Appendix E

Greenhouse Gas Emissions

Greenhouse Gas Emissions Assessment JD Fields Pipe Facility Project City of Hemet, California

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Appendix A: Greenhouse Gas Emissions Data

LIST OF ABBREVIATED TERMS

AB Assembly Bill

CARB California Air Resource Board
CCR California Code of Regulations

CalEEMod California Emissions Estimator Model
CEQA California Environmental Quality Act
CALGreen Code California Green Building Standards Code
CPUC California Public Utilities Commission

CO₂ carbon dioxide

CO₂e carbon dioxide equivalent
CFC Chlorofluorocarbon
CPP Clean Power Plan

CCSP Climate Change Scoping Plan

cy cubic yard

EPA Environmental Protection Agency

FCAA Federal Clean Air Act
FR Federal Register
GHG greenhouse gas

HCFC Hydrochlorofluorocarbon

HFC Hydrofluorocarbon

LCFS Low Carbon Fuel Standard

CH₄ Methane

MMTCO₂e million metric tons of carbon dioxide equivalent

MTCO₂e metric tons of carbon dioxide equivalent

NHTSA National Highway Traffic Safety Administration

 NF_3 nitrogen trifluoride N_2O nitrous oxide PFC Perfluorocarbon

RTP/SCS Regional Transportation Plan/Sustainable Communities Strategy

SB Senate Bill

SCAB South Coast Air Basin

SCAQMD South Coast Air Quality Management District
SCAG Southern California Association of Government

Sf square foot

SF₆ sulfur hexafluoride
TAC toxic air contaminants

1 INTRODUCTION

This report documents the results of a Greenhouse Gas (GHG) Emissions Assessment completed for the Hemet Foxgate Warehouse (Project). The purpose of this GHG Emissions Assessment is to evaluate the potential construction and operational emissions associated with the Project and determine the level of impact the Project would have on the environment.

1.1 Project Location

The proposed JD Fields Pipe Facility Project (Project) encompasses approximately 9.2 acres. The Project site is located in the City of Hemet, on the east side of S. Gilmore Street and approximately 700 feet south of W. Acacia Avenue; refer to Exhibit 1: Local Vicinity Map. Local access to the Project site is provided S. Gilmore Street. Regional access is provided by State Route 74 (SR-74), which connects to Interstate 215 (I-215) to the west and State Route 79 (SR-79), which connects to Interstate 10 (I-10) to the north; refer to Exhibit 2: Regional Vicinity Map. Additionally, the property is located on the United States Geological Survey (USGS) 7.5-Minute Series Topographic Map, Hemet, California-Riverside County Quadrangle.

1.2 Project Description

The existing 9.2-acre site is currently vacant and unimproved. The Project proposes the development of a 25,000 square foot (sq. ft.) metal/prefab modular warehouse building consisting of 22,000 sq.ft. warehouse space and 3,300 sq. ft. office, an approximately 11,961 sq. ft. detention basin, 60 parking stalls, truck trailer parking, loading and off-loading docks, interior drives, a 7.0 acres laydown or outdoor storage facility, perimeter fencing, and landscaping; refer to Exhibit 3: Conceptual Site Plan. The proposed warehouse facility is anticipated to be utilized by the owner/operator, JD Fields & Company, for receipt/delivery, storage, fabrication, and distribution of steel/Polyvinyl chloride (PVC) pipe, steel piling, plumping equipment, valves, and flanges. However, the facility would exclude retail sale of any products fabricated and/or stored on site. This project intends to employ approximately 50 on-site office/warehouse workers of various construction trades (skilled labor), including a professional sales staff, and may operate twenty-four (24) hours a day, seven (7) days a week.

The proposed Project is consistent with the General Plan land use designation of Industrial (I) which allows for a range of manufacturing, business office, assembly, fabrication, construction, transportation, logistics, and auto repair uses. The proposed Project is also consistent with existing Zoning of General Manufacturing (M-2), which permits a range of manufacturing and processing uses, including the proposed pipe fabrication and storage use.

Site Access

Regional access is provided by SR-74, which connects to I-215 to the west and SR-79, which connects to I-10 to the north. Truck, passenger, and emergency vehicle access would be provided via three (3) gated access driveways along S. Gilmore Street.

Fencing

The Project would incorporate three (3) entry gates and 6' high perimeter security fencing.

Parking

Pursuant to §90-1423 of the Hemet Zoning Code, the number of parking spaces required for manufacturing or industrial establishments, including offices is 1 space for each 500 square feet of gross floor area. The total square footage of the proposed warehouse building is 25,000 square feet; therefore, the Project would be required to provide at least 50 parking spaces. The Project proposes 60 parking spaces, which would exceed the minimum required number by ten (10) spaces.

Hours of Operation

The Project is anticipated to employ approximately 50 on-site office/warehouse workers of various construction trades (skilled labor), including a professional sales staff, and may operate twenty-four (24) hours a day, seven (7) days a week.

Construction and Operation

The Project would be constructed in one phase. For analysis purposes, construction is anticipated to commence construction in early 2022 and would begin operation by mid to late 2022.

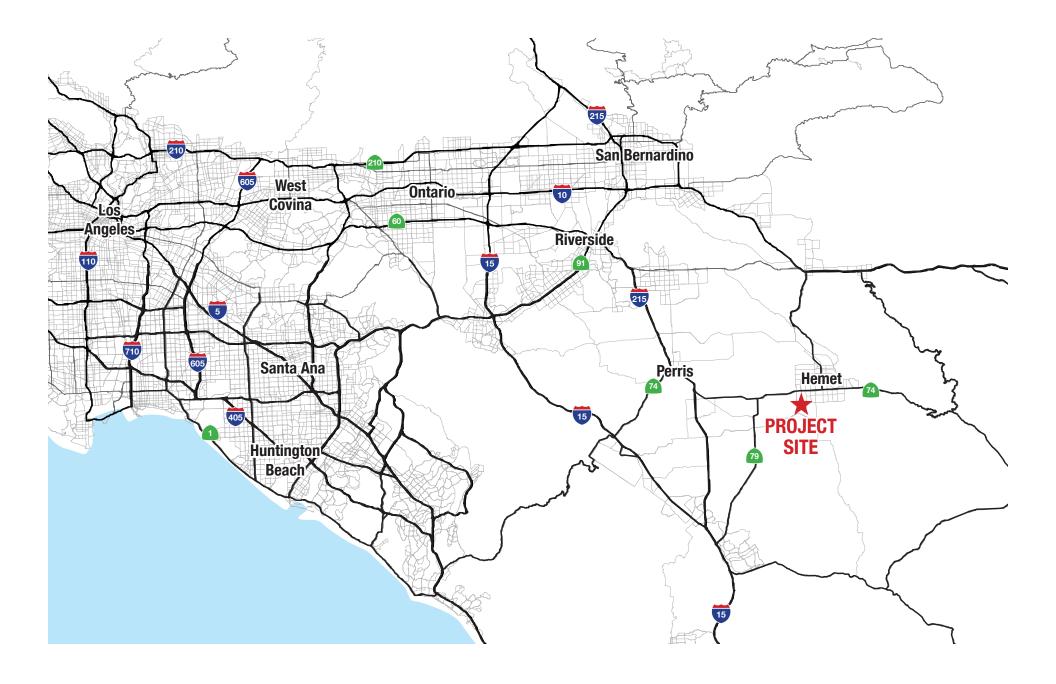
Existing General Plan Land Use and Zoning Designations

The City's 2030 General Plan was adopted on January 24, 2012 and the Zoning Code (Chapter 90 of the Hemet Municipal Code [MC]) was adopted in 1984 via Ordinance No. 621). Both documents have been periodically amended and/or revised since the time of adoption. Zoning is the primary mechanism for implementing the General Plan. It provides detailed regulations pertaining to permitted and conditional uses, site development standards, and performance criteria to implement the goals and policies of the General Plan. In particular, the Land Use Element of the City's GP establishes the primary basis for consistency with the City's Zoning Code. The City's Zoning Map corresponds with the General Plan designations. The Project is located within the Industrial (I) General Plan Land Use Designation and the General Manufacturing (M-2) Zone. 1, 2

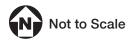
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¹ City of Hemet, 2030 General Plan, Chapter 2: Land Use, Figure 2.1 Land Use Plan, January 24, 2012, Retrieved from City of Hemet's Website: https://www.hemetca.gov/DocumentCenter/View/5329/2_Land_Use_web5142019?bidId=, Accessed June 21, 2021.

² City of Hemet. *Zoning Map.* Available at https://www.hemetca.gov/DocumentCenter/View/5289/official-zoning-map1222019?bidld=, accessed on June 21,2021.



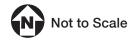


















2 ENVIRONMENTAL SETTING

2.1 Greenhouse Gases and Climate Change

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.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding 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.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (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 a GHG molecule is dependent on multiple variables and cannot be pinpointed, more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms of carbon sequestration. 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 atmosphere³. Table 1: Description of Greenhouse Gases describes the primary GHGs attributed to global climate change, including their physical properties.

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³ Intergovernmental Panel on Climate Change, 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, 2013. http://www.climatechange2013.org/images/report/WG1AR5_ALL_FINAL.pdf.

of Greenhouse Gases
Description
CO_2 is a colorless, odorless gas that is emitted naturally and through human activities. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. The atmospheric lifetime of CO_2 is variable because it is readily exchanged in the atmosphere. CO_2 is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs.
N_2O is largely attributable to agricultural practices and soil management. Primary human-related sources of N_2O include agricultural soil management, sewage treatment, combustion of fossil fuels, and adipic and nitric acid production. N_2O is produced from biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years. The Global Warming Potential of N_2O is 298.
CH ₄ , a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Methane is the major component of natural gas, about 87 percent by volume. Human-related sources include fossil fuel production, animal husbandry, rice cultivation, biomass burning, and waste management. Natural sources of CH ₄ include wetlands, gas hydrates, termites, oceans, freshwater bodies, non-wetland soils, and wildfires. The atmospheric lifetime of CH ₄ is about 12 years and the Global Warming Potential is 25.
HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is increasing, as the continued phase out of CFCs and HCFCs gains momentum. The 100-year Global Warming Potential of HFCs range from 124 for HFC-152 to 14,800 for HFC-23.
PFCs have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Global Warming Potentials range from 6,500 to 9,200.
CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987. Global Warming Potentials for CFCs range from 3,800 to 14,400.
SF_6 is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas. The Global Warming Potential of SF_6 is 23,900.
HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, HCFCs are subject to a consumption cap and gradual phase out. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The 100-year Global Warming Potentials of HCFCs range from 90 for HCFC-123 to 1,800 for HCFC-142b.
NF_3 was added to Health and Safety Code section 38505(g)(7) as a GHG of concern. This gas is used in electronics manufacture for semiconductors and liquid crystal displays. It has a high global warming potential of 17,200.

Source: Compiled from U.S. EPA, Overview of Greenhouse Gases, (https://www.epa.gov/ghgemissions/overview-greenhouse-gases), accessed 2-5-2020; U.S. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016, 2018; Intergovernmental Panel on Climate Change, Climate Change 2007: The Physical Science Basis, 2007; National Research Council, Advancing the Science of Climate Change, 2010; U.S. EPA, Methane and Nitrous Oxide Emission from Natural Sources, April 2010.

3 REGULATORY SETTING

3.1 Federal

To date, national standards have not been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

U.S. Environmental Protection Agency Endangerment Finding

The U.S. Environmental Protection Agency (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Federal Clean Air Act (FCAA) and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO_2 , CH_4 , N_2O , HFCs, PFCs, and SF_6) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing FCAA and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

Federal Vehicle Standards

In response to the U.S. Supreme Court ruling discussed above, Executive Order 13432 was issued in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, an Executive Memorandum was issued directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction,

clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO₂ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking. On January 12, 2017, the EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks. It should be noted that the U.S. EPA is currently proposing to freeze the vehicle fuel efficiency standards at their planned 2020 level (37 mpg), canceling any future strengthening (currently 54.5 mpg by 2026).

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program.

In 2018, the President and the EPA stated their intent to halt various federal regulatory activities to reduce GHG emission, including the phase two program. California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives. On September 27, 2019, the EPA and the NHTSA published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program." (84 Fed. Reg. 51,310 (Sept. 27, 2019.) The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On March 31, 2020, the EPA and NHTSA finalized rulemaking for SAFE Part Two sets CO_2 emissions standards and corporate average fuel economy (CAFE) standards for passenger vehicles and light duty trucks, covering model years 2021-2026. The current U.S. EPA administration has repealed SAFE Rule Part One, effective January 28, 2022 and is reconsidering Part Two.

3.2 State of California

California Air Resources Board

The California Air Resources Board (CARB) is responsible for the coordination and oversight of State and local air pollution control programs in California. Various statewide and local initiatives to reduce California's contribution to GHG emissions have raised awareness about climate change and its potential for severe long-term adverse environmental, social, and economic effects. California is a significant emitter of CO₂ equivalents (CO₂e) in the world and produced 459 million gross metric tons of CO₂e in 2013. In the State, the transportation sector is the largest emitter of GHGs, followed by industrial operations such as manufacturing and oil and gas extraction.

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark Assembly Bill (AB) 32, *California Global Warming Solutions Act of 2006*, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 building efficiency standards and Title 20 appliance energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

AB 32 instructs the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. AB 32 also directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

CARB Scoping Plan

CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business-as-usual")⁴. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates early actions and additional GHG reduction measures by both CARB and the State's Climate Action Team, identifies additional measures to be pursued as regulations, and outlines the adopted role of a cap-and-trade program⁵. Additional development of these measures and adoption of the appropriate regulations occurred through the end of 2013. Key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent by 2020.
- Developing a California cap-and-trade program that links with other programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions (adopted in 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets (several sustainable community strategies have been adopted).
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, heavy-duty truck measures, the Low Carbon Fuel Standard

August 2022

⁴ CARB defines business-as-usual (BAU) in its Scoping Plan as emissions levels that would occur if California continued to grow and add new GHG emissions but did not adopt any measures to reduce emissions. Projections for each emission-generating sector were compiled and used to estimate emissions for 2020 based on 2002–2004 emissions intensities. Under CARB's definition of BAU, new growth is assumed to have the same carbon intensities as was typical from 2002 through 2004.

⁵ The Climate Action Team, led by the secretary of the California Environmental Protection Agency, is a group of State agency secretaries and heads of agencies, boards, and departments. Team members work to coordinate statewide efforts to implement global warming emissions reduction programs and the State's Climate Adaptation Strategy.

- (amendments to the Pavley Standard adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).
- Creating targeted fees, including a public goods charge on water use, fees on gasses with high
 global warming potential, and a fee to fund the administrative costs of the State of California's
 long-term commitment to AB 32 implementation.

In 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relied on emissions projections updated in light of current economic forecasts that accounted for the economic downturn since 2008, reduction measures already approved and put in place relating to future fuel and energy demand, and other factors. This update reduced the projected 2020 emissions from 596 million metric tons of CO₂e (MMTCO₂e) to 545 MMTCO₂e. The reduction in forecasted 2020 emissions means that the revised business-as-usual reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 is now 21.7 percent, down from 29 percent. CARB also provided a lower 2020 inventory forecast that incorporated State-led GHG emissions reduction measures already in place. When this lower forecast is considered, the necessary reduction from business-as-usual needed to achieve the goals of AB 32 is approximately 16 percent.

CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes the most recent science related to climate change, including anticipated impacts to California and the levels of GHG emissions reductions necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32.

In 2016, the Legislature passed Senate Bill (SB) 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017 CARB adopted a second update to the Scoping Plan⁶. The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and, support the Clean Power Plan and other Federal actions.

Senate Bill 32 (California Global Warming Solutions Act of 2006: Emissions Limit)

Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

SB 375 (The Sustainable Communities and Climate Protection Act of 2008)

Signed into law on September 30, 2008, SB 375 provides a process to coordinate land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction goals established by AB 32. SB 375 requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, aligns planning for transportation and housing, and creates specified incentives for the implementation of the strategies.

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⁶ California Air Resources Board, California's 2017 Climate Change Scoping Plan, https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf_Accessed May 9, 2018.

AB 1493 (Pavley Regulations and Fuel Efficiency Standards)

AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the by the U.S. District Court for the District of Columbia in 2011. The regulations establish one set of emission standards for model years 2009–2016 and a second set of emissions standards for model years 2017 to 2025. By 2025, when all rules will be fully implemented, new automobiles will emit 34 percent fewer CO₂e emissions and 75 percent fewer smogforming emissions.

SB 1368 (Emission Performance Standards)

SB 1368 is the companion bill of AB 32, which directs the California Public Utilities Commission (CPUC) to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 limits carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. The new law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. The CPUC adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, for 1,100 pounds of CO₂ per megawatt-hour.

SB 1078 and SBX1-2 (Renewable Electricity Standards)

SB 1078 requires California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Executive Order S-21-09 also directed CARB to adopt a regulation by July 31, 2010, requiring the State's load serving entities to meet a 33 percent renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23. SBX1-2, which codified the 33 percent by 2020 goal.

SB 350 (Clean Energy and Pollution Reduction Act of 2015)

Signed into law on October 7, 2015, SB 350 implements the goals of Executive Order B-30-15. The objectives of SB 350 are to increase the procurement of electricity from renewable sources from 33 percent to 50 percent (with interim targets of 40 percent by 2024, and 25 percent by 2027) and to double the energy efficiency savings in electricity and natural gas end uses of retail customers through energy efficiency and conservation. SB 350 also reorganizes the Independent System Operator to develop more regional electricity transmission markets and improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

AB 398 (Market-Based Compliance Mechanisms)

Signed on July 25, 2017, AB 398 extended the duration of the Cap-and-Trade program from 2020 to 2030. AB 398 required CARB to update the Scoping Plan and for all GHG rules and regulations adopted by the State. It also designated CARB as the statewide regulatory body responsible for ensuring that California meets its statewide carbon pollution reduction targets, while retaining local air districts' responsibility and authority to curb toxic air contaminants and criteria pollutants from local sources that severely impact public health. AB 398 also decreased free carbon allowances over 40 percent by 2030 and prioritized Capand-Trade spending to various programs including reducing diesel emissions in impacted communities.

SB 150 (Regional Transportation Plans)

Signed on October 10, 2017, SB 150 aligns local and regional GHG reduction targets with State targets (i.e., 40 percent below their 1990 levels by 2030). SB 150 creates a process to include communities in discussions on how to monitor their regions' progress on meeting these goals. The bill also requires the CARB to regularly report on that progress, as well as on the successes and the challenges regions experience associated with achieving their targets. SB 150 provides for accounting of climate change efforts and GHG reductions and identify effective reduction strategies.

SB 100 (California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases)

Signed into Law in September 2018, SB 100 increased California's renewable electricity portfolio from 50 to 60 percent by 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs using executive orders. Although not regulatory, they set the tone for the State and guide the actions of state agencies.

Executive Order S-3-05. Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions reduction targets:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07. Issued on January 18, 2007, Executive Order S 01-07 mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. The executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. CARB adopted the LCFS on April 23, 2009.

Executive Order S-13-08. Issued on November 14, 2008, Executive Order S-13-08 facilitated the California Natural Resources Agency development of the 2009 California Climate Adaptation Strategy. Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order S-14-08. Issued on November 17, 2008, Executive Order S-14-08 expands the State's Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. CARB adopted the Renewable Electricity Standard on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly owned electricity retailers.

Executive Order S-21-09. Issued on July 17, 2009, Executive Order S-21-09 directs CARB to adopt regulations to increase California's RPS to 33 percent by 2020. This builds upon SB 1078 (2002), which established the California RPS program, requiring 20 percent renewable energy by 2017, and SB 107 (2006), which advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II.

Executive Order B-30-15. Issued on April 29, 2015, Executive Order B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of CO_2 e (MMTCO₂e). The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by Executive Order S-3-05. The executive order also requires the State's climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other provisions. With the enactment of SB 32 in 2016, the Legislature codified the goal of reducing GHG emissions by 2030 to 40 percent below 1990 levels.

Executive Order B-55-18. Issued on September 10, 2018, Executive Order B-55-18 establishes a goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. This goal is in addition to the existing statewide targets of reducing GHG emissions. The executive order requires CARB to work with relevant state agencies to develop a framework for implementing this goal. It also requires CARB to update the Scoping Plan to identify and recommend measures to achieve carbon neutrality. The executive order also requires state agencies to develop sequestration targets in the Natural and Working Lands Climate Change Implementation Plan.

Executive Order N-79-20. Signed in September 2020, Executive Order N-79-20 establishes as a goal that where feasible, all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035. The executive order sets a similar goal requiring that all medium and heavy-duty vehicles will be zero-emission by 2045 where feasible. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new zero emission vehicles (ZEVs) "towards the target of 100 percent." The executive order directs the California Environmental Protection Agency, the California Geologic Energy Management Division (CalGEM), and the California Natural Resources Agency to transition and repurpose oil production facilities with a goal toward meeting carbon neutrality by 2045. Executive Order N-79-20 builds upon the CARB Advanced Clean Trucks regulation, which was adopted by CARB in July 2020.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 Appliance Efficiency Regulations. The appliance efficiency regulations (California Code of Regulations [CCR] Title 20, Sections 1601-1608) include standards for new appliances. Twenty-three categories of appliances are included in the scope of these regulations. These standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances.

Title 24 Building Energy Efficiency Standards. California's Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6), was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

Title 24 California Green Building Standards Code. The California Green Building Standards Code (CCR Title 24, Part 11 code) commonly referred to as the CALGreen Code, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics.

On August 11, 2021, the CEC adopted the 2022 Energy Code. In December, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. Among other updates like strengthened ventilation standards for gas cooking appliances, the 2022 Energy Code includes updated standards in three major areas:

- New electric heat pump requirements for residential uses, schools, offices, banks, libraries, retail, and grocery stores.
- The promotion of electric-ready requirements for new homes including the addition of circuitry for electric appliances, battery storage panels, and dedicated infrastructure to allow for the conversion from natural gas to electricity.
- The expansion of solar photovoltaic and battery storage standards to additional land uses including high-rise multifamily residences, hotels and motels, tenant spaces, offices, (including medical offices and clinics), retail and grocery stores, restaurants, schools, and civic uses (including theaters auditoriums, and convention centers)

Projects whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.⁷

CARB Advanced Clean Truck Regulation

CARB adopted the Advanced Clean Truck Regulation in June 2020 requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. This rule directly addresses disproportionate risks and health and pollution burdens and puts California on the path for an all zero-emission short-haul drayage fleet in ports and railyards by 2035, and zero-emission "last-mile" delivery trucks and vans by 2040. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8. The regulation has two components including a manufacturer sales requirement, and a reporting requirement:

- Zero-Emission Truck Sales: Manufacturers who certify Class 2b through 8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales need to be 55 percent of Class 2b 3 truck sales, 75 percent of Class 4 8 straight truck sales, and 40 percent of truck tractor sales.
- Company and Fleet Reporting: Large employers including retailers, manufacturers, brokers and
 others would be required to report information about shipments and shuttle services. Fleet
 owners, with 50 or more trucks, would be required to report about their existing fleet operations.
 This information would help identify future strategies to ensure that fleets purchase available
 zero-emission trucks and place them in service where suitable to meet their needs.

3.3 REGIONAL

South Coast Air Quality Management District Thresholds

The South Coast Air Quality Management District (SCAQMD) formed a GHG California Environmental Quality Act (CEQA) Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. As of the last Working Group meeting (Meeting 15) held in September 2010, the SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency.

With the tiered approach, the Project is compared with the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from SB 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. For all industrial projects, the SCAQMD is proposing a screening threshold of 10,000 metric tons of CO₂e (MTCO₂e) per year for industrial projects and a threshold of 3,000 MTCO₂e per year for all other projects. SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

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⁷ California Energy Commission. 2022. 2022 Building Energy Efficiency Standards, https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency (accessed August 2022).

Tier 4 consists of three decision tree options. Under the Tier 4 first option, SCAQMD initially outlined that a project would be excluded if design features and/or mitigation measures resulted in emissions 30 percent lower than business as usual emissions. However, the Working Group did not provide a recommendation for this approach. The Working Group folded the Tier 4 second option into the third option. Under the Tier 4 third option, a project would be excluded if it was below an efficiency-based threshold of 4.8 MTCO₂e per service population per year. Tier 5 would exclude projects that implement offsite mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level.

Southern California Association of Governments

On September 3, 2020, SCAG's Regional Council adopted Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy [2020 RTP/SCS]). The RTP/SCS charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The strategy was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The RTP/SCS is a long-range vision plan that balances future mobility and housing needs with economic, environmental, and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions.

3.4 Local

City of Hemet Climate Action Plan

The City of Hemet is a participant in the Western Riverside Council of Government's (WRCOG's) Climate Action Plan (CAP) and adopted the WRCOG subregional CAP on September 11, 2018. As such, the City of Hemet has chosen to adopt the WRCOG CAP as the Helmet CAP incorporating as appendices the Western Riverside Energy Leader Partnership (WRELP) Community Energy Action Plan and the Municipal Energy Action Plan for the City of Hemet.

The CAP recommends GHG emissions targets that are consistent with the reduction targets of the State of California and presents a number of strategies that will make it possible for the City to meet the recommended targets. The City uses WRCOG's subregion emissions reduction target of 15% below 2010 levels by 2020. Based on guidance from CARB and the Governor's Office of Planning and Research, this reduction target level is consistent with AB 32 and serves as a basis for projects to be consistent with meeting statewide reduction targets. The following CAP emission reduction measures potentially apply to the proposed project:

- **R2-E2:** New Commercial Energy Efficiency. Increase energy efficiency in new commercial developments an average of 10% beyond Title 24 Standards (2013 Title 24 Standard per WRCOG CAP).
- **R2-E4:** Commercial Renewable Energy. Derive 10% of electricity use in new commercial developments from renewable energy and install an average of 5 kilowatt (kW) of solar photovoltaic cells per 10,000 square feet of building space.

R2-W2: Water Conservation Strategies. Reduce water consumption in new developments by 20% through low flush toilets, landscape ordinance, incentive programs, on-site storm water capture, and other similar programs.

4 SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 Thresholds and Significance Criteria

Addressing GHG emissions generation impacts requires an agency to determine what constitutes a significant impact. The amendments to the CEQA Guidelines specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine whether a project's GHG emissions will have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions⁸.

Based upon the criteria derived from Appendix G of the CEQA Guidelines, a project normally would have a significant effect on the environment if it would:

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

4.2 Methodology

Global climate change is, by definition, a cumulative impact of GHG emissions. Therefore, there is no project-level analysis. The baseline against which to compare potential impacts of the Project includes the natural and anthropogenic drivers of global climate change, including world-wide GHG emissions from human activities which almost doubled between 1970 and 2010 from approximately 27 gigatonnes (Gt) of CO₂/year to nearly 49 GtCO₂/year.⁹ As such, the geographic extent of climate change and GHG emissions' cumulative impact discussion is worldwide.

The Project's construction and operational emissions were calculated using the California Emissions Estimator Model version 2020.4.0 (CalEEMod). Details of the modeling assumptions and emission factors are provided in <u>Appendix A: Greenhouse Gas Emissions Data</u>. For construction, CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecasted based on the proposed construction schedule and applying the mobile-source and fugitive dust emissions factors derived from CalEEMod. The Project's construction-related GHG emissions would be generated from off-road construction equipment, on-road hauling, and vendor (material delivery) trucks, and worker vehicles.

Construction equipment, trucks, worker vehicles, and ground-disturbing activities associated with Project construction would generate GHG emissions. Construction emissions are estimated by assuming construction occurs at the earliest feasible date (i.e., a conservative estimate of construction activities) and applying emissions factors in CalEEMod. For analysis purposes, construction is anticipated to commence construction in early 2022 and would begin operation by mid to late 2022. Construction is

Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2014.

August 2022

^{8 14} California Code of Regulations, Section 15064.4a

Intergovernmental Panel on Climate Change, Climate Change 2014 Mitigation of Climate Change Working Group III

conservatively assumed to begin in early 2022, as delaying the start of construction would only likely reduce emissions as emission control technology will improve in the future. 10

The Project's operations-related GHG emissions would be generated by vehicular traffic, area sources (e.g. landscaping maintenance, consumer products), electrical generation, natural gas consumption, water supply and wastewater treatment, and solid waste.

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Emissions in future years (i.e., due to a later construction start date or operational opening year) would be lower due to phased-in emissions standards, inspection and maintenance requirements, and fleet turnover). Specifically, project construction was modeled to start in early 2022 but would commence at a later date. As such, construction impacts would be less than those analyzed due to the use of more energy-efficient and cleaner burning construction vehicle fleet mix, pursuant to state regulations that require vehicle fleet operators to phase-in less polluting heavy-duty equipment. As a result, Project-related construction air quality impacts would be lower than the impacts disclosed herein. For emissions modeling purposes, conservatively analyzing the emissions using an earlier construction start date (i.e., early 2022), provides for a worst-case analysis and full disclosure of potential air quality impacts, as required by CEQA.

5 POTENTIAL IMPACTS AND MITIGATION

5.1 Greenhouse Gas Emissions

Threshold 5.1 Would the Project generate GHG emissions, either directly or indirectly, that could have a significant impact on the environment?

Short-Term Construction Greenhouse Gas Emissions

The Project would result in direct emissions of GHGs from construction. The approximate quantity of daily GHG emissions generated by construction equipment utilized to build the Project is depicted in <u>Table 2</u>: Construction-Related Greenhouse Gas Emissions.

Table 2: Construction-Related Greenhouse Gas Emissions			
Category	MTCO₂e		
Construction	515		
30-Year Amortized Construction	17		
Source: CalEEMod version 2016.3.2. Refer to Appendix A for model outputs.			

As shown, the Project would result in the generation of approximately 515 MTCO₂e over the course of construction. Construction GHG emissions are typically summed and amortized over the lifetime of the Project (assumed to be 30 years), then added to the operational emissions.¹¹ The amortized Project construction emissions would be 17 MTCO₂e per year. Once construction is complete, the generation of these GHG emissions would cease.

Long-Term Operational Greenhouse Gas Emissions

Operational or long-term emissions occur over the life of the Project. GHG emissions would result from direct emissions such as Project generated vehicular traffic, on-site combustion of natural gas, and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power, the energy required to convey water to, and wastewater from the Project, the emissions associated with solid waste generated from the Project, and any fugitive refrigerants from air conditioning or refrigerators.

Total GHG emissions associated with the Project are summarized in <u>Table 3: Project Greenhouse Gas Emissions</u>. The Project would include energy efficiency requirements matching or exceeding Title 24 requirements and water conservation measures that match California Green Building Code standards. As shown in <u>Table 3</u>, the Project would generate approximately 533 MTCO₂e annually from both construction and operations and the Project. Around 40 percent of the GHG emissions are associated with nonconstruction related mobile sources. Emissions of motor vehicles are controlled by State and Federal standards, and the Project has no control over these standards.

¹¹ The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13,* August 26, 2009).

Emissions Source	MTCO₂e per Year
Construction Amortized Over 30 Years	17
Area Source	0.01
Energy	17
Mobile	210
Off-road	259
Waste	12
Water and Wastewater	18
Total	533
Riverside County CAP Threshold	3,000
Exceeds Threshold?	No

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

5.2 Greenhouse Gas Reduction Plan Compliance

Threshold 5.2 Would the Project conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions?

City of Hemet Climate Action Plan

The City's CAP, which was an adoption the WRCOG subregional CAP, provides a framework for reducing GHG emissions and managing resources to best prepare for a changing climate. With respect to evaluation of projects under CEQA, the CAP states, "One of the major benefits to an adopted Hemet CAP is that development projects within the City would not require additional GHG emissions analysis and mitigation under CEQA if they are consistent with the Hemet CAP". The purpose of the City's CAP is to guide the development, enhancement, and implementation of actions that would reduce the City's GHG emissions by 15 percent below existing (2010) levels by 2020. However, the Project buildout would be post-2020; thus, consistency with the City's CAP is included for informational purposes.

As noted above, the City's CAP includes reduction measures R2-E2: New Commercial Energy Efficiency, R2-E4: Commercial Renewable Energy, and R2-W2: Water Conservation Strategies that are applicable to the proposed Project. The proposed Project would be required to meet the 2019 Title 24 standards, which requires a 30 percent reducing in energy consumption than 2016 standards due mainly to lighting upgrades. 2016 Title 24 standards for nonresidential buildings will use about 5 percent less energy than those built to the 2013 standards. Therefore, by meeting the 2019 Title 24 Standards, the proposed Project would exceed the requirement of 10 percent beyond 2013 Title 24 Standards.

Additionally, SCE would provide electricity for the proposed Project. According to the California Energy Commission, SCE obtained 36 percent of its power supply from renewable sources in 2018. ¹² Therefore, the Project would exceed 10 percent of renewable electricity goal. Additionally, the latest building code requires non-residential buildings to be solar ready. However, the City of Hemet CAP (measure R2-E4) requires installation of an average of 5 kilowatt (kW) of solar photovoltaic cells per 10,000 square feet of building space, therefore **MM GHG-1** is required to comply with CAP measure R2-E4. Furthermore, the Project would comply with the CalGreen standards, which requires a 20 percent reduction in indoor water use. The Project would also comply with the City's Water Conservation Ordinance (Chapter 14, Article VIII of the Hemet Municipal Code). Therefore, the Project would be consistent with the strategies in the City's CAP.

Regional Transportation Plan/Sustainable Communities Strategy Consistency

On September 3, 2020, SCAG's Regional Council adopted Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy [2020 RTP/SCS]). The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders in the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG's RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the Project region consistent with both the target date of AB 32 and the post-2020 GHG reduction goals of Executive Orders 5-03-05 and B-30-15.

The RTP/SCS contains over 4,000 transportation projects, ranging from highway improvements, railroad grade separations, bicycle lanes, new transit hubs and replacement bridges. These future investments were included in county plans developed by the six county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices for everyone. The RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding.

The plan accounts for operations and maintenance costs to ensure reliability, longevity, and cost effectiveness. The RTP/SCS is also supported by a combination of transportation and land use strategies that help the region achieve state GHG emissions reduction goals and Federal Clean Air Act (FCAA) requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently. GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore Project comparison to the RTP/SCS is an appropriate indicator of whether the Project would inhibit the post-2020 GHG reduction goals promulgated by the state. The Project's consistency with the RTP/SCS goals is analyzed in detail in Table 4: Regional Transportation Plan/Sustainable Communities Strategy Consistency.

¹² California Energy Commission, Annual Power Content Labels for 2018, July 2019.

SCAG Goals	;	Compliance	
GOAL 1:	Encourage regional economic prosperity and global competitiveness.	N/A:	This is not a project-specific policy and is therefore not applicable. However, the Project is located on a vacant site and development of the site would contribute to regional economic prosperity.
GOAL 2:	Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent:	Although this Project is not a transportation improvement project, the Project is located near existing transit routes on S. Lyon Street close to Mayberry Avenue. RTA bus routes 31 and 32 are in the vicinity of the Project.
GOAL 3:	Enhance the preservation, security, and resilience of the regional transportation system.	N/A:	This is not a transportation improvement project and is therefore not applicable.
GOAL 4:	Increase person and goods movement and travel choices within the transportation system.	N/A:	This is not a project-specific policy and is therefore not applicable. However, the Project includes a warehouse use that would support goods movement.
GOAL 5:	Reduce greenhouse gas emissions and improve air quality.	Consistent:	The Project is located within an urban area in proximity to existing truck routes and freeways. Location of the project within a developed area would reduce trip lengths, which would reduce GHG and air quality emissions.
GOAL 6:	Support healthy and equitable communities	Consistent:	The Project does not exceed the SCAQMD's regional or localized thresholds. Based on the Friant Ranch decision, projects that do not exceed the SCAQMD's LSTs would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and result in no criteria pollutant health impacts.
GOAL 7:	Adapt to a changing climate and support an integrated regional development pattern and transportation network.	N/A:	This is not a project-specific policy and is therefore not applicable.
GOAL 8:	Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	N/A:	This is not a project-specific policy and is therefore not applicable.
GOAL 9:	Encourage development of diverse housing types in areas that are supported by multiple transportation options.	N/A:	The Project involves development of a warehouse and does not include housing. The Project is located within a relatively short walking distance to local bus routes.
GOAL 10:	Promote conservation of natural and agricultural lands and restoration of habitats.	N/A:	The Project is located on a previously developed site and is not located on agricultural lands.

Compliance with applicable State standards would ensure consistency with State and regional GHG reduction planning efforts. The goals stated in the RTP/SCS were used to determine consistency with the planning efforts previously stated. As shown in <u>Table 4</u>, the proposed Project would be consistent with the stated goals of the RTP/SCS. Therefore, the proposed Project would not result in any significant

impacts or interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets.

Consistency with the CARB Scoping Plan

The California State Legislature adopted AB 32 in 2006. AB 32 focuses on reducing GHGs (CO_2 , CH_4 , N_2O , HFCs, PFCs, and SF₆) to 1990 levels by the year 2020. Pursuant to the requirements in AB 32, CARB adopted the *Climate Change Scoping Plan* (Scoping Plan) in 2008, which outlines actions recommended to obtain that goal. The Scoping Plan provides a range of GHG reduction actions that include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as the cap-and-trade program, and an AB 32 implementation fee to fund the program. The 2017 Scoping Plan Update identifies additional GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the Scoping Plan in 2013. Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets.

As shown in <u>Table 5: Project Consistency with Applicable CARB Scoping Plan Measures</u>, the Project is consistent with most of the strategies, while others are not applicable to the Project. As such, impacts related to consistency with the Scoping Plan would be less than significant.

Table 5: Project Consistency with Applicable CARB Scoping Plan Measures				
Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency	
Transportation	California Cap-and-	Regulation for the	Not Applicable. The Cap-and-Trade Program applies to	
	Trade Program	California Cap on GHG	large industrial sources such as power plants,	
	Linked to Western	Emissions and Market-	refineries, and cement manufacturers. However, the	
	Climate Initiative	Based Compliance	regulation indirectly affects people who use the	
		Mechanism October	products and services produced by these industrial	
		20, 2015 (CCR 95800)	sources when increased cost of products or services	
			(such as electricity and fuel) are transferred to the	
			consumers. The Cap-and-Trade Program covers the	
			GHG emissions associated with electricity consumed in	
			California, generated in-state or imported.	
			Accordingly, GHG emissions associated with CEQA	
			projects' electricity usage are covered by the Cap-and-	
			Trade Program. The Cap-and-Trade Program also	
			covers fuel suppliers (natural gas and propane fuel	
			providers and transportation fuel providers) to address	
			emissions from such fuels and combustion of other	
			fossil fuels not directly covered at large sources in the	
			Program's first compliance period.	
	California Light-Duty	Pavley I 2005	Consistent. This measure applies to all new vehicles	
	Vehicle GHG	Regulations to Control	starting with model year 2012. The Project would not	
	Standards	GHG Emissions from	conflict with its implementation as it would apply to all	
		Motor Vehicles	new passenger vehicles purchased in California.	
		Pavley I 2005	Passenger vehicles, model year 2012 and later,	
		Regulations to Control	associated with construction and operation of the	
		GHG Emissions from	Project would be required to comply with the Pavley	
		Motor Vehicles	emissions standards.	
		2012 LEV III California	Consistent. The LEV III amendments provide	
		GHG and Criteria	reductions from new vehicles sold in California	
		Pollutant Exhaust and	between 2017 and 2025. Passenger vehicles	

Table 5: Project Consistency with Applicable CARB Scoping Plan Measures				
Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency	
		Evaporative Emission	associated with the site would comply with LEV I	
		Standards	standards.	
	Low Carbon Fuel	2009 readopted in	Consistent. This measure applies to transportation	
	Standard	2015. Regulations to	fuels utilized by vehicles in California. The Project	
		Achieve GHG Emission	would not conflict with implementation of th	
		Reductions Subarticle	measure. Motor vehicles associated with construction	
		7. Low Carbon Fuel	and operation of the Project would utilize low carbo	
	Dogional	Standard CCR 95480 SB 375. Cal. Public	transportation fuels as required under this measure.	
	Regional Transportation-	Resources Code §§	Consistent. The Project would provide development the region that is consistent with the grow	
	Related GHG	21155, 21155.1,	projections in the RTP/SCS.	
	Targets.	21155, 21155.1, 21155.2, 21159.28	projections in the KTF/3C3.	
	Goods Movement	Goods Movement	Not applicable. The Project does not propose ar	
		Action Plan January	changes to maritime, rail, or intermodal facilities	
		2007	forms of transportation.	
	Medium/Heavy-Duty	2010 Amendments to	Consistent. This measure applies to medium ar	
	Vehicle	the Truck and Bus	heavy-duty vehicles that operate in the state. The	
		Regulation, the	Project would not conflict with implementation of th	
		Drayage Truck	measure. Medium and heavy-duty vehicles associate	
		Regulation and the	with construction and operation of the Project wou	
		Tractor-Trailer GHG	be required to comply with the requirements of the	
		Regulation	regulation.	
	High Speed Rail	Funded under SB 862	Not applicable. This is a statewide measure th	
			cannot be implemented by a project applicant or Lea	
Electricity and	Energy Efficiency	Title 20 Appliance	Agency. Consistent. The Project would not conflict with	
Natural Gas	Lifeigy Efficiency	Efficiency Regulation	implementation of this measure. The Project wou	
		Title 24 Part 6 Energy	comply with the latest energy efficiency standards.	
		Efficiency Standards for	, , , , , , , , , , , , , , , , , , ,	
		Residential and Non-		
		Residential Building		
		Title 24 Part 11		
		California Green		
		Building Code		
		Standards		
	Renewable Portfolio	2010 Regulation to	Consistent. The Project would obtain electricity fro	
	Standard/Renewable	Implement the	the electric utility, Southern California Edison (SCF	
	Electricity Standard.	Renewable Electricity	SCE obtained 36 percent of its power supply fro	
	Million Solar Roofs	Standard (33% 2020)	renewable sources in 2018. Therefore, the utili would provide power when needed on site that	
	Program	SB 350 Clean Energy and Pollution	composed of a greater percentage of renewab	
	i rogram	Reduction Act of 2015	sources.	
		(50% 2030)		
	Million Solar Roofs	Tax Incentive Program	Consistent. This measure is to increase sol	
	Program		throughout California, which is being done by various	
			electricity providers and existing solar programs. The	
			program provides incentives that are in place at the	
			time of construction.	
Water	Water	Title 24 Part 11	Consistent. The Project would comply with the	
		California Green	CalGreen standards, which requires a 20 perce	
		Building Code	reduction in indoor water use.	
		Standards		

Scoping Plan	Scoping Plan	Implementing	
Sector	Measure	Regulations	Project Consistency
Jectoi	ivicasure	SBX 7-7—The Water	
		Conservation Act of	
		2009	
		Model Water Efficient	
		Landscape Ordinance	
Green Buildings	Green Building	Title 24 Part 11	Consistent. The State is to increase the use of green
Green buildings	Strategy	California Green	building practices. The Project would implement
	Strategy	Building Code	required green building strategies through existing
		Standards	regulation that requires the Project to comply with
		Standards	various CalGreen requirements. The Project includes
			sustainability design features that support the Green
			Building Strategy.
Industry	Industrial Emissions	2010 CARB Mandatory	Not applicable. The Mandatory Reporting Regulation
muustiy	ilidustilai Elilissiolis	Reporting Regulation	requires facilities and entities with more than 10,000
		Reporting Regulation	MTCO ₂ e of combustion and process emissions, all
			facilities belonging to certain industries, and all electric
			power entities to submit an annual GHG emissions
			data report directly to CARB. As shown above, total
			Project GHG emissions would not exceed 10,000
			$MTCO_2e$. Therefore, this regulation would not apply.
Recycling and	Recycling and Waste	Title 24 Part 11	Consistent. The Project would not conflict with
Waste		California Green	implementation of these measures. The Project is
Management		Building Code	required to achieve the recycling mandates via
0		Standards	compliance with the CALGreen code. The City has
		AB 341 Statewide 75	consistently achieved its state recycling mandates.
		Percent Diversion Goal	, , , , , , ,
Forests	Sustainable Forests	Cap and Trade Offset	Not applicable. The Project is in an area designated for
		Projects	urban uses. No forested lands exist on-site.
High Global	High Global	CARB Refrigerant	Consistent. The regulations are applicable to
Warming	Warming Potential	Management Program	refrigerants used by large air conditioning systems and
Potential	Gases	CCR 95380	large commercial and industrial refrigerators and cold
			storage system. The Project would not conflict with the
			refrigerant management regulations adopted by CARB.
Agriculture	Agriculture	Cap and Trade Offset	Not applicable. The Project site is designated for urban
		Projects for Livestock	development. No grazing, feedlot, or other agricultural
		and Rice Cultivation	activities that generate manure occur currently exist
			on-site or are proposed to be implemented by the
			Project.

Source: California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017 and CARB, *Climate Change Scoping Plan*, December 2008.

As seen in <u>Tables 4 and 5</u>, the Project would be consistent with all applicable plan goals. As shown in <u>Table 3</u>, the Project is estimated to emit approximately 533 MTCO₂e per year with majority of emissions coming indirectly from off-site motor vehicles. As discussed above, the GHG emissions caused by long-term operation of the Project would not exceed the County's 3,000 MTCO₂e per year screening threshold, and impacts would be less than significant.

As discussed above, the proposed Project would not interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets. Additionally, Project emissions would be indirectly reduced through the implementation of various Scoping Plan measures, such as the low carbon fuel standard, vehicle emissions standards, building energy efficiency standards, market-based mechanisms (such as the cap-and-trade program) and the Renewable Portfolio Standard. Therefore, the Project would

not conflict with the Scoping Plan's recommended measures and, as such, would not impede implementation of the Scoping Plan. As such, impacts related to consistency with the Scoping Plan would be less than significant.

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the Project would benefit from implementation of current and potential future regulations (e.g., improvements in vehicle emissions, SB 100/renewable electricity portfolio improvements, etc.) enacted to meet an 80 percent reduction below 1990 levels by 2050.

The Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for reducing the emissions of GHGs because the Project would generate low levels of GHGs, and would not impede implementation of the Scoping Plan, or conflict with the policies of the Scoping Plan or any other GHG reduction plan. Therefore, the impacts would be less than significant.

Mitigation Measures:

MM GHG-1

As part of the building permit for tenant improvements, the project shall install solar photovoltaic (PV) panels. On-site solar PV systems shall be installed within two years of commencing operations. Each building shall include an electrical system and other infrastructure sufficiently sized to accommodate the PV arrays. The electrical system and infrastructure must be clearly labeled with noticeable and permanent signage. This mitigation measure applies only to tenant permits and not the building shell approvals.

Level of Significance: Less than significant impact with implementation of MM GHG-1.

5.3 Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

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 1 day), GHGs have much longer atmospheric lifetimes of 1 year to several thousand years that allow them to be dispersed around the globe.

Cumulative Impacts

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of project-related GHGs would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. In addition, the Project as well as other cumulative related projects would also be subject to all applicable regulatory requirements, which would further reduce GHG emissions. As shown in Table 3 through Table 5, the Project would not conflict with the GHGRP, the RTP/SCS, or the CARB Scoping Plan. Therefore, the Project's cumulative contribution of GHG emissions would be less than significant and the Project's cumulative GHG impacts would also be less than cumulatively considerable.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

6 REFERENCES

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- 2. County of Riverside, Climate Action Plan Update, 2019.
- 3. County of Riverside, General Plan, 2015.
- 4. Intergovernmental Panel on Climate Change, Climate Change 2007: The Physical Science Basis, 2007.
- 5. Intergovernmental Panel on Climate Change, Climate Change 2013: The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2013.
- 6. National Research Council, Advancing the Science of Climate Change, 2010.
- 7. State of California, Code of Regulations Section 15065.5a, 2018.
- 8. Southern California Association of Governments, 2016 2040 Regional Transportation Plan/Sustainable Communities Strategy, 2016.
- 9. South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #8*, 2009.
- 10. South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*, 2009.
- 11. U.S. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016, 2018.
- 12. U.S. EPA, Methane and Nitrous Oxide Emission from Natural Sources, 2010.
- 13. U.S. EPA, Overview of Greenhouse Gases, 2018.

Appendix A

Greenhouse Gas Emissions Data

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

Hemet Warehouse CalEEMod

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Urbanization

CO2 Intensity

(lb/MWhr)

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	3.00	1000sqft	0.07	3,000.00	0
Unrefrigerated Warehouse-No Rail	22.00	1000sqft	0.51	22,000.00	0
Other Asphalt Surfaces	414.05	1000sqft	9.51	414,048.00	0

Precipitation Freq (Days)

0.004

N2O Intensity

(lb/MWhr)

1.2 Other Project Characteristics

Urhan

390.98

Orbanization	Orban	Willia Opeca (III/3)	2.7	r recipitation ried (bays)	20
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Ediso	on			

24

0.033

Wind Speed (m/s)

CH4 Intensity

(lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per Site Plan (5.18.2021)

Construction Phase - anticipated construction schedule

Off-road Equipment - No demolition

Grading -

Vehicle Trips - Per Traffic study

Operational Off-Road Equipment - Off-road equipment

Construction Off-road Equipment Mitigation - SCAQMD Rule Compliance

Fleet Mix - Fleet mix adjustment

Water Mitigation -

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

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	30.00	25.00
tblConstructionPhase	NumDays	300.00	120.00
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	20.00	40.00
tblFleetMix	HHD	0.02	0.50
tblFleetMix	LDA	0.53	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.4220e-003	0.25
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.7590e-003	0.00
tblFleetMix	MHD	0.01	0.25
tblFleetMix	OBUS	6.3000e-004	0.00
tblFleetMix	SBUS	1.1020e-003	0.00
tblFleetMix	UBUS	3.2100e-004	0.00
tblGrading	MaterialExported	0.00	13,902.00
tblLandUse	LandUseSquareFeet	414,050.00	414,048.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.38	0.38

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

tblOperationalOffRoadEquipment	OperLoadFactor	0.20	0.20
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	6.00
tblVehicleTrips	CNW_TL	6.90	40.00
tblVehicleTrips	CNW_TTP	41.00	100.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.21	10.67
tblVehicleTrips	ST_TR	1.74	0.48
tblVehicleTrips	SU_TR	0.70	10.67
tblVehicleTrips	SU_TR	1.74	0.48
tblVehicleTrips	WD_TR	9.74	10.67
tblVehicleTrips	WD_TR	1.74	0.48

2.0 Emissions Summary

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					ton	s/yr							MT	/yr		
	0.4315	2.2091	2.3216	5.6100e- 003	0.3934	0.0961	0.4895	0.1447	0.0897	0.2343	0.0000	506.3814	506.3814	0.0800	0.0218	514.8906
Maximum	0.4315	2.2091	2.3216	5.6100e- 003	0.3934	0.0961	0.4895	0.1447	0.0897	0.2343	0.0000	506.3814	506.3814	0.0800	0.0218	514.8906

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					ton	s/yr							МТ	/yr		
	0.4315	2.2091	2.3216	5.6100e- 003	0.2496	0.0961	0.3457	0.0818	0.0897	0.1715	0.0000	506.3811	506.3811	0.0800	0.0218	514.8903
Maximum	0.4315	2.2091	2.3216	5.6100e- 003	0.2496	0.0961	0.3457	0.0818	0.0897	0.1715	0.0000	506.3811	506.3811	0.0800	0.0218	514.8903

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	36.55	0.00	29.38	43.43	0.00	26.81	0.00	0.00	0.00	0.00	0.00	0.00

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-1-2022	4-30-2022	1.1441	1.1441
2	5-1-2022	7-31-2022	0.7123	0.7123
3	8-1-2022	9-30-2022	0.4167	0.4167
		Highest	1.1441	1.1441

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	0.1350	5.0000e- 005	5.6100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0109	0.0109	3.0000e- 005	0.0000	0.0116
Energy	2.9000e- 004	2.6700e- 003	2.2400e- 003	2.0000e- 005		2.0000e- 004	2.0000e- 004		2.0000e- 004	2.0000e- 004	0.0000	16.8500	16.8500	1.2300e- 003	2.0000e- 004	16.9392
Mobile	0.0266	0.4033	0.2480	2.1100e- 003	0.1073	5.7000e- 003	0.1130	0.0299	5.4500e- 003	0.0353	0.0000	201.8127	201.8127	3.6400e- 003	0.0256	209.5334
Offroad	0.1581	1.3513	1.3432	2.9200e- 003		0.0739	0.0739		0.0679	0.0679	0.0000	256.8607	256.8607	0.0831	0.0000	258.9376
Waste	ii ii		,			0.0000	0.0000		0.0000	0.0000	4.7642	0.0000	4.7642	0.2816	0.0000	11.8031
Water			,			0.0000	0.0000		0.0000	0.0000	1.7832	13.6233	15.4065	0.1843	4.4600e- 003	21.3443
Total	0.3199	1.7573	1.5991	5.0500e- 003	0.1073	0.0798	0.1871	0.0299	0.0736	0.1035	6.5474	489.1576	495.7050	0.5538	0.0303	518.5691

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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					ton	s/yr							MT	/yr		
Area	0.1350	5.0000e- 005	5.6100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0109	0.0109	3.0000e- 005	0.0000	0.0116
Energy	2.9000e- 004	2.6700e- 003	2.2400e- 003	2.0000e- 005		2.0000e- 004	2.0000e- 004		2.0000e- 004	2.0000e- 004	0.0000	16.8500	16.8500	1.2300e- 003	2.0000e- 004	16.9392
Mobile	0.0266	0.4033	0.2480	2.1100e- 003	0.1073	5.7000e- 003	0.1130	0.0299	5.4500e- 003	0.0353	0.0000	201.8127	201.8127	3.6400e- 003	0.0256	209.5334
Offroad	0.1581	1.3513	1.3432	2.9200e- 003		0.0739	0.0739		0.0679	0.0679	0.0000	256.8607	256.8607	0.0831	0.0000	258.9376
Waste			,			0.0000	0.0000		0.0000	0.0000	4.7642	0.0000	4.7642	0.2816	0.0000	11.8031
Water			,			0.0000	0.0000		0.0000	0.0000	1.4266	10.9882	12.4147	0.1475	3.5700e- 003	17.1654
Total	0.3199	1.7573	1.5991	5.0500e- 003	0.1073	0.0798	0.1871	0.0299	0.0736	0.1035	6.1908	486.5225	492.7132	0.5170	0.0294	514.3902

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.45	0.54	0.60	6.65	2.94	0.81

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/1/2022	1/31/2022	5	0	
2	Site Preparation	Site Preparation	2/1/2022	2/14/2022	5	10	

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3	Grading	Grading	2/15/2022	3/21/2022	5	25	
4	Building Construction	Building Construction	3/22/2022	9/5/2022	5	120	
5	Paving	Paving	9/1/2022	11/2/2022	5	45	
6	Architectural Coating	Architectural Coating	10/1/2022	11/25/2022	5	40	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 75

Acres of Paving: 9.51

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 37,500; Non-Residential Outdoor: 12,500; Striped Parking Area: 24,843 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42

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Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,738.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	184.00	72.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	37.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

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3.2 Demolition - 2022

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e- 004		8.0600e- 003	8.0600e- 003		7.4200e- 003	7.4200e- 003	0.0000	16.7197	16.7197	5.4100e- 003	0.0000	16.8549
Total	0.0159	0.1654	0.0985	1.9000e- 004	0.0983	8.0600e- 003	0.1064	0.0505	7.4200e- 003	0.0579	0.0000	16.7197	16.7197	5.4100e- 003	0.0000	16.8549

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					ton	s/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	3.1000e- 004	2.4000e- 004	3.0700e- 003	1.0000e- 005	9.9000e- 004	1.0000e- 005	9.9000e- 004	2.6000e- 004	0.0000	2.7000e- 004	0.0000	0.7822	0.7822	2.0000e- 005	2.0000e- 005	0.7892
Total	3.1000e- 004	2.4000e- 004	3.0700e- 003	1.0000e- 005	9.9000e- 004	1.0000e- 005	9.9000e- 004	2.6000e- 004	0.0000	2.7000e- 004	0.0000	0.7822	0.7822	2.0000e- 005	2.0000e- 005	0.7892

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3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0364	0.0000	0.0364	0.0187	0.0000	0.0187	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e- 004		8.0600e- 003	8.0600e- 003		7.4200e- 003	7.4200e- 003	0.0000	16.7197	16.7197	5.4100e- 003	0.0000	16.8549
Total	0.0159	0.1654	0.0985	1.9000e- 004	0.0364	8.0600e- 003	0.0445	0.0187	7.4200e- 003	0.0261	0.0000	16.7197	16.7197	5.4100e- 003	0.0000	16.8549

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					ton	s/yr							МТ	/уг		
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	3.1000e- 004	2.4000e- 004	3.0700e- 003	1.0000e- 005	9.4000e- 004	1.0000e- 005	9.4000e- 004	2.5000e- 004	0.0000	2.5000e- 004	0.0000	0.7822	0.7822	2.0000e- 005	2.0000e- 005	0.7892
Total	3.1000e- 004	2.4000e- 004	3.0700e- 003	1.0000e- 005	9.4000e- 004	1.0000e- 005	9.4000e- 004	2.5000e- 004	0.0000	2.5000e- 004	0.0000	0.7822	0.7822	2.0000e- 005	2.0000e- 005	0.7892

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3.4 Grading - 2022

<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
l agiavo Baot	ii ii ii		1 1 1		0.1159	0.0000	0.1159	0.0458	0.0000	0.0458	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0453	0.4855	0.3630	7.8000e- 004		0.0204	0.0204		0.0188	0.0188	0.0000	68.1683	68.1683	0.0221	0.0000	68.7194
Total	0.0453	0.4855	0.3630	7.8000e- 004	0.1159	0.0204	0.1364	0.0458	0.0188	0.0646	0.0000	68.1683	68.1683	0.0221	0.0000	68.7194

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/yr		
I lading	2.6900e- 003	0.1170	0.0250	5.0000e- 004	0.0150	1.2900e- 003	0.0163	4.1200e- 003	1.2300e- 003	5.3500e- 003	0.0000	48.3687	48.3687	6.5000e- 004	7.6200e- 003	50.6556
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
	8.7000e- 004	6.8000e- 004	8.5200e- 003	2.0000e- 005	2.7500e- 003	1.0000e- 005	2.7600e- 003	7.3000e- 004	1.0000e- 005	7.4000e- 004	0.0000	2.1728	2.1728	6.0000e- 005	6.0000e- 005	2.1922
Total	3.5600e- 003	0.1177	0.0335	5.2000e- 004	0.0177	1.3000e- 003	0.0190	4.8500e- 003	1.2400e- 003	6.0900e- 003	0.0000	50.5415	50.5415	7.1000e- 004	7.6800e- 003	52.8478

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3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0430	0.0000	0.0430	0.0170	0.0000	0.0170	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0453	0.4855	0.3630	7.8000e- 004		0.0204	0.0204		0.0188	0.0188	0.0000	68.1682	68.1682	0.0221	0.0000	68.7193
Total	0.0453	0.4855	0.3630	7.8000e- 004	0.0430	0.0204	0.0634	0.0170	0.0188	0.0358	0.0000	68.1682	68.1682	0.0221	0.0000	68.7193

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					ton	s/yr							MT	/yr		
Hauling	2.6900e- 003	0.1170	0.0250	5.0000e- 004	0.0143	1.2900e- 003	0.0156	3.9500e- 003	1.2300e- 003	5.1800e- 003	0.0000	48.3687	48.3687	6.5000e- 004	7.6200e- 003	50.6556
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	8.7000e- 004	6.8000e- 004	8.5200e- 003	2.0000e- 005	2.6000e- 003	1.0000e- 005	2.6200e- 003	6.9000e- 004	1.0000e- 005	7.1000e- 004	0.0000	2.1728	2.1728	6.0000e- 005	6.0000e- 005	2.1922
Total	3.5600e- 003	0.1177	0.0335	5.2000e- 004	0.0169	1.3000e- 003	0.0182	4.6400e- 003	1.2400e- 003	5.8900e- 003	0.0000	50.5415	50.5415	7.1000e- 004	7.6800e- 003	52.8478

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3.5 Building Construction - 2022 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1024	0.9369	0.9818	1.6200e- 003		0.0485	0.0485		0.0457	0.0457	0.0000	139.0352	139.0352	0.0333	0.0000	139.8679
Total	0.1024	0.9369	0.9818	1.6200e- 003		0.0485	0.0485		0.0457	0.0457	0.0000	139.0352	139.0352	0.0333	0.0000	139.8679

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	6.8600e- 003	0.1918	0.0646	7.9000e- 004	0.0273	2.6400e- 003	0.0299	7.8700e- 003	2.5200e- 003	0.0104	0.0000	75.6508	75.6508	8.0000e- 004	0.0112	79.0160
Worker	0.0386	0.0301	0.3761	1.0400e- 003	0.1213	6.2000e- 004	0.1220	0.0322	5.7000e- 004	0.0328	0.0000	95.9506	95.9506	2.5600e- 003	2.6600e- 003	96.8061
Total	0.0455	0.2218	0.4407	1.8300e- 003	0.1486	3.2600e- 003	0.1519	0.0401	3.0900e- 003	0.0432	0.0000	171.6014	171.6014	3.3600e- 003	0.0139	175.8221

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3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.1024	0.9369	0.9818	1.6200e- 003		0.0485	0.0485	 	0.0457	0.0457	0.0000	139.0350	139.0350	0.0333	0.0000	139.8677
Total	0.1024	0.9369	0.9818	1.6200e- 003		0.0485	0.0485		0.0457	0.0457	0.0000	139.0350	139.0350	0.0333	0.0000	139.8677

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/уг		
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	6.8600e- 003	0.1918	0.0646	7.9000e- 004	0.0261	2.6400e- 003	0.0288	7.5900e- 003	2.5200e- 003	0.0101	0.0000	75.6508	75.6508	8.0000e- 004	0.0112	79.0160
Worker	0.0386	0.0301	0.3761	1.0400e- 003	0.1150	6.2000e- 004	0.1157	0.0307	5.7000e- 004	0.0312	0.0000	95.9506	95.9506	2.5600e- 003	2.6600e- 003	96.8061
Total	0.0455	0.2218	0.4407	1.8300e- 003	0.1412	3.2600e- 003	0.1444	0.0383	3.0900e- 003	0.0414	0.0000	171.6014	171.6014	3.3600e- 003	0.0139	175.8221

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3.6 Paving - 2022

<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0248	0.2503	0.3281	5.1000e- 004		0.0128	0.0128		0.0118	0.0118	0.0000	45.0620	45.0620	0.0146	0.0000	45.4264
Paving	0.0125					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0373	0.2503	0.3281	5.1000e- 004		0.0128	0.0128		0.0118	0.0118	0.0000	45.0620	45.0620	0.0146	0.0000	45.4264

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	1.1800e- 003	9.2000e- 004	0.0115	3.0000e- 005	3.7100e- 003	2.0000e- 005	3.7300e- 003	9.9000e- 004	2.0000e- 005	1.0000e- 003	0.0000	2.9333	2.9333	8.0000e- 005	8.0000e- 005	2.9594
Total	1.1800e- 003	9.2000e- 004	0.0115	3.0000e- 005	3.7100e- 003	2.0000e- 005	3.7300e- 003	9.9000e- 004	2.0000e- 005	1.0000e- 003	0.0000	2.9333	2.9333	8.0000e- 005	8.0000e- 005	2.9594

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3.6 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0248	0.2503	0.3281	5.1000e- 004		0.0128	0.0128		0.0118	0.0118	0.0000	45.0620	45.0620	0.0146	0.0000	45.4263
Paving	0.0125					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0373	0.2503	0.3281	5.1000e- 004		0.0128	0.0128		0.0118	0.0118	0.0000	45.0620	45.0620	0.0146	0.0000	45.4263

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	1.1800e- 003	9.2000e- 004	0.0115	3.0000e- 005	3.5200e- 003	2.0000e- 005	3.5400e- 003	9.4000e- 004	2.0000e- 005	9.5000e- 004	0.0000	2.9333	2.9333	8.0000e- 005	8.0000e- 005	2.9594
Total	1.1800e- 003	9.2000e- 004	0.0115	3.0000e- 005	3.5200e- 003	2.0000e- 005	3.5400e- 003	9.4000e- 004	2.0000e- 005	9.5000e- 004	0.0000	2.9333	2.9333	8.0000e- 005	8.0000e- 005	2.9594

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3.7 Architectural Coating - 2022 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.1735					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	4.0900e- 003	0.0282	0.0363	6.0000e- 005		1.6300e- 003	1.6300e- 003	 	1.6300e- 003	1.6300e- 003	0.0000	5.1065	5.1065	3.3000e- 004	0.0000	5.1148
Total	0.1775	0.0282	0.0363	6.0000e- 005		1.6300e- 003	1.6300e- 003		1.6300e- 003	1.6300e- 003	0.0000	5.1065	5.1065	3.3000e- 004	0.0000	5.1148

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					ton	s/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	2.5900e- 003	2.0100e- 003	0.0252	7.0000e- 005	8.1300e- 003	4.0000e- 005	8.1700e- 003	2.1600e- 003	4.0000e- 005	2.2000e- 003	0.0000	6.4315	6.4315	1.7000e- 004	1.8000e- 004	6.4888
Total	2.5900e- 003	2.0100e- 003	0.0252	7.0000e- 005	8.1300e- 003	4.0000e- 005	8.1700e- 003	2.1600e- 003	4.0000e- 005	2.2000e- 003	0.0000	6.4315	6.4315	1.7000e- 004	1.8000e- 004	6.4888

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3.7 Architectural Coating - 2022 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.1735					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1 .	4.0900e- 003	0.0282	0.0363	6.0000e- 005		1.6300e- 003	1.6300e- 003		1.6300e- 003	1.6300e- 003	0.0000	5.1065	5.1065	3.3000e- 004	0.0000	5.1148
Total	0.1775	0.0282	0.0363	6.0000e- 005		1.6300e- 003	1.6300e- 003		1.6300e- 003	1.6300e- 003	0.0000	5.1065	5.1065	3.3000e- 004	0.0000	5.1148

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					ton	s/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	2.5900e- 003	2.0100e- 003	0.0252	7.0000e- 005	7.7100e- 003	4.0000e- 005	7.7500e- 003	2.0600e- 003	4.0000e- 005	2.0900e- 003	0.0000	6.4315	6.4315	1.7000e- 004	1.8000e- 004	6.4888
Total	2.5900e- 003	2.0100e- 003	0.0252	7.0000e- 005	7.7100e- 003	4.0000e- 005	7.7500e- 003	2.0600e- 003	4.0000e- 005	2.0900e- 003	0.0000	6.4315	6.4315	1.7000e- 004	1.8000e- 004	6.4888

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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	0.0266	0.4033	0.2480	2.1100e- 003	0.1073	5.7000e- 003	0.1130	0.0299	5.4500e- 003	0.0353	0.0000	201.8127	201.8127	3.6400e- 003	0.0256	209.5334
Unmitigated	0.0266	0.4033	0.2480	2.1100e- 003	0.1073	5.7000e- 003	0.1130	0.0299	5.4500e- 003	0.0353	0.0000	201.8127	201.8127	3.6400e- 003	0.0256	209.5334

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	32.01	32.01	32.01	103,119	103,119
Other Asphalt Surfaces	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	10.56	10.56	10.56	153,754	153,754
Total	42.57	42.57	42.57	256,873	256,873

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	40.00	0.00	0.00	100.00	100	0	0

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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
General Office Building	0.531022	0.055789	0.171983	0.143721	0.027315	0.007422	0.011813	0.018850	0.000630	0.000321	0.024273	0.001102	0.005759
Other Asphalt Surfaces	0.531022	0.055789	0.171983	0.143721	0.027315	0.007422	0.011813	0.018850	0.000630	0.000321	0.024273	0.001102	0.005759
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.250000	0.250000	0.500000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	13.9411	13.9411	1.1800e- 003	1.4000e- 004	14.0131
Electricity Unmitigated						0.0000	0.0000	 	0.0000	0.0000	0.0000	13.9411	13.9411	1.1800e- 003	1.4000e- 004	14.0131
NaturalGas Mitigated	2.9000e- 004	2.6700e- 003	2.2400e- 003	2.0000e- 005		2.0000e- 004	2.0000e- 004	 	2.0000e- 004	2.0000e- 004	0.0000	2.9089	2.9089	6.0000e- 005	5.0000e- 005	2.9262
NaturalGas Unmitigated	2.9000e- 004	2.6700e- 003	2.2400e- 003	2.0000e- 005		2.0000e- 004	2.0000e- 004		2.0000e- 004	2.0000e- 004	0.0000	2.9089	2.9089	6.0000e- 005	5.0000e- 005	2.9262

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

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>		

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	⁻ /yr		
General Office Building	10290	6.0000e- 005	5.0000e- 004	4.2000e- 004	0.0000		4.0000e- 005	4.0000e- 005		4.0000e- 005	4.0000e- 005	0.0000	0.5491	0.5491	1.0000e- 005	1.0000e- 005	0.5524
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	 	0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	44220	2.4000e- 004	2.1700e- 003	1.8200e- 003	1.0000e- 005		1.6000e- 004	1.6000e- 004		1.6000e- 004	1.6000e- 004	0.0000	2.3598	2.3598	5.0000e- 005	4.0000e- 005	2.3738
Total		3.0000e- 004	2.6700e- 003	2.2400e- 003	1.0000e- 005		2.0000e- 004	2.0000e- 004		2.0000e- 004	2.0000e- 004	0.0000	2.9089	2.9089	6.0000e- 005	5.0000e- 005	2.9262

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
General Office Building	10290	6.0000e- 005	5.0000e- 004	4.2000e- 004	0.0000		4.0000e- 005	4.0000e- 005		4.0000e- 005	4.0000e- 005	0.0000	0.5491	0.5491	1.0000e- 005	1.0000e- 005	0.5524
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	44220	2.4000e- 004	2.1700e- 003	1.8200e- 003	1.0000e- 005		1.6000e- 004	1.6000e- 004		1.6000e- 004	1.6000e- 004	0.0000	2.3598	2.3598	5.0000e- 005	4.0000e- 005	2.3738
Total		3.0000e- 004	2.6700e- 003	2.2400e- 003	1.0000e- 005		2.0000e- 004	2.0000e- 004		2.0000e- 004	2.0000e- 004	0.0000	2.9089	2.9089	6.0000e- 005	5.0000e- 005	2.9262

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 <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	√yr	
General Office Building	27570	4.8894	4.1000e- 004	5.0000e- 005	4.9146
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	51040	9.0517	7.6000e- 004	9.0000e- 005	9.0984
Total		13.9411	1.1700e- 003	1.4000e- 004	14.0131

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
General Office Building	27570	4.8894	4.1000e- 004	5.0000e- 005	4.9146
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	51040	9.0517	7.6000e- 004	9.0000e- 005	9.0984
Total		13.9411	1.1700e- 003	1.4000e- 004	14.0131

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.1350	5.0000e- 005	5.6100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0109	0.0109	3.0000e- 005	0.0000	0.0116
Unmitigated	0.1350	5.0000e- 005	5.6100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0109	0.0109	3.0000e- 005	0.0000	0.0116

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	0.0173					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.1171				 	0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.2000e- 004	5.0000e- 005	5.6100e- 003	0.0000	 	2.0000e- 005	2.0000e- 005	1 1 1 1	2.0000e- 005	2.0000e- 005	0.0000	0.0109	0.0109	3.0000e- 005	0.0000	0.0116
Total	0.1350	5.0000e- 005	5.6100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0109	0.0109	3.0000e- 005	0.0000	0.0116

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr											MT	/yr		
Architectural Coating	0.0173					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1171				 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.2000e- 004	5.0000e- 005	5.6100e- 003	0.0000	 	2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0109	0.0109	3.0000e- 005	0.0000	0.0116
Total	0.1350	5.0000e- 005	5.6100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0109	0.0109	3.0000e- 005	0.0000	0.0116

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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	Total CO2	CH4	N2O	CO2e					
Category	MT/yr								
ga.ca	12.4147	0.1475	3.5700e- 003	17.1654					
Unmitigated	15.4065	0.1843	4.4600e- 003	21.3443					

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
	0.533201 / 0.326801	2.0443	0.0175	4.3000e- 004	2.6106
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	5.0875 / 0	13.3622	0.1668	4.0300e- 003	18.7337
Total		15.4065	0.1843	4.4600e- 003	21.3443

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7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e		
Land Use	Mgal	MT/yr					
General Office Building	0.426561 / 0.306866	1.7250	0.0140	3.4000e- 004	2.1785		
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000		
Unrefrigerated Warehouse-No Rail	4.07 / 0	10.6897	0.1334	3.2300e- 003	14.9869		
Total		12.4147	0.1474	3.5700e- 003	17.1654		

8.0 Waste Detail

8.1 Mitigation Measures Waste

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									
ga.oa	4.7642	0.2816	0.0000	11.8031						
Unmitigated	4.7642	0.2816	0.0000	11.8031						

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e				
Land Use	tons	MT/yr							
General Office Building	2.79	0.5663	0.0335	0.0000	1.4031				
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000				
Unrefrigerated Warehouse-No Rail	20.68	4.1979	0.2481	0.0000	10.4000				
Total		4.7642	0.2816	0.0000	11.8031				

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e				
Land Use	tons	MT/yr							
General Office Building	2.79	0.5663	0.0335	0.0000	1.4031				
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000				
Unrefrigerated Warehouse-No Rail	20.68	4.1979	0.2481	0.0000	10.4000				
Total		4.7642	0.2816	0.0000	11.8031				

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Off-Highway Trucks	1	8.00	260	402	0.38	Diesel
Forklifts	6	8.00	260	89	0.20	Diesel

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UnMitigated/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
Equipment Type					ton	s/yr							MT	/yr		
Forklifts	0.0891	0.8269	0.9044	1.2000e- 003		0.0548	0.0548		0.0504	0.0504	0.0000	105.2708	105.2708	0.0341	0.0000	106.1220
Off-Highway Trucks	0.0690	0.5244	0.4388	1.7300e- 003		0.0191	0.0191		0.0175	0.0175	0.0000	151.5899	151.5899	0.0490	0.0000	152.8156
Total	0.1581	1.3513	1.3432	2.9300e- 003		0.0739	0.0739		0.0679	0.0679	0.0000	256.8607	256.8607	0.0831	0.0000	258.9376

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

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11.0 Vegetation