireplaces

Energy Use - Building is all electric, BMP 1

Land Use Change -

Construction Off-road Equipment Mitigation -

Draeger's Mixed Use Project - San Mateo County, Annual

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

Area Mitigation -

Energy Mitigation - solar panels installed on rooftop

Water Mitigation - electric vehicle charging, low flow plumbing, low water landscaping

Vehicle Trips - values based off of traffic memo

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	430.00
tblConstructionPhase	NumDays	200.00	430.00
tblConstructionPhase	NumDays	4.00	10.00
tblConstructionPhase	NumDays	10.00	430.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	PhaseEndDate	8/17/2023	2/11/2025
tblConstructionPhase	PhaseEndDate	7/20/2023	2/11/2025
tblConstructionPhase	PhaseEndDate	10/13/2022	6/20/2023
tblConstructionPhase	PhaseEndDate	8/3/2023	2/11/2025
tblConstructionPhase	PhaseEndDate	10/7/2022	6/16/2023
tblConstructionPhase	PhaseStartDate	8/4/2023	6/21/2023
tblConstructionPhase	PhaseStartDate	10/14/2022	6/21/2023
tblConstructionPhase	PhaseStartDate	10/8/2022	6/7/2023
tblConstructionPhase	PhaseStartDate	7/21/2023	6/21/2023
tblConstructionPhase	PhaseStartDate	10/6/2022	6/5/2023
tblEnergyUse	LightingElect	810.36	8,913.96
tblEnergyUse	LightingElect	3.58	374,908.34
tblEnergyUse	LightingElect	7.42	131,029.78
tblEnergyUse	NT24E	3,172.76	34,900.36
tblEnergyUse	NT24E	4.80	502,670.40
tblEnergyUse	NT24E	27.24	481,031.16
tblEnergyUse	NT24NG	2,615.00	0.00

Draeger's Mixed Use Project - San Mateo County, Annual

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

tblEnergyUse	NT24NG	1.01	0.00
tblEnergyUse	NT24NG	12.69	0.00
tblEnergyUse	T24E	49.64	546.04
tblEnergyUse	T24E	3.66	383,286.00
tblEnergyUse	T24E	2.43	42,911.37
tblEnergyUse	T24NG	16,900.98	0.00
tblEnergyUse	T24NG	18.14	0.00
tblEnergyUse	T24NG	24.29	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	1.35	0.00
tblFireplaces	NumberNoFireplace	0.36	0.00
tblFireplaces	NumberWood	1.52	0.00
tblGrading	AcresOfGrading	10.00	1.10
tblGrading	AcresOfGrading	9.38	1.10
tblLandUse	LotAcreage	0.40	0.60
tblLandUse	LotAcreage	2.40	0.50
tblLandUse	LotAcreage	1.98	0.00
tblLandUse	LotAcreage	0.56	0.00
tblLandUse	LotAcreage	0.28	0.00
tblVehicleTrips	ST_TR	8.14	4.00
tblVehicleTrips	ST_TR	177.62	108.00
tblVehicleTrips	SU_TR	6.28	4.00
tblVehicleTrips	SU_TR	166.47	108.00
tblVehicleTrips	WD_TR	7.32	4.00
tblVehicleTrips	WD_TR	9.74	12.00
tblVehicleTrips	WD_TR	106.78	108.00
tblWoodstoves	NumberCatalytic	0.18	0.00

Draeger's Mixed Use Project - San Mateo County, Annual

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

tblWoodstoves	NumberNoncatalytic	0.18	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

Draeger's Mixed Use Project - San Mateo County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.4270	1.5944	1.8810	3.9100e-003	0.1386	0.0682	0.2067	0.0531	0.0648	0.1179	0.0000	343.3603	343.3603	0.0580	9.2000e-003	347.5507
2024	0.7666	2.6221	3.3951	6.9900e-003	0.1523	0.1056	0.2579	0.0413	0.1006	0.1418	0.0000	615.2963	615.2963	0.0990	0.0170	622.8468
2025	0.0854	0.2809	0.3853	7.9000e-004	0.0174	0.0106	0.0280	4.7200e-003	0.0101	0.0148	0.0000	69.9870	69.9870	0.0112	1.9000e-003	70.8352
Maximum	0.7666	2.6221	3.3951	6.9900e-003	0.1523	0.1056	0.2579	0.0531	0.1006	0.1418	0.0000	615.2963	615.2963	0.0990	0.0170	622.8468

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.4270	1.5944	1.8810	3.9100e-003	0.1069	0.0682	0.1750	0.0359	0.0648	0.1007	0.0000	343.3600	343.3600	0.0580	9.2000e-003	347.5504
2024	0.7666	2.6221	3.3951	6.9900e-003	0.1523	0.1056	0.2579	0.0413	0.1006	0.1418	0.0000	615.2958	615.2958	0.0990	0.0170	622.8463
2025	0.0854	0.2809	0.3853	7.9000e-004	0.0174	0.0106	0.0280	4.7200e-003	0.0101	0.0148	0.0000	69.9870	69.9870	0.0112	1.9000e-003	70.8351
Maximum	0.7666	2.6221	3.3951	6.9900e-003	0.1523	0.1056	0.2579	0.0413	0.1006	0.1418	0.0000	615.2958	615.2958	0.0990	0.0170	622.8463

Draeger's Mixed Use Project - San Mateo County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	10.28	0.00	6.44	17.30	0.00	6.24	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
3	3-8-2023	6-7-2023	0.0202	0.0202
4	6-8-2023	9-7-2023	0.8815	0.8815
5	9-8-2023	12-7-2023	0.8839	0.8839
6	12-8-2023	3-7-2024	0.8541	0.8541
7	3-8-2024	6-7-2024	0.8488	0.8488
8	6-8-2024	9-7-2024	0.8476	0.8476
9	9-8-2024	12-7-2024	0.8418	0.8418
10	12-8-2024	3-7-2025	0.5895	0.5895
		Highest	0.8839	0.8839

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	tons/yr										MT/yr					
Area	0.5935	7.9000e-004	0.0686	0.0000		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.1127	0.1127	1.1000e-004	0.0000	0.1156
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.9319	0.7836	8.1123	0.0151	1.6478	0.0105	1.6583	0.4401	9.7300e-003	0.4498	0.0000	1,413.1903	1,413.1903	0.1112	0.0690	1,436.5262
Waste						0.0000	0.0000		0.0000	0.0000	40.7565	0.0000	40.7565	2.4086	0.0000	100.9726
Water						0.0000	0.0000		0.0000	0.0000	6.7785	0.0000	6.7785	0.6962	0.0164	29.0829
Total	1.5253	0.7844	8.1809	0.0151	1.6478	0.0109	1.6586	0.4401	0.0101	0.4502	47.5351	1,413.3030	1,460.8381	3.2162	0.0854	1,566.6972

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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5935	7.9000e-004	0.0686	0.0000		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.1127	0.1127	1.1000e-004	0.0000	0.1156
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.8206	0.6212	6.4722	0.0105	1.1304	7.8200e-003	1.1382	0.3019	7.2500e-003	0.3092	0.0000	988.7687	988.7687	0.0936	0.0552	1,007.5687
Waste						0.0000	0.0000		0.0000	0.0000	40.7565	0.0000	40.7565	2.4086	0.0000	100.9726
Water						0.0000	0.0000		0.0000	0.0000	5.6424	0.0000	5.6424	0.5795	0.0137	24.2086
Total	1.4140	0.6220	6.5408	0.0105	1.1304	8.2000e-003	1.1386	0.3019	7.6300e-003	0.3095	46.3990	988.8814	1,035.2804	3.0819	0.0689	1,132.8654

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.30	20.71	20.05	30.06	31.40	24.49	31.35	31.40	24.53	31.24	2.39	30.03	29.13	4.18	19.33	27.69

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/5/2023	6/16/2023	5	10	
2	Grading	Grading	6/7/2023	6/20/2023	5	10	
3	Paving	Paving	6/21/2023	2/11/2025	5	430	

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

4	Building Construction	Building Construction	6/21/2023	2/11/2025	5	430
5	Architectural Coating	Architectural Coating	6/21/2023	2/11/2025	5	430

Acres of Grading (Site Preparation Phase): 1.1**Acres of Grading (Grading Phase): 1.1****Acres of Paving: 0****Residential Indoor: 18,164; Residential Outdoor: 6,055; Non-Residential Indoor: 183,480; Non-Residential Outdoor: 61,160; Striped Parking Area: 5,918 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

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

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	87.00	37.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0269	0.0000	0.0269	0.0146	0.0000	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6700e-003	0.0621	0.0332	9.0000e-005		2.5400e-003	2.5400e-003		2.3300e-003	2.3300e-003	0.0000	7.5571	7.5571	2.4400e-003	0.0000	7.6182
Total	5.6700e-003	0.0621	0.0332	9.0000e-005	0.0269	2.5400e-003	0.0295	0.0146	2.3300e-003	0.0169	0.0000	7.5571	7.5571	2.4400e-003	0.0000	7.6182

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	6.0000e-005	7.8000e-004	0.0000	3.1000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2370	0.2370	1.0000e-005	1.0000e-005	0.2389
Total	9.0000e-005	6.0000e-005	7.8000e-004	0.0000	3.1000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2370	0.2370	1.0000e-005	1.0000e-005	0.2389

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0121	0.0000	0.0121	6.5500e-003	0.0000	6.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6700e-003	0.0621	0.0332	9.0000e-005		2.5400e-003	2.5400e-003		2.3300e-003	2.3300e-003	0.0000	7.5571	7.5571	2.4400e-003	0.0000	7.6182
Total	5.6700e-003	0.0621	0.0332	9.0000e-005	0.0121	2.5400e-003	0.0147	6.5500e-003	2.3300e-003	8.8800e-003	0.0000	7.5571	7.5571	2.4400e-003	0.0000	7.6182

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	6.0000e-005	7.8000e-004	0.0000	3.1000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2370	0.2370	1.0000e-005	1.0000e-005	0.2389
Total	9.0000e-005	6.0000e-005	7.8000e-004	0.0000	3.1000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2370	0.2370	1.0000e-005	1.0000e-005	0.2389

3.3 Grading - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0307	0.0000	0.0307	0.0166	0.0000	0.0166	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6700e-003	0.0723	0.0435	1.0000e-004		3.0200e-003	3.0200e-003		2.7800e-003	2.7800e-003	0.0000	9.0520	9.0520	2.9300e-003	0.0000	9.1252
Total	6.6700e-003	0.0723	0.0435	1.0000e-004	0.0307	3.0200e-003	0.0337	0.0166	2.7800e-003	0.0194	0.0000	9.0520	9.0520	2.9300e-003	0.0000	9.1252

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	7.0000e-005	9.7000e-004	0.0000	3.9000e-004	0.0000	4.0000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.2962	0.2962	1.0000e-005	1.0000e-005	0.2986
Total	1.1000e-004	7.0000e-005	9.7000e-004	0.0000	3.9000e-004	0.0000	4.0000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.2962	0.2962	1.0000e-005	1.0000e-005	0.2986

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0138	0.0000	0.0138	7.4800e-003	0.0000	7.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6700e-003	0.0723	0.0435	1.0000e-004		3.0200e-003	3.0200e-003		2.7800e-003	2.7800e-003	0.0000	9.0520	9.0520	2.9300e-003	0.0000	9.1251
Total	6.6700e-003	0.0723	0.0435	1.0000e-004	0.0138	3.0200e-003	0.0168	7.4800e-003	2.7800e-003	0.0103	0.0000	9.0520	9.0520	2.9300e-003	0.0000	9.1251

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	7.0000e-005	9.7000e-004	0.0000	3.9000e-004	0.0000	4.0000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.2962	0.2962	1.0000e-005	1.0000e-005	0.2986
Total	1.1000e-004	7.0000e-005	9.7000e-004	0.0000	3.9000e-004	0.0000	4.0000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.2962	0.2962	1.0000e-005	1.0000e-005	0.2986

3.4 Paving - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0445	0.4303	0.6074	9.3000e-004		0.0213	0.0213		0.0196	0.0196	0.0000	81.2298	81.2298	0.0258	0.0000	81.8735
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0445	0.4303	0.6074	9.3000e-004		0.0213	0.0213		0.0196	0.0196	0.0000	81.2298	81.2298	0.0258	0.0000	81.8735

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Paving - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9300e-003	1.2600e-003	0.0174	6.0000e-005	7.0600e-003	3.0000e-005	7.1000e-003	1.8800e-003	3.0000e-005	1.9100e-003	0.0000	5.3141	5.3141	1.3000e-004	1.3000e-004	5.3567
Total	1.9300e-003	1.2600e-003	0.0174	6.0000e-005	7.0600e-003	3.0000e-005	7.1000e-003	1.8800e-003	3.0000e-005	1.9100e-003	0.0000	5.3141	5.3141	1.3000e-004	1.3000e-004	5.3567

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0445	0.4303	0.6074	9.3000e-004		0.0213	0.0213		0.0196	0.0196	0.0000	81.2297	81.2297	0.0258	0.0000	81.8734
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0445	0.4303	0.6074	9.3000e-004		0.0213	0.0213		0.0196	0.0196	0.0000	81.2297	81.2297	0.0258	0.0000	81.8734

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Paving - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9300e-003	1.2600e-003	0.0174	6.0000e-005	7.0600e-003	3.0000e-005	7.1000e-003	1.8800e-003	3.0000e-005	1.9100e-003	0.0000	5.3141	5.3141	1.3000e-004	1.3000e-004	5.3567
Total	1.9300e-003	1.2600e-003	0.0174	6.0000e-005	7.0600e-003	3.0000e-005	7.1000e-003	1.8800e-003	3.0000e-005	1.9100e-003	0.0000	5.3141	5.3141	1.3000e-004	1.3000e-004	5.3567

3.4 Paving - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0810	0.7678	1.1561	1.7700e-003		0.0368	0.0368		0.0340	0.0340	0.0000	154.2403	154.2403	0.0489	0.0000	155.4627
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0810	0.7678	1.1561	1.7700e-003		0.0368	0.0368		0.0340	0.0340	0.0000	154.2403	154.2403	0.0489	0.0000	155.4627

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Paving - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4800e-003	2.1500e-003	0.0312	1.1000e-004	0.0134	6.0000e-005	0.0135	3.5700e-003	6.0000e-005	3.6200e-003	0.0000	9.8387	9.8387	2.3000e-004	2.3000e-004	9.9141
Total	3.4800e-003	2.1500e-003	0.0312	1.1000e-004	0.0134	6.0000e-005	0.0135	3.5700e-003	6.0000e-005	3.6200e-003	0.0000	9.8387	9.8387	2.3000e-004	2.3000e-004	9.9141

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0810	0.7678	1.1561	1.7700e-003		0.0368	0.0368		0.0340	0.0340	0.0000	154.2401	154.2401	0.0489	0.0000	155.4625
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0810	0.7678	1.1561	1.7700e-003		0.0368	0.0368		0.0340	0.0340	0.0000	154.2401	154.2401	0.0489	0.0000	155.4625

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Paving - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4800e-003	2.1500e-003	0.0312	1.1000e-004	0.0134	6.0000e-005	0.0135	3.5700e-003	6.0000e-005	3.6200e-003	0.0000	9.8387	9.8387	2.3000e-004	2.3000e-004	9.9141
Total	3.4800e-003	2.1500e-003	0.0312	1.1000e-004	0.0134	6.0000e-005	0.0135	3.5700e-003	6.0000e-005	3.6200e-003	0.0000	9.8387	9.8387	2.3000e-004	2.3000e-004	9.9141

3.4 Paving - 2025**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.6000e-003	0.0799	0.1319	2.0000e-004		3.7000e-003	3.7000e-003		3.4100e-003	3.4100e-003	0.0000	17.6603	17.6603	5.6000e-003	0.0000	17.8003
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.6000e-003	0.0799	0.1319	2.0000e-004		3.7000e-003	3.7000e-003		3.4100e-003	3.4100e-003	0.0000	17.6603	17.6603	5.6000e-003	0.0000	17.8003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Paving - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.2000e-004	3.3700e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5400e-003	4.1000e-004	1.0000e-005	4.1000e-004	0.0000	1.0997	1.0997	2.0000e-005	3.0000e-005	1.1078
Total	3.8000e-004	2.2000e-004	3.3700e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5400e-003	4.1000e-004	1.0000e-005	4.1000e-004	0.0000	1.0997	1.0997	2.0000e-005	3.0000e-005	1.1078

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.6000e-003	0.0799	0.1319	2.0000e-004		3.7000e-003	3.7000e-003		3.4100e-003	3.4100e-003	0.0000	17.6603	17.6603	5.6000e-003	0.0000	17.8002
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.6000e-003	0.0799	0.1319	2.0000e-004		3.7000e-003	3.7000e-003		3.4100e-003	3.4100e-003	0.0000	17.6603	17.6603	5.6000e-003	0.0000	17.8002

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Paving - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.2000e-004	3.3700e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5400e-003	4.1000e-004	1.0000e-005	4.1000e-004	0.0000	1.0997	1.0997	2.0000e-005	3.0000e-005	1.1078
Total	3.8000e-004	2.2000e-004	3.3700e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5400e-003	4.1000e-004	1.0000e-005	4.1000e-004	0.0000	1.0997	1.0997	2.0000e-005	3.0000e-005	1.1078

3.5 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1051	0.8080	0.8702	1.5200e-003		0.0355	0.0355		0.0343	0.0343	0.0000	125.3034	125.3034	0.0213	0.0000	125.8353
Total	0.1051	0.8080	0.8702	1.5200e-003		0.0355	0.0355		0.0343	0.0343	0.0000	125.3034	125.3034	0.0213	0.0000	125.8353

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7200e-003	0.1202	0.0431	5.3000e-004	0.0167	6.2000e-004	0.0173	4.8200e-003	5.9000e-004	5.4100e-003	0.0000	54.2403	54.2403	3.3400e-003	8.0000e-003	56.7066
Worker	0.0129	8.4500e-003	0.1167	3.8000e-004	0.0473	2.3000e-004	0.0475	0.0126	2.1000e-004	0.0128	0.0000	35.5637	35.5637	9.0000e-004	8.8000e-004	35.8489
Total	0.0157	0.1287	0.1598	9.1000e-004	0.0639	8.5000e-004	0.0648	0.0174	8.0000e-004	0.0182	0.0000	89.8040	89.8040	4.2400e-003	8.8800e-003	92.5555

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1051	0.8080	0.8702	1.5200e-003		0.0355	0.0355		0.0343	0.0343	0.0000	125.3033	125.3033	0.0213	0.0000	125.8352
Total	0.1051	0.8080	0.8702	1.5200e-003		0.0355	0.0355		0.0343	0.0343	0.0000	125.3033	125.3033	0.0213	0.0000	125.8352

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7200e-003	0.1202	0.0431	5.3000e-004	0.0167	6.2000e-004	0.0173	4.8200e-003	5.9000e-004	5.4100e-003	0.0000	54.2403	54.2403	3.3400e-003	8.0000e-003	56.7066
Worker	0.0129	8.4500e-003	0.1167	3.8000e-004	0.0473	2.3000e-004	0.0475	0.0126	2.1000e-004	0.0128	0.0000	35.5637	35.5637	9.0000e-004	8.8000e-004	35.8489
Total	0.0157	0.1287	0.1598	9.1000e-004	0.0639	8.5000e-004	0.0648	0.0174	8.0000e-004	0.0182	0.0000	89.8040	89.8040	4.2400e-003	8.8800e-003	92.5555

3.5 Building Construction - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1860	1.4494	1.6398	2.8900e-003		0.0590	0.0590		0.0570	0.0570	0.0000	237.9108	237.9108	0.0396	0.0000	238.9013
Total	0.1860	1.4494	1.6398	2.8900e-003		0.0590	0.0590		0.0570	0.0570	0.0000	237.9108	237.9108	0.0396	0.0000	238.9013

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.9900e-003	0.2260	0.0816	9.9000e-004	0.0316	1.1800e-003	0.0328	9.1500e-003	1.1300e-003	0.0103	0.0000	101.1497	101.1497	6.4800e-003	0.0149	105.7615
Worker	0.0233	0.0144	0.2086	7.0000e-004	0.0897	4.1000e-004	0.0901	0.0239	3.8000e-004	0.0243	0.0000	65.8433	65.8433	1.5400e-003	1.5600e-003	66.3480
Total	0.0283	0.2404	0.2902	1.6900e-003	0.1214	1.5900e-003	0.1230	0.0330	1.5100e-003	0.0345	0.0000	166.9930	166.9930	8.0200e-003	0.0165	172.1095

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1860	1.4494	1.6398	2.8900e-003		0.0590	0.0590		0.0570	0.0570	0.0000	237.9105	237.9105	0.0396	0.0000	238.9010
Total	0.1860	1.4494	1.6398	2.8900e-003		0.0590	0.0590		0.0570	0.0570	0.0000	237.9105	237.9105	0.0396	0.0000	238.9010

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.9900e-003	0.2260	0.0816	9.9000e-004	0.0316	1.1800e-003	0.0328	9.1500e-003	1.1300e-003	0.0103	0.0000	101.1497	101.1497	6.4800e-003	0.0149	105.7615
Worker	0.0233	0.0144	0.2086	7.0000e-004	0.0897	4.1000e-004	0.0901	0.0239	3.8000e-004	0.0243	0.0000	65.8433	65.8433	1.5400e-003	1.5600e-003	66.3480
Total	0.0283	0.2404	0.2902	1.6900e-003	0.1214	1.5900e-003	0.1230	0.0330	1.5100e-003	0.0345	0.0000	166.9930	166.9930	8.0200e-003	0.0165	172.1095

3.5 Building Construction - 2025**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0199	0.1562	0.1866	3.3000e-004		5.8900e-003	5.8900e-003		5.6800e-003	5.6800e-003	0.0000	27.2448	27.2448	4.4500e-003	0.0000	27.3560
Total	0.0199	0.1562	0.1866	3.3000e-004		5.8900e-003	5.8900e-003		5.6800e-003	5.6800e-003	0.0000	27.2448	27.2448	4.4500e-003	0.0000	27.3560

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e-004	0.0256	9.3400e-003	1.1000e-004	3.6200e-003	1.4000e-004	3.7600e-003	1.0500e-003	1.3000e-004	1.1800e-003	0.0000	11.3545	11.3545	7.6000e-004	1.6800e-003	11.8733
Worker	2.5500e-003	1.4900e-003	0.0226	8.0000e-005	0.0103	5.0000e-005	0.0103	2.7300e-003	4.0000e-005	2.7800e-003	0.0000	7.3597	7.3597	1.6000e-004	1.7000e-004	7.4139
Total	3.1100e-003	0.0271	0.0319	1.9000e-004	0.0139	1.9000e-004	0.0141	3.7800e-003	1.7000e-004	3.9600e-003	0.0000	18.7142	18.7142	9.2000e-004	1.8500e-003	19.2872

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0199	0.1562	0.1866	3.3000e-004		5.8900e-003	5.8900e-003		5.6800e-003	5.6800e-003	0.0000	27.2448	27.2448	4.4500e-003	0.0000	27.3560
Total	0.0199	0.1562	0.1866	3.3000e-004		5.8900e-003	5.8900e-003		5.6800e-003	5.6800e-003	0.0000	27.2448	27.2448	4.4500e-003	0.0000	27.3560

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e-004	0.0256	9.3400e-003	1.1000e-004	3.6200e-003	1.4000e-004	3.7600e-003	1.0500e-003	1.3000e-004	1.1800e-003	0.0000	11.3545	11.3545	7.6000e-004	1.6800e-003	11.8733
Worker	2.5500e-003	1.4900e-003	0.0226	8.0000e-005	0.0103	5.0000e-005	0.0103	2.7300e-003	4.0000e-005	2.7800e-003	0.0000	7.3597	7.3597	1.6000e-004	1.7000e-004	7.4139
Total	3.1100e-003	0.0271	0.0319	1.9000e-004	0.0139	1.9000e-004	0.0141	3.7800e-003	1.7000e-004	3.9600e-003	0.0000	18.7142	18.7142	9.2000e-004	1.8500e-003	19.2872

3.6 Architectural Coating - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2316					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.0899	0.1250	2.1000e-004		4.8900e-003	4.8900e-003		4.8900e-003	4.8900e-003	0.0000	17.6175	17.6175	1.0500e-003	0.0000	17.6438
Total	0.2448	0.0899	0.1250	2.1000e-004		4.8900e-003	4.8900e-003		4.8900e-003	4.8900e-003	0.0000	17.6175	17.6175	1.0500e-003	0.0000	17.6438

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5300e-003	1.6500e-003	0.0228	7.0000e-005	9.2300e-003	4.0000e-005	9.2800e-003	2.4600e-003	4.0000e-005	2.5000e-003	0.0000	6.9492	6.9492	1.7000e-004	1.7000e-004	7.0050
Total	2.5300e-003	1.6500e-003	0.0228	7.0000e-005	9.2300e-003	4.0000e-005	9.2800e-003	2.4600e-003	4.0000e-005	2.5000e-003	0.0000	6.9492	6.9492	1.7000e-004	1.7000e-004	7.0050

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2316					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.0899	0.1250	2.1000e-004		4.8900e-003	4.8900e-003		4.8900e-003	4.8900e-003	0.0000	17.6174	17.6174	1.0500e-003	0.0000	17.6438
Total	0.2448	0.0899	0.1250	2.1000e-004		4.8900e-003	4.8900e-003		4.8900e-003	4.8900e-003	0.0000	17.6174	17.6174	1.0500e-003	0.0000	17.6438

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5300e-003	1.6500e-003	0.0228	7.0000e-005	9.2300e-003	4.0000e-005	9.2800e-003	2.4600e-003	4.0000e-005	2.5000e-003	0.0000	6.9492	6.9492	1.7000e-004	1.7000e-004	7.0050
Total	2.5300e-003	1.6500e-003	0.0228	7.0000e-005	9.2300e-003	4.0000e-005	9.2800e-003	2.4600e-003	4.0000e-005	2.5000e-003	0.0000	6.9492	6.9492	1.7000e-004	1.7000e-004	7.0050

3.6 Architectural Coating - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4396					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0237	0.1597	0.2371	3.9000e-004		7.9800e-003	7.9800e-003		7.9800e-003	7.9800e-003	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4947
Total	0.4633	0.1597	0.2371	3.9000e-004		7.9800e-003	7.9800e-003		7.9800e-003	7.9800e-003	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4947

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5500e-003	2.8100e-003	0.0408	1.4000e-004	0.0175	8.0000e-005	0.0176	4.6700e-003	7.0000e-005	4.7400e-003	0.0000	12.8659	12.8659	3.0000e-004	3.1000e-004	12.9646
Total	4.5500e-003	2.8100e-003	0.0408	1.4000e-004	0.0175	8.0000e-005	0.0176	4.6700e-003	7.0000e-005	4.7400e-003	0.0000	12.8659	12.8659	3.0000e-004	3.1000e-004	12.9646

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4396					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0237	0.1597	0.2371	3.9000e-004		7.9800e-003	7.9800e-003		7.9800e-003	7.9800e-003	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4947
Total	0.4633	0.1597	0.2371	3.9000e-004		7.9800e-003	7.9800e-003		7.9800e-003	7.9800e-003	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4947

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5500e-003	2.8100e-003	0.0408	1.4000e-004	0.0175	8.0000e-005	0.0176	4.6700e-003	7.0000e-005	4.7400e-003	0.0000	12.8659	12.8659	3.0000e-004	3.1000e-004	12.9646
Total	4.5500e-003	2.8100e-003	0.0408	1.4000e-004	0.0175	8.0000e-005	0.0176	4.6700e-003	7.0000e-005	4.7400e-003	0.0000	12.8659	12.8659	3.0000e-004	3.1000e-004	12.9646

3.6 Architectural Coating - 2025**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0503					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5600e-003	0.0172	0.0271	4.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004	0.0000	3.8299	3.8299	2.1000e-004	0.0000	3.8351
Total	0.0529	0.0172	0.0271	4.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004	0.0000	3.8299	3.8299	2.1000e-004	0.0000	3.8351

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	2.9000e-004	4.4100e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.4381	1.4381	3.0000e-005	3.0000e-005	1.4487
Total	5.0000e-004	2.9000e-004	4.4100e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.4381	1.4381	3.0000e-005	3.0000e-005	1.4487

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0503					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5600e-003	0.0172	0.0271	4.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004	0.0000	3.8299	3.8299	2.1000e-004	0.0000	3.8351
Total	0.0529	0.0172	0.0271	4.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004	0.0000	3.8299	3.8299	2.1000e-004	0.0000	3.8351

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	2.9000e-004	4.4100e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.4381	1.4381	3.0000e-005	3.0000e-005	1.4487
Total	5.0000e-004	2.9000e-004	4.4100e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.4381	1.4381	3.0000e-005	3.0000e-005	1.4487

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Increase Density

Increase Diversity

Improve Destination Accessibility

Increase Transit Accessibility

Integrate Below Market Rate Housing

Improve Pedestrian Network

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.8206	0.6212	6.4722	0.0105	1.1304	7.8200e-003	1.1382	0.3019	7.2500e-003	0.3092	0.0000	988.7687	988.7687	0.0936	0.0552	1,007.5687
Unmitigated	0.9319	0.7836	8.1123	0.0151	1.6478	0.0105	1.6583	0.4401	9.7300e-003	0.4498	0.0000	1,413.1903	1,413.1903	0.1112	0.0690	1,436.5262

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	35.88	35.88	35.88	82,869	56,848
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	1,256.64	231.43	73.30	2,249,077	1,542,867
Parking Lot	0.00	0.00	0.00		
Supermarket	1,900.80	1,900.80	1900.80	2,162,053	1,483,168
Total	3,193.32	2,168.11	2,009.98	4,493,998	3,082,883

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36

4.4 Fleet Mix

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

5.0 Energy Detail

5.1 Mitigation Measures Energy

[illegible]

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

Unmitigated

[illegible]

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

Mitigated

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	397912	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	469146	0.0000	0.0000	0.0000	0.0000
General Office Building	1.32038e+011	0.0000	0.0000	0.0000	0.0000
Parking Lot	4336.5	0.0000	0.0000	0.0000	0.0000
Supermarket	1.15275e+010	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	397912	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	469146	0.0000	0.0000	0.0000	0.0000
General Office Building	1.32038e+011	0.0000	0.0000	0.0000	0.0000
Parking Lot	4336.5	0.0000	0.0000	0.0000	0.0000
Supermarket	1.15275e+010	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

No Hearths Installed

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5935	7.9000e-004	0.0686	0.0000		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.1127	0.1127	1.1000e-004	0.0000	0.1156
Unmitigated	0.5935	7.9000e-004	0.0686	0.0000		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.1127	0.1127	1.1000e-004	0.0000	0.1156

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5191					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1900e-003	7.9000e-004	0.0686	0.0000		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.1127	0.1127	1.1000e-004	0.0000	0.1156
Total	0.5935	7.9000e-004	0.0686	0.0000		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.1127	0.1127	1.1000e-004	0.0000	0.1156

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5191					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1900e-003	7.9000e-004	0.0686	0.0000		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.1127	0.1127	1.1000e-004	0.0000	0.1156
Total	0.5935	7.9000e-004	0.0686	0.0000		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	0.1127	0.1127	1.1000e-004	0.0000	0.1156

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Landscaping

Draeger's Mixed Use Project - San Mateo County, Annual

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.6424	0.5795	0.0137	24.2086
Unmitigated	6.7785	0.6962	0.0164	29.0829

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.584432 / 0.368446	0.1854	0.0190	4.5000e-004	0.7955
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	18.6123 / 11.4075	5.9048	0.6065	0.0143	25.3343
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Supermarket	2.16952 / 0.0670986	0.6883	0.0707	1.6700e-003	2.9531
Total		6.7785	0.6962	0.0164	29.0829

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.486481 / 0.368446	0.1543	0.0159	3.7000e-004	0.6622
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	15.4929 / 11.4075	4.9152	0.5048	0.0119	21.0883
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Supermarket	1.80591 / 0.0670986	0.5729	0.0589	1.3900e-003	2.4581
Total		5.6424	0.5795	0.0137	24.2086

8.0 Waste Detail**8.1 Mitigation Measures Waste**

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

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	40.7565	2.4086	0.0000	100.9726
Unmitigated	40.7565	2.4086	0.0000	100.9726

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	4.13	0.8384	0.0496	0.0000	2.0770
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	97.39	19.7693	1.1683	0.0000	48.9776
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Supermarket	99.26	20.1489	1.1908	0.0000	49.9180
Total		40.7565	2.4086	0.0000	100.9726

Draeger's Mixed Use Project - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	4.13	0.8384	0.0496	0.0000	2.0770
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	97.39	19.7693	1.1683	0.0000	48.9776
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Supermarket	99.26	20.1489	1.1908	0.0000	49.9180
Total		40.7565	2.4086	0.0000	100.9726

9.0 Operational Offroad

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

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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Draeger's Mixed Use Project - San Mateo County, Annual

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

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Draeger's Mixed Use Project - Existing Building - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Draeger's Mixed Use Project - Existing Building****San Mateo County, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Supermarket	60.97	1000sqft	1.10	60,965.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	70
Climate Zone	5			Operational Year	2024
Utility Company	Peninsula Clean Energy				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Two story building

Construction Phase - No building construction will be taking place, existing building will be demolished and replaced with a new, mixed use building.

Off-road Equipment - Existing building will be demolished and replaced with a new, mixed use building.

Energy Use -

Construction Off-road Equipment Mitigation -

Vehicle Trips - Trips determined from traffic report

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	60,970.00	60,965.00
tblLandUse	LotAcreage	1.40	1.10
tblVehicleTrips	ST_TR	177.62	107.41

Draeger's Mixed Use Project - Existing Building - San Mateo County, Annual

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

tblVehicleTrips	SU_TR	166.47	107.41
tblVehicleTrips	WD_TR	106.78	107.41

2.0 Emissions Summary

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2699	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0900e-003	1.0900e-003	0.0000	0.0000	1.1600e-003
Energy	0.0134	0.1221	0.1026	7.3000e-004		9.2800e-003	9.2800e-003		9.2800e-003	9.2800e-003	0.0000	132.9634	132.9634	2.5500e-003	2.4400e-003	133.7535
Mobile	1.9004	1.4626	15.1890	0.0254	2.7312	0.0186	2.7498	0.7294	0.0172	0.7466	0.0000	2,340.6075	2,340.6075	0.2184	0.1299	2,384.7822
Waste						0.0000	0.0000		0.0000	0.0000	69.8025	0.0000	69.8025	4.1252	0.0000	172.9328
Water						0.0000	0.0000		0.0000	0.0000	2.3844	0.0000	2.3844	0.2449	5.7800e-003	10.2300
Total	2.1838	1.5848	15.2922	0.0261	2.7312	0.0278	2.7590	0.7294	0.0265	0.7559	72.1869	2,473.5719	2,545.7588	4.5911	0.1381	2,701.6997

Draeger's Mixed Use Project - Existing Building - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2699	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0900e-003	1.0900e-003	0.0000	0.0000	1.1600e-003
Energy	0.0134	0.1221	0.1026	7.3000e-004		9.2800e-003	9.2800e-003		9.2800e-003	9.2800e-003	0.0000	132.9634	132.9634	2.5500e-003	2.4400e-003	133.7535
Mobile	1.9004	1.4626	15.1890	0.0254	2.7312	0.0186	2.7498	0.7294	0.0172	0.7466	0.0000	2,340.6075	2,340.6075	0.2184	0.1299	2,384.7822
Waste						0.0000	0.0000		0.0000	0.0000	69.8025	0.0000	69.8025	4.1252	0.0000	172.9328
Water						0.0000	0.0000		0.0000	0.0000	2.3844	0.0000	2.3844	0.2449	5.7800e-003	10.2300
Total	2.1838	1.5848	15.2922	0.0261	2.7312	0.0278	2.7590	0.7294	0.0265	0.7559	72.1869	2,473.5719	2,545.7588	4.5911	0.1381	2,701.6997

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

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/2/2011		5	10	
2	Building Construction	Building Construction	1/2/2011		5	200	
3	Demolition	Demolition	1/2/2011		5	20	

Draeger's Mixed Use Project - Existing Building - San Mateo County, Annual

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

4	Grading	Grading	1/2/2011		5	4
5	Paving	Paving	1/2/2011		5	10
6	Site Preparation	Site Preparation	1/2/2011		5	2

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 91,448; Non-Residential Outdoor: 30,483; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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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
Architectural Coating			0.00	0.00	10.80	7.30				
Building Construction			10.00	0.00	10.80	7.30				
Demolition			0.00	0.00	10.80	7.30				
Grading			0.00	0.00	10.80	7.30				
Paving			0.00	0.00	10.80	7.30				
Site Preparation			0.00	0.00	10.80	7.30				

3.1 Mitigation Measures Construction

Draeger's Mixed Use Project - Existing Building - San Mateo County, Annual

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	tons/yr										MT/yr					
Mitigated	1.9004	1.4626	15.1890	0.0254	2.7312	0.0186	2.7498	0.7294	0.0172	0.7466	0.0000	2,340.6075	2,340.6075	0.2184	0.1299	2,384.7822
Unmitigated	1.9004	1.4626	15.1890	0.0254	2.7312	0.0186	2.7498	0.7294	0.0172	0.7466	0.0000	2,340.6075	2,340.6075	0.2184	0.1299	2,384.7822

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Supermarket	6,548.79	6,548.79	6,548.79	7,448,877	7,448,877
Total	6,548.79	6,548.79	6,548.79	7,448,877	7,448,877

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Supermarket	0.473689	0.072335	0.232457	0.144246	0.025248	0.006233	0.010124	0.002125	0.001469	0.000591	0.028445	0.000434	0.002601

Draeger's Mixed Use Project - Existing Building - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.0 Energy Detail**

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0134	0.1221	0.1026	7.3000e-004		9.2800e-003	9.2800e-003		9.2800e-003	9.2800e-003	0.0000	132.9634	132.9634	2.5500e-003	2.4400e-003	133.7535
NaturalGas Unmitigated	0.0134	0.1221	0.1026	7.3000e-004		9.2800e-003	9.2800e-003		9.2800e-003	9.2800e-003	0.0000	132.9634	132.9634	2.5500e-003	2.4400e-003	133.7535

Draeger's Mixed Use Project - Existing Building - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Supermarket	2.49164e+006	0.0134	0.1221	0.1026	7.3000e-004		9.2800e-003	9.2800e-003		9.2800e-003	9.2800e-003	0.0000	132.9634	132.9634	2.5500e-003	2.4400e-003	133.7535
Total		0.0134	0.1221	0.1026	7.3000e-004		9.2800e-003	9.2800e-003		9.2800e-003	9.2800e-003	0.0000	132.9634	132.9634	2.5500e-003	2.4400e-003	133.7535

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Supermarket	2.49164e+006	0.0134	0.1221	0.1026	7.3000e-004		9.2800e-003	9.2800e-003		9.2800e-003	9.2800e-003	0.0000	132.9634	132.9634	2.5500e-003	2.4400e-003	133.7535
Total		0.0134	0.1221	0.1026	7.3000e-004		9.2800e-003	9.2800e-003		9.2800e-003	9.2800e-003	0.0000	132.9634	132.9634	2.5500e-003	2.4400e-003	133.7535

Draeger's Mixed Use Project - Existing Building - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Supermarket	2.41117e+006	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Supermarket	2.41117e+006	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Draeger's Mixed Use Project - Existing Building - San Mateo County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2699	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0900e-003	1.0900e-003	0.0000	0.0000	1.1600e-003
Unmitigated	0.2699	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0900e-003	1.0900e-003	0.0000	0.0000	1.1600e-003

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0318					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2381					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0900e-003	1.0900e-003	0.0000	0.0000	1.1600e-003
Total	0.2699	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0900e-003	1.0900e-003	0.0000	0.0000	1.1600e-003

Draeger's Mixed Use Project - Existing Building - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0318					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2381					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0900e-003	1.0900e-003	0.0000	0.0000	1.1600e-003
Total	0.2699	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0900e-003	1.0900e-003	0.0000	0.0000	1.1600e-003

7.0 Water Detail**7.1 Mitigation Measures Water**

Draeger's Mixed Use Project - Existing Building - San Mateo County, Annual

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.3844	0.2449	5.7800e-003	10.2300
Unmitigated	2.3844	0.2449	5.7800e-003	10.2300

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Supermarket	7.51566 / 0.232443	2.3844	0.2449	5.7800e-003	10.2300
Total		2.3844	0.2449	5.7800e-003	10.2300

Draeger's Mixed Use Project - Existing Building - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Supermarket	7.51566 / 0.232443	2.3844	0.2449	5.7800e-003	10.2300
Total		2.3844	0.2449	5.7800e-003	10.2300

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	69.8025	4.1252	0.0000	172.9328
Unmitigated	69.8025	4.1252	0.0000	172.9328

Draeger's Mixed Use Project - Existing Building - San Mateo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Supermarket	343.87	69.8025	4.1252	0.0000	172.9328
Total		69.8025	4.1252	0.0000	172.9328

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Supermarket	343.87	69.8025	4.1252	0.0000	172.9328
Total		69.8025	4.1252	0.0000	172.9328

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Draeger's Mixed Use Project - Existing Building - San Mateo County, Annual

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation
